

P S S

Payment and Settlement Systems

Analysis and Statistics

No. 36

Russian Payment System
in 2011

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RUSSIAN PAYMENT SYSTEM IN 2011

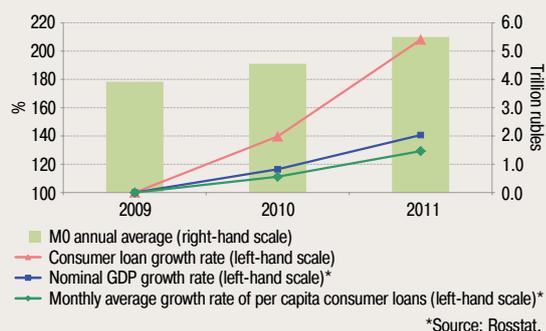
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Chapter 1. PAYMENT SERVICES PROVIDED
BY THE BANKING SYSTEM OF RUSSIA

Chart 1.1. Russia's socio-economic indicators (2009 = 100%)



In 2011, the national payment system development met the growing needs of the economy. It was given a fresh impetus to upgrade by the conceptual reform of relevant legislation following the adoption of Federal Law No. 161-FZ of June 27, 2011, "On the National Payment System." The reform made it possible to fill up regulatory gaps that had appeared in recent years due to advances in information technology and new participants on the payment services market; describe problems that confronted the payment systems, formulate requirements for the institutions that supported their functioning, and define Bank of Russia supervisory and oversight mandates in the national payment system.

1.1. CASH MEANS OF PAYMENT

1.1.1. Cash

Amid growing Russian economy, household incomes and credit in 2011, consumer demand and final consumption spending increased. These factors contributed to a higher demand for cash.

As of end of 2011, 5.9 trillion rubles circulated outside the banking system (M0), with annual growth equalling 17.3%. While M2 money supply rose by 22.6%, share of cash fell by one percentage point as compared with the previous year (up to 24.2% at the beginning of 2012), which was due to higher growth rates of non-cash funds (24.5%).

In per capita terms, the average value of cash circulating outside banks increased by 20.7% to 38,500 rubles (an annual increase of US\$ equivalent from \$1,050 to \$1,200). The value of cash remained stable relative to nominal GDP, which expanded by 20.8%; like in the previous years, there were 10 cash rubles per 100 rubles of GDP on average.

Chart 1.2. Russian Federation: the structure of money supply (M2)

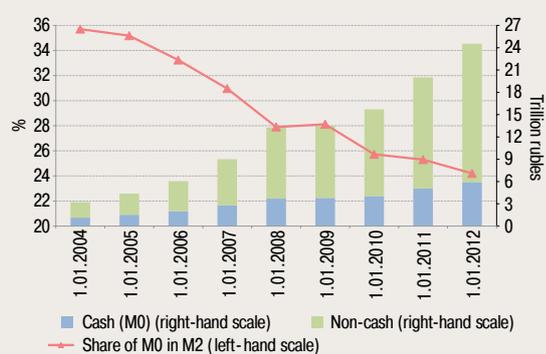
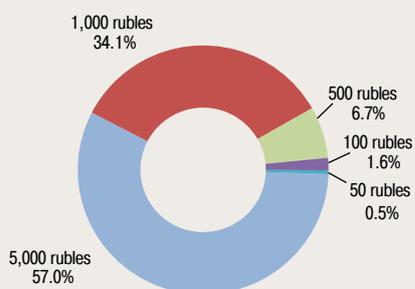


Chart 1.3. The share of certain notes in the total value of banknotes, as of end of 2011*



* 5- and 10-ruble notes accounted for less than 1% of the total value of banknotes.

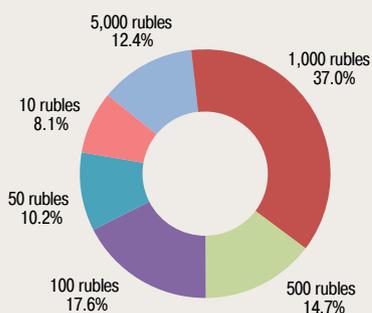
1.1.2. Banknotes and coin in circulation

As of end of 2011, Bank of Russia banknotes worth 6,903.0 billion rubles (including cash at the cash offices of Bank of Russia branches) were in circulation, including coins made of precious metals. Of this amount, banknotes had a total value of 6,854.3 billion rubles (6.3 billion sheets) and coins were valued at 48.5 billion (51.1 billion pieces¹). Banknotes accounted for 99.3% of the total value and coins – for 0.7% of cash in circulation, and for 11.0% and 89.0% of the total volume of cash, respectively.

The total value of Bank of Russia banknotes and coin, including coins made of precious metals, increased by 1,110.6 billion rubles (by 19.2%) during 2011. Of these, the value of banknotes grew by 1,098.0 billion rubles and coin – by 12.5 billion rubles. The number of banknotes dropped by 0.03 billion sheets, while the number of coins increased by 3.3 billion pieces.

As for the banknote structure of cash in circulation, the share of 5,000-ruble banknotes expanded from 49.7 to 57.0% during the year. In the same time, the share of 1,000-ruble banknotes contracted from 39.3 to 34.1%, 500-ruble banknotes from 8.5 to 6.7%, and 100-ruble banknotes from 1.9 to 1.6%. The shares of 50-ruble,

Chart 1.4. The share of certain notes in the total number of banknotes, as of end of 2011*



*5-ruble notes accounted for less than 1% of the total number of banknotes.

¹ The data on coins (number of pieces) do not include coins made of precious metals.

Managing the cost of cash ^[1]

International experts are actively discussing the shares of cash and non-cash funds used in payment turnover in different countries, such debates occurring in the context of developing innovative means of payment and the efficiency of their use versus cash. An important aspect of the issue is how to manage costs associated with the use of one form of funds or another.

Below are the key points published in an article by James Poteet, Senior Vice President of Product Strategy and Innovation for Brink's U.S. and by Fred Purches, Vice President of Global Solutions for Brink's, Inc. that was published in *Journal of Payments Strategy & Systems*.

Despite substantial differences between countries in the use of cash as a payment instrument, it still remains the most widely used means of payment. Cash handling costs, however, are quite tangible. Different countries have conducted studies to measure cash transaction costs. For example, the British Retail Consortium^[2] estimates that, in Belgium, the average cash transaction costs 0.53 euros to process and in the Netherlands – 0.30 euros. In the USA, the Federal Reserve estimates spending for cash operation expenses in 2010 at \$523 million^[3]. According to experts^[4], European banks incurred cash costs of 26 billion euros in 2007, or 8% of their total operating costs, with some of the largest retail banks reporting costs as high as 15%.

There exist various technological and process-oriented approaches allowing financial institutions to control cash costs, cut cash handling costs, make the processes more transparent, and manage cash inventories.

Software

As a bank cannot afford cash shortage, it tends to keep extra cash in branches, in ATMs, in cash vaults, and in smart safes. Many financial institutions use software to simplify management of cash inventories (ranging from Excel spreadsheets to off-the-shelf forecasting program) and are thus able to automate the process of identifying the amount of cash required to accommodate daily ATM operations, cash vaults and branch needs, and cut costs by 10–15%. The approach, however, has some shortcomings, such as:

- high cost of the software (i.e. purchase of a finished product/designing and reconfiguring it, staff training, oversight, ongoing maintenance and upgrades);
- any software product works with input data, which may be incomplete, incorrect or biased. Furthermore, statistical models are often unable to forecast outlying events and their associated cash needs;
- partial (incomplete) optimisation of cash stock. Traditionally, banks use software to manage cash stock available in ATMs, while such software takes time to be implemented at offices and vaults; and,
- there is no centralised governance of the cash inventories.

Process improvement

In today's banking business, cash handling still largely remains a manual process. Each act of processing cash involves recounting, reporting, inventorying, monitoring and control. Each of these processes can be automated and/or streamlined. Experts^[4] believe that there is an opportunity to migrate deposit operations to "smart deposit machines", which might be the first step towards fully automated bank branches. To reduce manual processing, banks are also implementing lean manufacturing methodologies. Such process improvements help to achieve savings of 20–35% and reduce bank's total cash handling costs by 3–5%.

Outsourcing

A key advantage of outsourcing is flexibility. For a wide variety of operations – most notably cash processing – outsourcing protects banks from changing volumes that affect the variable costs, and help to minimize infrastructural costs. For example, commercial banks in advanced countries have long been outsourcing cash management to large processing centres, which operate with higher efficiency because they concentrate large volumes of cash for handling.

Vendor consolidation

Bundling multiple services for cash cost savings is an important and valuable aspect of any cash management solution. A bank's costs attributable to such services delivered by specialised providers tend to stay below 40% of its total cash handling costs. To cut these costs, banks bundle several services by the same provider (e.g., ATM maintenance and cash transportation).

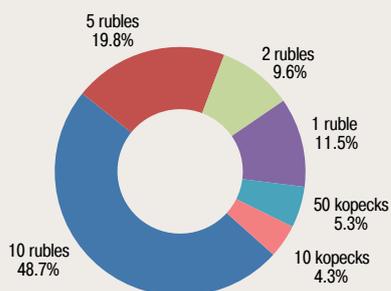
^[1] Based on the paper by Poteet, J., Purches, F. The cash payment answer: Are we asking the right question? // *Journal of Payments Strategy & Systems*, 2011, Vol. 5, No. 3, pp. 316–328, September. The journal's website is at: <http://www.henrystewart.com/jpss.aspx>.

^[2] British Retail Consortium. *Cost of Collection Survey*, 2006. London, 2006.

^[3] http://www.federalreserve.gov/paymentsystems/coin_expcasops.htm.

^[4] Bellens, J. (McKinsey), Moucheron, D. (Fortis) and Leibbrandt, G. (SWIFT). *Reducing the Cost of Cash*. <http://www.gtnews.com>, 29th May 2007.

Chart 1.5. The share of certain coins in the total value of coins, as of end of 2011*



* 1- and 5-kopeck coins accounted for less than 1% of the total value of coins.

Chart 1.6. The share of certain coins in the total number of coins, as of end of 2011

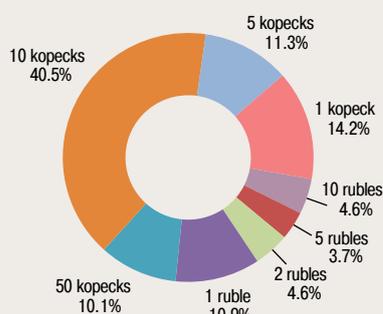


Chart 1.7. The structure of cash receipts in 2011, by method of execution

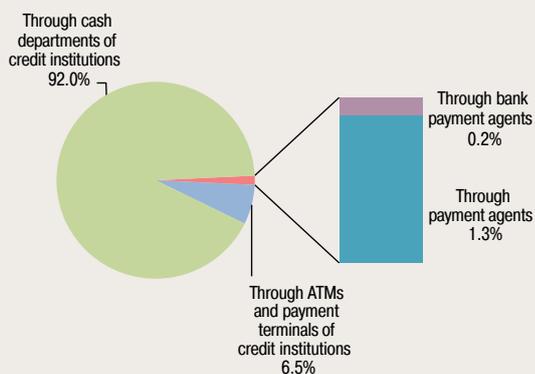
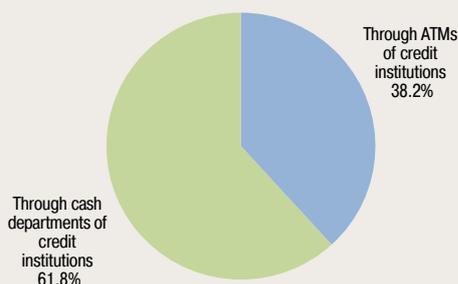


Chart 1.8. The structure of cash withdrawals in 2011, by method of execution



10-ruble and 5-ruble banknotes remained virtually unchanged at their 2010 level.

In 2011, 10-ruble banknotes have been actively replaced by 10-ruble coins: the number of these banknotes in circulation contracted by 37.6%, whereas the number of coins increased 1.9 times. The share of 5-ruble coins decreased to 19.8%, 2-ruble coins – to 9.6%, 1-ruble coins – to 11.5%, 50-kopeck coins – to 5.3% and 10-kopeck coins – to 4.3%. The aggregate share of small-denomination coins (1-kopeck and 5-kopeck) also fell as compared to 2010 and amounted to less than 1.0%.

In 2011, the Bank of Russia issued in circulation 54 types of precious metal coins, of which 14 gold coins, and 40 silver coins, as well as 14 types of base-metal commemorative coins. In 2011, it launched the Sochi 2014 Coin Program.

1.1.3. Cash turnover structure

In 2011, the value of cash turnover through the Bank of Russia branches and credit institutions (hereinafter referred to as banks) increased by almost 25% year on year to 68.2 trillion rubles, with one-fifth of it being cash receipts and cash withdrawals via ATMs and payment terminals. The average daily cash turnover, including through ATMs and payment terminals, amounted to 226.5 billion rubles (a growth of 44.4 billion rubles).

The total value of cash receipts in the banks cash departments increased by 23.2% on 2010 to 31.6 trillion rubles, with the bulk of cash coming from the sale of consumer goods and services (44.4%), whose total value grew almost by one-third during the year. Retail deposits also added up to as high as 21.1%, having increased almost by 40% during the year.

Most of cash withdrawals from the banks' cash departments, the value of which amounted to 21.9 trillion rubles (a rise of 21.3%) in 2011, were withdrawals from household savings and time deposit accounts (42.0%), payment of wages, social benefits and students grants (a total of 10.4%), and withdrawals from household current accounts (9.0%).

Amidst a volatile exchange rate on the local foreign exchange market in 2011, households preferred to convert part of their ruble savings into foreign exchange: with sales of foreign currency to individuals generating a significant increase in revenue (a growth of 27.8%), cash paid out to buy foreign currency from individuals fell by 2.9%. In securities transactions, there was an increase in withdrawals (9.1%) and receipts (17.3%) year on year.

Table 1.1. Major sources of cash receipts and purposes of cash withdrawals in 2011

Receipts	Value, trillion rubles	Share of total value, %	Growth rate, %	Withdrawals	Value, trillion rubles	Share of total value, %	Growth rate, %
Proceeds from sale of goods	10.8	34.2	19.6	Wage, social benefit and students' grants withdrawals	2.3	10.4	-9.3
Proceeds from provision of paid services (works performed)	3.2	10.2	10.1	Withdrawals for expenses unrelated to wage fund and social benefits	0.2	1.1	10.0
Receipts of taxes, duties, insurance payments, penalties, customs payments, individuals' self-taxation payments, contributions and insurance premiums	0.6	1.8	9.5	Withdrawals for purchase of agricultural products	0.1	0.5	2.9
Receipts from individuals for money remittances to other individuals	0.6	1.7	1.8	Pension, allowance and insurance indemnity withdrawals	0.4	2.0	4.0
Loan receipts and credit repayments	1.3	4.1	16.7	Money remittances received (without opening an account by the payee)	0.5	2.1	3
Proceeds from real estate transactions	0.4	1.4	36.7	Loans and credits extended	0.4	1.6	-9.2
Receipts of funds to household savings and time deposit accounts	6.7	21.1	39.7	Withdrawals from household savings and time deposit accounts	9.2	42	38.9
Receipts from Federal Communications Agency organisations	0.2	0.8	-10.3	Payments to Federal Communications Agency organisations	2.3	10.6	5.6
Receipts of funds to individual unincorporated entrepreneurs' accounts	2.5	7.8	11.2	Withdrawals from individual unincorporated entrepreneurs' accounts	0.6	2.7	11.1
Proceeds from government and other securities and bills transactions	0.1	0.3	19.8	Withdrawals for government and other securities and bills transactions	0.1	0.5	17.1
Receipts from payment card transactions	1.1	3.6	43.5	Withdrawals for payment card transactions	1.4	6.5	32.7
Proceeds from sale of cash foreign currency to individuals	1.5	4.7	27.8	Withdrawals for purchase of cash foreign currency from individuals	1.0	4.3	-2.9
Receipts of funds to household accounts	2.1	6.5	46.3	Withdrawals from household accounts	2	9	68.1
Other receipts	0.5	1.7	16.5	Withdrawals for other purposes	1.4	6.6	13.2

Box 2

Reasons for use of cash and success factors of new payment instruments^[1]

Cash is one of the most widespread payment instruments. Why it is so popular is explained by Michael Salmony, Executive Adviser at Equens SE (the first and leading pan-European full-service provider) in an article appearing in *Journal of Payments Strategy & Systems*. He spells out selection criteria for other payment instruments to define the best alternative to cash.

Cash availability analysis

Cash remains a popular means of payment throughout the world even though cash usage costs are high. For example, the eurozone's aggregate costs of distributing, managing, handling, processing and recycling cash and using it as a means of payment added up to 84 billion euros (0.6% of Europe's GDP), or 130 euros per capita in 2008^[2]. Worldwide cash handling costs are higher than 300 billion euros per year^[3].

To understand why cash is so popular and so widely used, it is necessary to examine the interests of key stakeholders, which include central banks, commercial banks, national governments, retailers, shadow businesses, and consumers.

Any central bank is faced with conflicting goals: on the one hand, it is expected to promote the efficiency of payment systems and, on the other hand, by participating on the financial market as an issuer of cash, it reaps huge economic benefits from the fact that no interest income accrues on notes and coin in circulation^[4] (with annual savings of around 13 billion euros per year in the eurozone)^[5].

Commercial banks that serve individuals and retailers bear high cash handling costs, some of which are passed on to bank customers (e.g. a cash withdrawal fee, including ATM withdrawals). On the other hand, banks have a "non-monetary" incentive to continue using it to maintain relationships with customers, especially older and wealthier ones (those who regularly bring their savings to the bank).

National governments benefit from using cash by earning income from issuing it as a difference between the cost and the face value of a note (seigniorage). On the other hand, using cash also incurs high costs, including losses resulting from tax shortfalls and social costs associated with the shadow economy.

Trade companies. Many studies^{[6], [7]} have shown that cash can be described as one of the quickest means of payment in retailing and services (only payments by contactless cards can be 8–12 seconds faster). The UK QPQ^{[8], [9]}, studies indicate that cash is the cheapest payment method at major retail stores: 0.02 pound per cash transaction versus 0.08 pound per debit card transaction, with credit card transactions costing even more. Shops also prefer cash to meet customer demand and because it is “cheap” to use (cards entail costs for terminals, bank fees, bad debts, and fraud^[10]). Note, however, that cash “cheapness” is mainly due to the fact that it is subsidised by the government.

Shadow business. There is a positive correlation between the percentage of anonymous cash payments in the total amount of payments and the activity of the shadow economy^[11]. Moreover, a greater part of cash (e.g. 71% in Norway^[12]) is used against the law. Widespread use of cash pushes criminals to steal wallets and rob banks. The shadow economy benefits particularly from circulating notes of large denominations (200-euro banknote and 500-euro banknote): one million US dollars weighs 10 kg, whereas one million euros weighs only 1.6 kg^[13], which makes it easier to transport ill-gotten cash.

Consumers perceive cash as a free means of payment because its real cost to society is hidden and distributed implicitly. What consumers like is that cash is accepted everywhere and they can directly watch the way it is spent. Finally, use of cash is an integral part of everyday life and an old habit. For unbanked people (more than two billion in the world^[14]), cash is the only available means of payment. For example, in the UK unbanked people represent 10% of the total population, and in the United States one-third of all households are unbanked^[15].

Critical success factors of new payment instruments

To identify the best alternatives to cash, other payment instruments need to be checked for matching the characteristics that are inherent in cash. A retail payment instrument should be within reach and widespread, easy to use, avoid being a financial burden for the buyer and seller, and provide an acceptable level of security.

Table 1.2. Selection criteria for online payment instruments^[16]

For consumers	For sellers	For banks
Cheap (71% wish the payments to be free of charge)	Profitability	Revenue
Revocation option (62%)	Security	Security
Goods first – pay after (59%)	Standardising	Moderate workload on system
Possibility of using the same payment instrument in the Internet and elsewhere (in points of sale)	Customer identification	Low dependence on agents (for example, on telecom companies)
Well-known brand/reputation of the payment service provider	Guaranteed payment	Economic expediency
Possibility of choosing a payment system	Multi-channel nature (unification across points of sale, mobile applications, web applications)	Customer relations management
Fast	Receipt of cash as soon as possible	Customer satisfaction
Anonymous	The customer is linked to the seller	Fast
Guaranteed delivery of service	Providing different means of payment to the buyer	Standardising
Refund on failure	Automatic verification of accounts	
Security	Liquidity management: certain date of payment	

The importance of the payment instrument selection criteria largely depends on the way it is viewed by a given stakeholder. Usually, all stakeholders (a consumer, seller and bank) have different and often clashing interests. An apparent conflict of interest arises between the end user (getting a free payment instrument) and the bank (earning a profit from providing a convenient service).

The conflict between sellers and banks is about the size and procedure of charging interchange fees on payment transactions by an issuing bank. The conflict between the seller and the buyer is about the possibility of calling back a payment. Buyers strive to be able to call back payments, while sellers want to use guaranteed and irrevocable payments, especially when trading in virtual products (films or software), which the end user immediately and irreversibly consumes after making the payment.

Conflicts of interest between key stakeholders result in their preferences for various payment instruments. Accordingly, when a new payment instrument is evaluated, the problem is to define a balanced set of criteria to take into account the conflicting interests of the different stakeholders. For example, a trade-off between

ease of use and security depends on the average size of a transaction. Another example is a choice between anonymity and identity of the buyer to prevent fraud and money laundering.

Summing-up, the following conclusions can be made:

- there are a variety of important characteristics inherent in payment instruments;
- these characteristics are irreconcilable without a scenario of how the payment instruments are used;
- differences arise both between and within interacting parties over the characteristics they treat as important.

That makes it clear that no one-size-fits-all solution is possible in the form of a single and universal payment instrument. It is the reason why about 300 different types of payment instruments are currently used in European e-commerce alone^[17].

^[1] Based on the publication by Salmony, M. Why is use of cash persisting? Critical success factors for overcoming vested interests // Journal of Payments Strategy & Systems, 2011, Vol. 5, No. 3, pp. 246–272, September.

^[2] Retail Banking Research. The Future of Cash and Payments. London, 2010.

^[3] Wincor Nixdorf. The Cash Revolution. Paderborn, February 2010.

^[4] Van Hove, L. Central Banks and Payment Instruments: a Serious Case of Schizophrenia // Communications & Strategies, 2007, No. 66, 2nd quarter, pp. 16–44.

^[5] Calculations of the author.

^[6] National studies by the Bank of the Netherlands, the National Bank of Belgium, and the Reserve Bank of Australia.

^[7] Polasik, Górka, Wilczewski, Kunkowski, Przenajkowska, Tetkowska. Time Efficiency of Point-of-Sale Payment Methods: The Empirical Results for Cash, Cards and Mobile Payments, Social Science Research Network (SSRN), 17 February 2011.

^[8] UK QPQ is a consultancy in retail payments.

^[9] QPQ. Empirical Study on the Comparison of Varying Payment Methods at Supermarket Checkouts in the UK. 2008.

^[10] British Retail Consortium. Cost of Collection Survey, 2008. London, 2008.

^[11] A study by the Bank of Italy (2010).

^[12] Humphrey, Kaloudis, Övre. Forecasting Cash Use in Legal and Illegal Activities. Arbeidsnotat 2000/14, Norges Bank, Oslo, 30 November 2000.

^[13] Calculations of the author.

^[14] Western Union (May 2011): 72% (2.7 billion) of adults in developing countries are unbanked. The average in the advanced economies is 19% (160 million people).

^[15] FSA, CSFI, Juniper (2008).

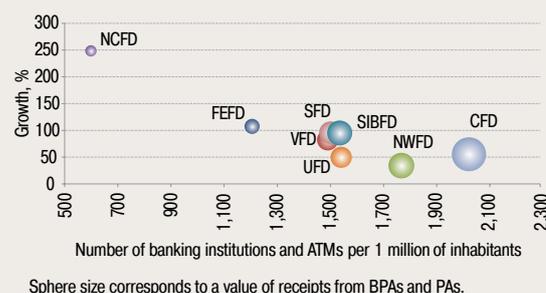
^[16] Based on information of the European Payments Council, the decision-making authority of the European payment industry.

^[17] The electronic Payment System Observatory – ePSO.

In Russia, in 2011 the average daily flow of cash through the ATMs and payment terminals of credit institutions amounted to 48.8 billion rubles, more than one-third up year on year. The growth rates of cash receipts outpaced those of cash withdrawals (65.3% as against 27.7%), which was the result of an expanding list of services that credit institutions offered through ATMs and payment terminals, including utilities payments in 2011. The flow of cash through ATMs averaged 102,700 rubles per capita (as against 78,300 rubles in 2010).

As credit institutions improve their payment infrastructures, payment agents (hereinafter referred to as PAs) and bank payment agents (hereinafter referred to as BPAs), who collect cash from individuals to make subsequent payments, have continued to actively develop their operations. The evidence of the high demand for their services are the persistently high growth rates of cash receipts by PAs and BPAs in recent years for payments on behalf of individuals for goods (works, services)². These receipts increased 1.7 times year on year to 499.7 billion rubles, or 3.4% of total cash receipts by credit institutions from the sale of goods or services (works) and as taxes, fees and insurance premiums (as against 2.4% in 2010).

Chart 1.9. Concentration of banking institutions and growth rates of cash receipts from PAs and BPAs (2011 as against 2010), by federal district



²Including residential rent.

Table 1.3. Payment agents and bank payment agents: similarities and differences

Payment agents	Bank payment agents
At regulation	
The activity of payment agents who include operators receiving payments and payment sub-agents is regulated by Federal Law No. 103-FZ of June 3, 2009, "On Payment Agents' Activity Concerning Reception of Payments from Individuals" (hereinafter referred to as Law No. 103-FZ)	The procedure for involving bank payment agents by a credit organisation for operations prescribed by legislation (including the reception of cash for transfers without opening a bank account) has been established by Article 14 of Federal Law No. 161-FZ of June 27, 2011, "On the National Payment System" (hereinafter referred to as – the NPS Law)
Control over compliance with the requirements of Law No. 103-FZ is exercised by federal executive power bodies, authorised by the Russian Government to exercise state control (supervision) of reception of payments	Control over bank payment agents is exercised by the credit institution which has involved them, over sub-agents – by bank payment agents, with whom the sub-agents have signed contracts
The NPS Law and Law No. 161-FZ have set similar requirements for payment agents and bank payment agents (sub-agents) concerning their obligation to inform the customer providing services to him (her), concerning their use of cash registering and controlling equipment and issuing him (her) a document on the results of the service provided	
At operation	
The activity of payment agents – operators receiving payments presume the existence of their contracts with suppliers on executing the activity of receiving payments from individuals	The activity of bank payment agents presume only the existence of a contract with the credit institution which has involved them, since a credit institution is authorised to make transfers to the supplier even in the absence of a contract between them
Payment agents are entitled to receive funds from payers to fulfil cash liabilities to suppliers of paying for goods (works, services), including housing and utility payments in line with the Housing Code of the Russian Federation	Bank payment agents may be involved by a credit institution for: <ul style="list-style-type: none"> • receiving cash from individuals and/or for issuing cash to individuals, including with the use of payment terminals and ATMs; • providing electronic means of payment to customers and ensuring a possibility of using them in line with the requirements set by a funds transfer operator; • identifying an individual customer, his (her) representative and/or beneficiary for transferring funds without opening a bank account
Only legal entities may act as payment agents – operators receiving payments (point 4 of part 1 of Article 2 of Law No. 103-FZ)	Legal entities and individual entrepreneurs may act as payment agents (point 4 of Article 3 of the NPS Law)
Payment agents – operators receiving payments and bank payment agents may involve sub-agents being legal entities or individual entrepreneurs (point 5 of part 1 of Article 2 of Law No. 103-FZ and point 5 of Article 3 of the NPS Law respectively)	
At settlement	
According to parts 1 and 9 of Article 4 of Law No. 103-FZ in receiving payments, settlements with the supplier are made by the payment agent – operator receiving payments, with whom, in turn, pursuant to part 9 of Article 4 of Law No. 103-FZ, payment sub-agents are obliged to settle	Settlements between bank payment sub-agents and bank payment agents are to be made using a special bank account as stipulated by part 5 of Article 14 of the NPS Law
Payment agents are obliged to use special bank accounts for depositing cash received from payers and making subsequent settlements (parts 14 and 15 of Article 4 of Law No. 103-FZ). In case of signing a contract between the supplier and the payment operator – operator receiving payments the supplier must use a special bank account for receiving funds taken by payment agents (part 18 of Article 4 of Law No. 103-FZ)	Bank payment agents (sub-agents) are obliged to use special bank accounts for depositing cash received from payers and making subsequent settlements (point 3 of part 3 and point 4 of part 4 of Article 14 of the NPS Law)
Control over compliance with the requirements to use special bank accounts opened to payment agents, bank payment agents (sub-agents), suppliers is exercised by tax authorities	

High growth rates of cash receipts by PAs and BPAs from individuals have been reported in all federal districts. The highest growth has been recorded in federal districts with the lowest density of banking system institutions. For example, such receipts have risen 3.5, 2.1 and 1.9 times in the North Caucasus, Southern and Far Eastern Federal Districts, respectively, whereas the Central Federal District, which has the highest density of banking system institutions per million inhabitants, has reported a 1.6-fold increase.

PAs have taken almost 90% of total cash receipts from individuals handled by agents, with BPAs taking the rest. This is common for all federal districts but for the Siberian and North Caucasus Federal Districts where the proportion of cash received by payment agents has been somewhat smaller (74.7 and 69.2%, respectively). The North

Caucasus District has shown a significant increase in receipts from payment agents, resulting from the regulation of their activities under Law No. 103-FZ and the Law on the National Payment System.

1.2. PAYMENT INSTRUMENTS

1.2.1. General characteristics of non-cash payments effected in the national payment system

As industrial output and household incomes grew in 2011, the banking system, which constitutes the institutional basis of the national payment system, responded to the needs of businesses and individuals for a wider range and better quality of payment services, first of all non-cash settlements. The volume and value of non-bank payments³ effected through the banking system increased over 2010 by 16.3 and 13.0%, respectively, to 5.7 billion transactions for a total of 489.2 trillion rubles. On average 23.0 million payments were carried out daily to the amount of 2.0 trillion rubles.

As in previous years, the bulk of these payments (99.0% by volume and 90.8% by value) were payments in rubles, primarily to support the flow of economic values within the country. They increased in terms of volume and value by more than 15% year on year, with 22.8 million payments worth 1.8 trillion rubles effected daily. The value of payments equivalent to the annual GDP turned over the banking system every 30 days, with an average payment amounting to 78,700 rubles.

The volume and value of foreign-currency payments dropped by almost 10% to 57.1 million transactions worth 45.1 trillion rubles. The average size of a foreign-currency payment was 10 times the average payment in rubles.

The positive trend of recent years towards more non-cash transactions made with bank cards has had a major impact on the structure of payments effected through the banking system. Although credit transfers continued to dominate, their share of total payments made through the banking system dropped during the year by 6.8 percentage points to 47.5%. At the same time, the share of non-cash transactions made with bank cards increased to 31.0% (as against 22.3% in 2010).

The structure of payments made through the banking system hardly changed year on year. Credit transfers remained the prevailing payment instrument (97.5%). The share of non-cash transactions made with bank cards – most of which were fairly small payments – represented 0.7% of total payments.

Credit institutions' own payments by and payments by their customers other than credit institutions accounted for 96.8% of the total volume and 84.4% of the total value of payments handled through the banking

Chart 1.10. The structure of cash receipts from PAs and BPAs in 2011, by federal district, %

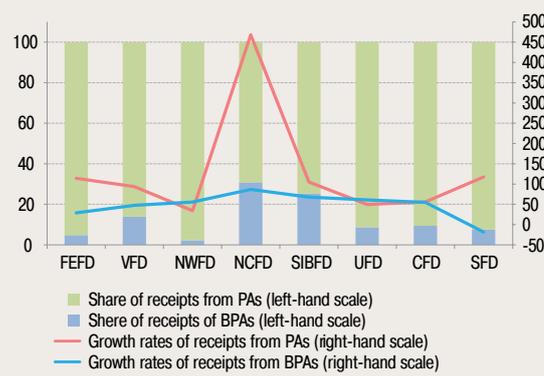


Table 1.4. The structure of non-bank payments effected through the banking system of Russia in 2011, by payment instrument

	Share by volume, %	Share by value, %
Credit transfers	47.5	97.5
Direct debits	2.1	0.4
Bank cards	31.0	0.7
Cheques	neg	neg
Bank orders	19.4	1.4

³ Including payments in rubles and foreign currency (except financial market and loan repayment transactions) from the accounts of the Bank of Russia customers and credit institutions (individuals and legal entities other than credit institutions), including card payments; funds transfers made by individuals without opening a bank account; and credit institutions' own (self supporting) payments. Under the terminology of the Bank for International Settlements, these transactions are defined as "payments by non-banks".

Table 1.5. The concentration ratio of the payment services market in 2011, %

Name of federal district	Concentration ratio by volume of payment services	Concentration ratio by value of payment services
Far Eastern Federal District	47.6	45.4
Volga Federal District	32.5	39.9
Northwestern Federal District	42.6	43.8
North Caucasus Federal District	65.0	56.4
Northern Federal District	39.1	42.3
Urals Federal District	40.3	47.0
Central Federal District	44.6	42.9
Southern Federal District	49.2	54.5

Table 1.6. Herfindahl-Hirschman Index (HHI) of the payment services market in 2011

Name of federal district	HHI (by volume of payment services)	HHI (by value of payment services)
Far Eastern Federal District	0.08	0.06
Volga Federal District	0.03	0.05
Northwestern Federal District	0.05	0.06
North Caucasus Federal District	0.25	0.15
Northern Federal District	0.04	0.05
Urals Federal District	0.05	0.06
Central Federal District	0.05	0.06
Southern Federal District	0.07	0.09

system. As compared with 2010, the volume of these payments grew by 17.0% to 5.5 billion rubles, while their value increased by 11.5% to 413.0 trillion rubles. Credit institutions daily processed 22.3 million payments worth 1.7 trillion rubles.

The share of payments by Bank of Russia customers other than credit institutions in the total value of payments effected through the Russia banking system increased to 15.6%, while their share in the total volume of payments, on the contrary, slightly decreased, to 3.2%. Bank of Russia customers made 181.7 million payments (up 2.6%) worth 76.2 trillion rubles (up 21.4%). The Bank of Russia processed a daily average of 0.7 million of such payments worth 0.3 trillion rubles.

Concentration ratios (the market shares of five top credit institutions) – a measure of competitiveness – varied among federal districts both in the volume and the value of payments. These were the lowest in the Volga Federal District (32.5 and 39.9%, respectively) and the highest in the North Caucasus (65.0 and 56.4%, respectively). Overall, this was indicative of the important role that major credit institutions played on the payment services market.

In most federal districts, the concentration ratio, which is calculated on the basis of the Herfindahl – Hirschman Index (HHI)⁴ and which reflects the distribution of market shares primarily among top players, ranged between 0.03 and 0.08 by volume of payments and between 0.05 and 0.09 by value of payments, which, in turn, shows that this segment of the payment services market is quite competitive. HHI troughs (0.03 and 0.05, respectively) were reported in the Volga Federal District. HHI peaks (0.25 and 0.15) indicating the highest concentration levels of payment services were reported in the North Caucasus Federal District, which is among the weakest performers in terms of credit institution density versus the number of population.

1.2.2. Credit transfers

Credit institutions

Credit transfers in Russia are among the most popular instruments used for non-cash payments. In 2011, credit institutions and their customers (individuals and legal entities other than credit institutions) issued more than 2.5 billion orders⁵ to make credit transfers in rubles and foreign currency to a total of 400.9 trillion rubles. The average payment equalled 158,600 rubles. Credit transfers accounted for almost half of the total volume and 97.1% of the value of the payment orders received by credit institutions.

In Russia, the volume of payments in the form of credit transfers increased by 1.9% and their value by 12.8%. All federal districts saw a rise in the value of credit transfers (with the Urals Federal District reporting the highest in-

⁴The Herfindahl – Hirschman Index (HHI) is the sum of the squares of all companies' market shares. It takes values from 0 to 1. Index values lower than 0.1 signify a low level of concentration, values from 0.1 to 0.18 stand for average levels of concentration, and values over 0.18 point to a high level of market concentration.

⁵Payments sent to a credit institution may be executed via the Bank of Russia or other payment systems.

crease of 26.1% and the North Caucasus coming in last with 7.9%). Meanwhile, three of the eight federal districts reported a drop in the volume of credit transfer payments (the largest decline of 11.8% occurred in the Southern Federal District).

About half of all credit transfers in terms of volume and 60% in terms of value were made in the Central Federal District, including 33.4 and 60.5% in the city of Moscow and the Moscow Region, respectively (hereinafter referred to as the Moscow Region). The shares of other federal districts in the usage of this payment instrument were much lower: from 1.3% (North Caucasus) to 20.1% (Volga) in terms of volume, and from 0.7 to 9.8% (in the same federal districts) in terms of value, respectively.

Overall, Russia's five largest credit institutions in terms of capital accounted for over 40% of the total volume of credit transfers and about one-third of their total value. On average, each credit institution within the group processed 840,000 incoming orders worth 105.0 billion rubles per day, which was much better performance than that of credit institutions with the lowest capital.

Almost half of all credit transfers were made by payment orders. Legal entities' transactions prevailed both in their volume and value (78.7 and 91.3%, respectively), with an average payment effected by payment order standing at 320,800 rubles.

As for credit transfers by individuals, most of them were made without opening bank accounts (86.9% of the total volume of credit transfers, or 1.3 billion transfers) and they represented about one-third of the total value (4.0 trillion rubles). A similar situation was observed in all federal districts, with the highest numbers (90.8% of volume and 58.3% of value) reported in the Southern Federal District, which was partly due to its geographical location (bordering on Ukraine and Kazakhstan). On average, there were nine transfers totalling 27,900 rubles per capita during the year.

Regarding recipients, most transfers made by individuals without opening bank accounts were intended for legal entities (primarily utilities and public agencies): 88.9% in terms of volume and 66.3% in terms of value. The average size of a transfer in favour of legal entities increased by one-quarter over 2010 to 2,300 rubles.

98.9% of the total volume and 92.2% of the total value of money transfers made by individuals without opening bank accounts were made in rubles. Foreign-currency transfers only accounted for 1.1 and 7.8%, respectively. But they tended to be much larger: the average size of a foreign-currency transfer was 22,400 rubles, or almost eight times the average size of a ruble-denominated transfer.

As in previous years, payments by letter of credit showed high growth rates (1.7 times year on year) in terms of value, with a slight increase in volume (less than 5%), which resulted from a significant (1.6 times) rise in the average payment by letter of credit, which equalled 17.8 million rubles in 2011. But despite the significant growth of these payments, their share of the total value of credit transfers remained small (less than 1%). Transactions of individuals with letters of credit dominated in terms of volume (68.8%) and transactions of legal entities other than credit institutions – in terms of value (93.0%).

Chart 1.11. Volume of credit transfers in 2011, by federal district

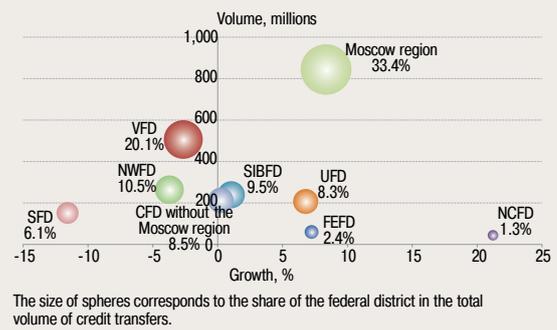


Chart 1.12. Value of credit transfers in 2011, by federal district

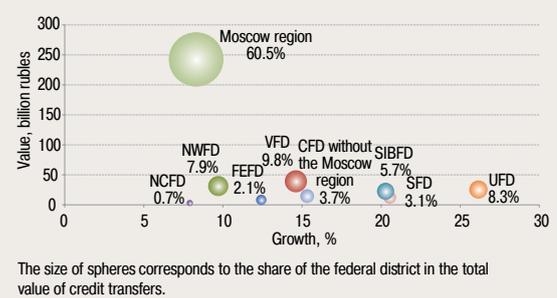


Chart 1.13. Structure of individuals' transfers sent without opening a bank account in 2011, by transfer direction, %

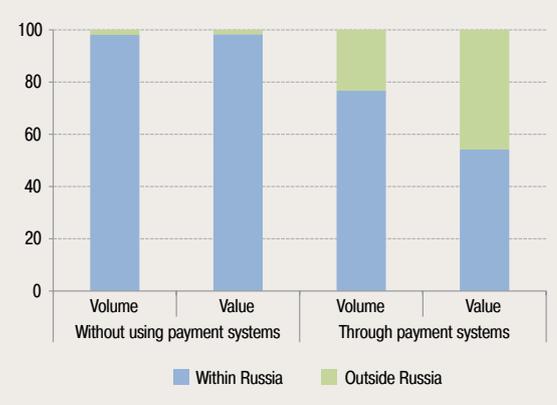


Table 1.7. The share of credit institutions in the total volume and value of credit transfers in 2011

Distribution of credit institutions ranked by size of assets (descending order)	Share, %		Average amount for a credit institution	
	Volume	Value	Volume, millions	Value, billion rubles
First 5	41.2	32.5	208.3	26,049.6
From 6 to 20	10.9	21.0	18.4	5,612.7
From 21 to 50	9.6	14.2	8.1	1,895.5
From 51 to 200	12.4	18.0	2.1	479.8
From 201	25.8	14.4	0.8	71.0

Bank of Russia

Credit transfers made in 2011 from the accounts of Bank of Russia customers other than credit institutions grew by 2.6% in volume and by 21.4% in value year on year and totalled 181.7 million transactions worth 76.2 trillion rubles. The average size per payment was 419,300 rubles. Virtually, all credit transfers were executed by payment order. Letters of credit were rarely used by Bank of Russia customers other than credit institutions (their share equalled less than 0.001% in the total volume and value of such transactions).

Box 3

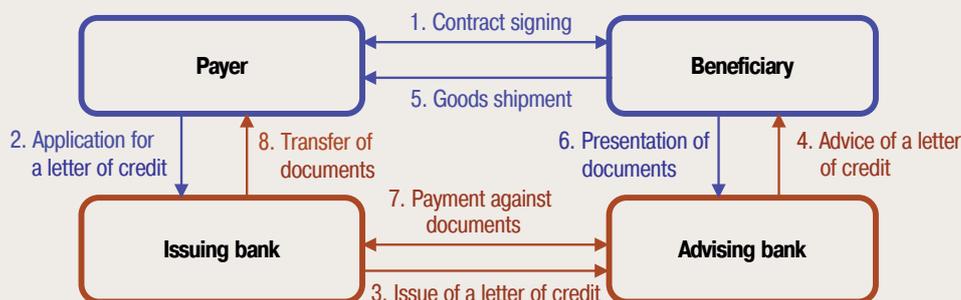
Letters of credit worldwide

The term “letter of credit” ultimately derives from the Latin “accreditivus,” which means trust^[1]. The definition highlights the essence of the instrument that constitutes an obligation of a payer’s bank to make payment to a beneficiary after the latter has submitted such documents according to the letter of credit terms and conditions.

The key international document that regulates the use of letters of credit is the *Uniform Customs and Practice for Documentary Credits*^[2] whose Article 2 describes a letter of credit as “any arrangement, however named or described, that is irrevocable and thereby constitutes a definite undertaking of the issuing bank to honour a complying presentation. Honour means:

- a) to pay at sight if the credit is available by sight payment;
- b) to incur a deferred payment undertaking and pay at maturity if the credit is available by deferred payment;
- c) to accept a bill of exchange (“draft”) drawn by the beneficiary and pay at maturity if the letter of credit is available by acceptance.”

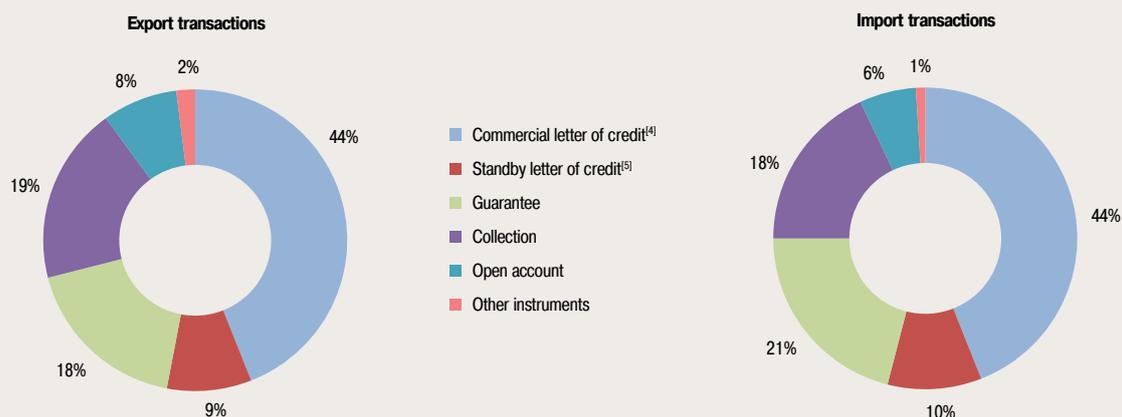
Chart 1.14. Letter of credit scheme



In the current international trade, letters of credit serve as a key instrument of payment. The evidence of this is given in a survey of banks that the International Chamber of Commerce (ICC) carried out in 2011: more than half of total import and export operations were arranged by letters of credit. Many banks referred to a growing demand for letters of credit, which was closely associated with the desire of exporters and importers to mitigate trading risk.

According to SWIFT^[3], letters of credit represented 75% of the entire SWIFT traffic in 2011. The Asia-Pacific region initiated 65% of all import transactions, followed by Europe, the Middle East and Africa. The largest average size per payment (\$1.5 million) was in European countries outside the eurozone. Asia and the Pacific also prevailed in total export payments by letters of credit.

Chart 1.15. The structure of export and import transactions in 2011, by volume



^[1] In the Russian language it sounds similar.

^[2] ICC publication No. 600.

^[3] Based on the ICC Global Survey on Trade Finance 2012, International Chamber of Commerce, 2012.

^[4] Commercial letter of credit is a letter of credit that involves the presentation of the following documents: a commercial invoice, bill of lading, insurance policy or certificate.

^[5] Standby letter of credit is a kind of a bank guarantee of a documentary nature (i.e. allowing documents other than the demand for payment to be presented) which meets the document requirements of the International Chamber of Commerce applied to letters of credit.

1.2.2.1. Payment systems activities in money transfers without opening a bank account

In 2011, in the Russian Federation, there were 95.0 million money transfers worth 420.4 billion rubles⁶ conducted by individuals through payment systems without opening a bank account. The volume of these transfers grew by 17.9% during the year, however, the total value of these transfers lightly decreased (by 1.3%).

In terms of value, money transfers in favour of individuals held the largest share in the structure of remittances made by individuals in the Russian Federation (92.1%), while transfers in favour of legal entities dominated these remittances by volume (81.9%). At the same time, the growth rate of transfers in favour of legal entities exceeded 25%, which shows demand for payment services in regular payments by households. The average remittance in favour of individuals equalled 22,500 rubles in 2011, while the average transfer to legal entities amounted to 400 rubles.

The payment infrastructure expanded considerably since 2010: the number of customer service points increased 2.3 times to 193,600 outlets. The largest number of customer service points was located in the Central and Volga Federal Districts, while the smallest number was registered in the Far Eastern and North Caucasus Federal Districts.

The largest number of customer service points per 1 million inhabitants of a district was observed in the Central and the Far Eastern Federal Districts (1,831 and 1,468 points, respectively). In all other federal districts, this indicator was below the national average of 1,353 points.

⁶Based on data provided by payment systems regarding funds transfers without opening a bank account: ALLURE, Migom, UNISStream, CONTACT, BYSTRAYA POCHTA, Blitz, LEADER, BLIZKO, Anelik, Western Union, INTEREXPRESS, Zolotaya Korona, VTB 24 – Sprint, Privat-Money.

Chart 1.16. Individuals' money transfers made through payment systems without opening a bank account in 2009–2011, by transfer beneficiary

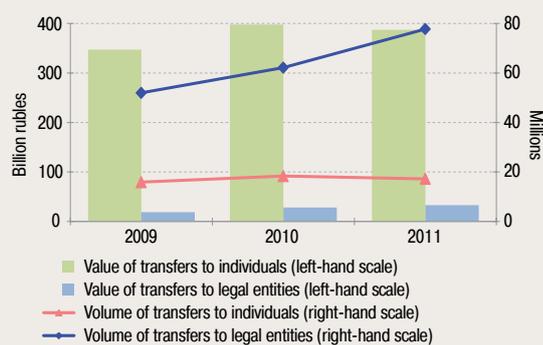


Chart 1.17. Payment infrastructure for money transfers without opening a bank account in 2011, by federal district, %

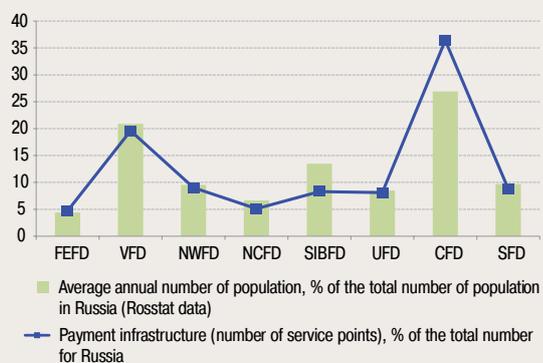


Chart 1.18. Russian market of money remittances sent by individuals without opening a bank account in 2011, by federal district

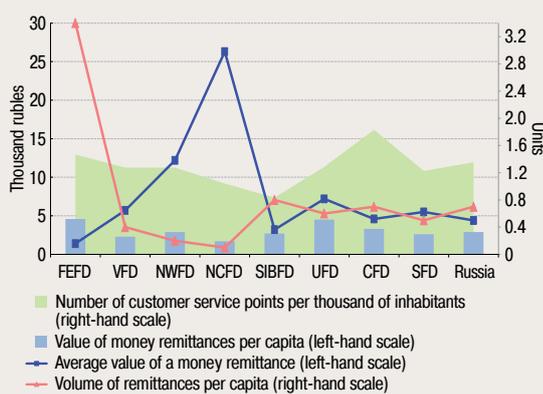
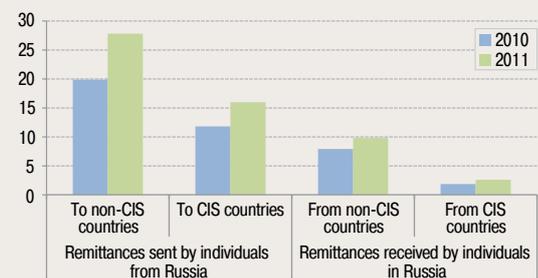


Chart 1.19. Cross-border remittances sent by individuals, by transfer direction, \$ billion



At the regional level, the maximum deviations from Russian average indicators characterising money transfers without opening a bank account, were registered in the Far Eastern and North Caucasus Federal Districts. The Far Eastern Federal District showed the maximum volume and value of per capita money transfers – on average, an individual inhabitant sent 3.4 remittances amounting to 4,600 rubles during 2011. The North Caucasus Federal District was a leader in the amount of a remittance sent via payment systems without opening a bank account (26,300 rubles), which exceeded the national level 6 times. Taking into account, that, in general, this channel of money transfers was used rarely in this region (the volume of remittances through payment systems without opening a bank account made up 0.1 and the value accounted 1,700 rubles per inhabitant), it was used less for regular service payments in favour of legal entities, and more – for large-value remittances transferred in favour of individuals.

1.2.2.2. Cross-border money remittances by individuals

The Russian market of cross-border remittances was characterised by higher growth rates in 2011 as compared with the previous year. The total value of cross-border money remittances sent by individuals⁷ from Russia and to Russia increased by 35.5% (in 2010, by 19.9%) and amounted to \$56.3 billion in 2011, of which 78% fell on remittances made from Russia, which was 3.5 times more than the volume of remittances to Russia. Cross-border money remittances balance was negative at \$31.4 billion as against \$21.9 billion in 2010.

Based on the data of “Migration and Remittance Factbook 2011” released by the World Bank Development Prospects Group⁸, Russia ranked 23rd by the value of remittances among top remittance recipients and 4th place among top remittance senders.

As in previous years, non-CIS countries had the largest share of cross-border remittances from Russia and to Russia made by individuals, their value almost twice exceeded the similar indicator for CIS countries.

Remittances sent by individuals from the Russian Federation

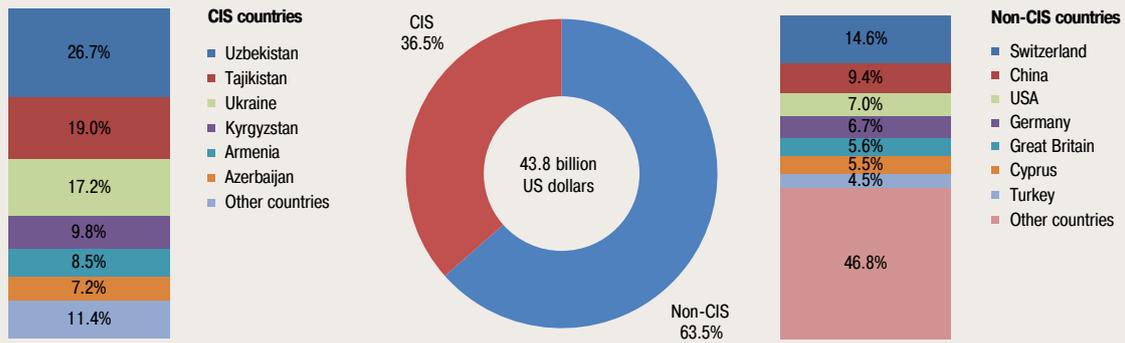
In 2011, the total of cross-border remittances sent by individuals from Russia was \$43.8 billion, which exceeded the corresponding indicator of 2010 by 38.2%. The largest share of these remittances was sent to non-CIS countries. Switzerland, China, the USA, Germany and the United Kingdom were top recipients, their total share accounted for 43.3%. There were \$16.0 billion sent to CIS countries, more than half of which delivered to Uzbekistan, Tajikistan, and Ukraine.

The share of remittances sent by individuals from Russia via payment systems without opening a bank ac-

⁷ Cross-border non-cash transactions (receipts) by resident and non-resident individuals (receipts in favour of resident and non-resident individuals) made with opening an account with credit institutions or without it, including remittances made via payment systems.

⁸ <http://www.worldbank.org/migration>

Chart 1.20. The structure of remittances sent by individuals from Russia in 2011, by recipient



count⁹ remained at the 2010 level and stood at 40.0%, of which the major share (86.4%) was sent to CIS countries.

Residents sent the largest share of remittances from Russia in 2011. They transferred money to their own accounts with foreign banks in more than a third of all cases (39.8%). Non-repayable remittances accounted for 29.9%, and the rest 30.3% – as payments for goods and services, real estate transactions, etc.

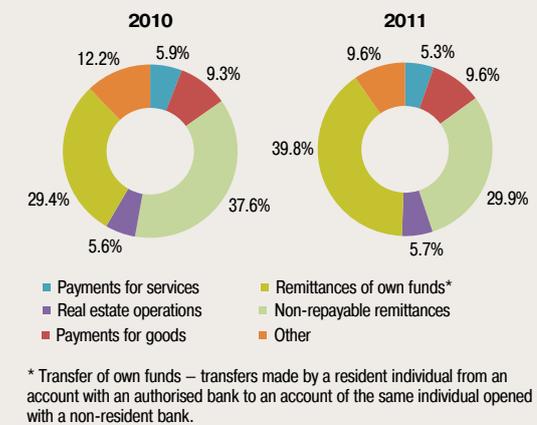
Remittances received by individuals in the Russian Federation

The value of remittances sent in 2011 in favour of individuals in Russia exceeded the value of the previous year by 26.9% and stood at \$12.4 billion. The average amount of a transaction grew by 6.4% to \$2,500. The largest share of all remittances fell on transactions made from non-CIS countries, where Switzerland, Cyprus and the United States were top remitters.

22.3% of all funds were transferred via payment systems without opening a bank account. Remittances made in favour of individuals from CIS countries were growing at a higher rate with their value standing at \$1.8 billion in 2011, and their share grew to 64.5%. The average amount of a transaction exceeded the same indicator for non-CIS countries and stood at \$757.

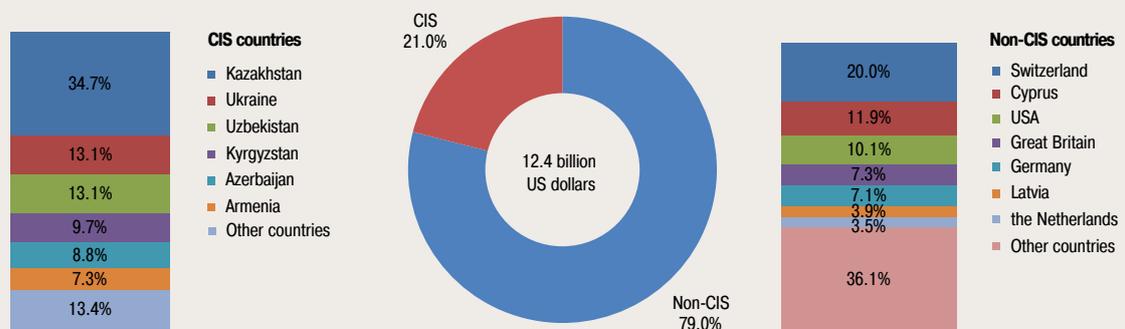
As before, remittances to Russia from abroad were sent mostly in favour of residents, their share was 75.3%. The

Chart 1.21. Cross-border remittances sent by resident individuals, by purpose of remittance



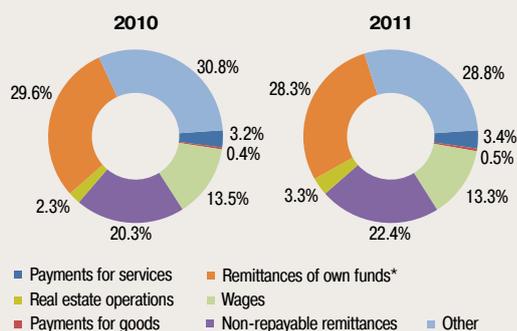
* Transfer of own funds – transfers made by a resident individual from an account with an authorised bank to an account of the same individual opened with a non-resident bank.

Chart 1.22. The structure of cross-border remittances to individuals in Russia in 2011, by remitter



⁹ Payment systems for remittances are: Anelik, BLIZKO, Coinstar Money Transfer, Contact, InterExpress, Migom, MoneyGram, Privat-Money, UNISStream, Western Union, Asia-Express, ALLURE, Blitz, Bystraya Pochta, Zolotaya Korona, LEADER, Post of Russia, Faster, Caspian Money Transfer.

Chart 1.23. Cross-border remittances to Russia for the benefit of resident individuals, by purpose of receipts



* Transfer of own funds – transfers from an account of a resident individual opened with a non-resident bank to the account of the same individual with an authorised bank.

structure of transfers to Russia split by purpose did not change considerably in comparison with the previous year: 28.3% of funds were transferred to own accounts with credit institutions; non-repayable remittances, compensation of employees, payments for services and goods, as well as proceeds from property transactions accounted for almost 43.0%, and remittances for miscellaneous purposes – 28.8%.

1.2.3. Direct debits¹⁰

Credit institutions

At present, direct debits are not widely used in Russia. In 2011, as compared with the previous year, the share of direct debit in the total volume of non-cash payments of the customers of credit institutions and their own payments decreased by 0.8 percentage point to 2.1%, and its total value remained at the same level (0.4%).

In 2011, the value of direct debit payments increased by 17.5% to 1.8 trillion rubles. The largest increase was registered in the North Caucasus Federal District (by 38.4%) and the Urals Federal District (by 36.2%). The volume of direct debit payments decreased by 13.8% and stood at 118.3 million transactions. The decrease was registered in the Central Federal District (by 35.8%), the Southern Federal District (by 19.5%), and the Northwestern Federal District (by 16.9%). As a result, the share of the Central Federal District in the total volume of direct debit payments fell to less than 40%.

An average size of a payment in Russia rose by 36.3% to 15,600 rubles. The North Caucasus Federal District (23,700 rubles), the Urals Federal District (22,800 rubles), and the Siberian Federal District (20,900 rubles) were in the lead.

Legal entities other than credit institutions used direct debits more actively: they accounted for 68 out of 100

Box 4

New in legislation: direct debits

Under Article 6 of the NPS Law, a new form of non-cash settlements – money transfer at the request of a payee (direct debit) may be used in the Russian Federation. While making direct debit settlements, a bank serving the payer based on an agreement stipulating the right of the payee to make a claim to the payer's account, debits the account with the payer's permission (payer's acceptance) at the payee's request.

The Article specifies that the payer's acceptance may be given prior to the receipt of the payee's request (the payer's acceptance given in advance) or after such a request was received by a bank. The acceptance procedure is stipulated in an agreement signed between the payer's bank and the payer, or in a separate document or message with regard to one or several payees or to payee's claims. In addition, the Article provides for the payer's bank receiving its acceptance, including the amount of funds claimed by the payee, executing or returning the payee's claims.

Point 2 of Article 8 of the NPS Law establishes a possibility of transferring, accepting for execution, executing and storing of electronic orders, including payee's claims.

Legal requirements for direct debits are allowed for by the Bank of Russia in its regulation establishing money transfer rules^[1]. In particular, it is established that direct debit settlements are conducted with the use of an instruction in the form of a payment claim only if an acceptance is available. Earlier, payment claims were used with acceptance and without it, and they were formed and sent only in hard copies.

[1] Bank of Russia Regulation No. 383-P, dated June 19, 2012, "On Money Transfer Rules".

¹⁰ Within the framework of the present Review, direct debits comprise payments made on the basis of payment requests and collection letters.

payments in the form of direct debits and their total value stood at almost 90%.

Two of three direct debit payments were made by payment claims. In terms of value, they reached almost 90% (1.6 trillion rubles). As compared with 2010, the value of direct debit payments grew by 25%, whereas their volume increased only by several percent, and the average size of payment grew from 16,700 rubles to 20,500 rubles.

As payments by collection orders contracted considerably (by 34.5% in volume and by 20.5% in value), their share decreased to 33.1% and 12.1%, respectively. The average size of payment by a collection order amounted to 5,700 rubles.

Bank of Russia

There were 11,100 direct debits worth 3.3 billion rubles conducted by the Bank of Russia customers other than credit institutions in 2011. As compared with the previous year, there was a contraction almost by third in the volume of payments, as well as in their value. Payments by payment claims prevailed in the structure of such payments (67.2% of the volume and 90.6% of the value).

1.2.4. Bank cards

Bank cards

An expansion of a range of bank products involving the use of bank payment cards, card service infrastructure development at points of sale and services, outreach of financial awareness of population more widely using modern bank technologies in making payments encouraged a dynamic growth of the national bank card market in 2011.

In 2011, the number of bank cards issued by Russian credit institutions, increased by 38.6% to 200.2 million¹¹. Card payments made in the Russian Federation as well as abroad grew by more than a third in volume and value year on year and stood at 4.2 billion transactions worth 17.7 trillion rubles. Non-cash payments using bank cards were characterised by high growth rates and they rose 1.6 times in volume and 1.8 times in value. It caused an increase of non-cash payment share in the total volume of operations by bank cards from 34.4% in 2010 to 41.8% in 2011, and in the total value – from 15.0 to 20.2%. At the same time, bank card holders kept using them primarily for cash withdrawals: the volume of such operations stood at 2.5 billion transactions worth 14.2 trillion rubles, and the average amount of operation was 5,800 rubles as against 5,300 rubles in 2010.

As in previous years, high growth rates of non-cash operations using bank cards have been related to a wide extent with technological infrastructure development, as well as with the enhancement of functional features of ATMs which help to pay for regularly consumer services (such as housing and utilities, communications, etc.). The number of ATMs allowing executing such payments has increased almost by a quarter, and the number of non-cash payments made via ATMs – 1.5 times. The average amount of such a payment grew from 372.7 rubles in 2010 up to 460.2 rubles in 2011.

Households more actively used bank cards in making payments for goods and services via Internet and mobile phones. During the year, the volume of these operations

Chart 1.24. The structure of direct debit payments in 2011, by type of settlement document

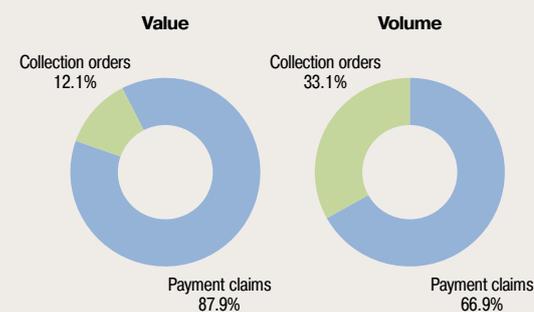


Chart 1.25. The structure of direct debit payments of the Bank of Russia customers in 2011, by type of settlement document

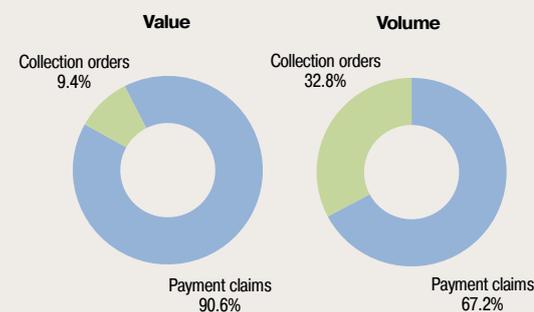
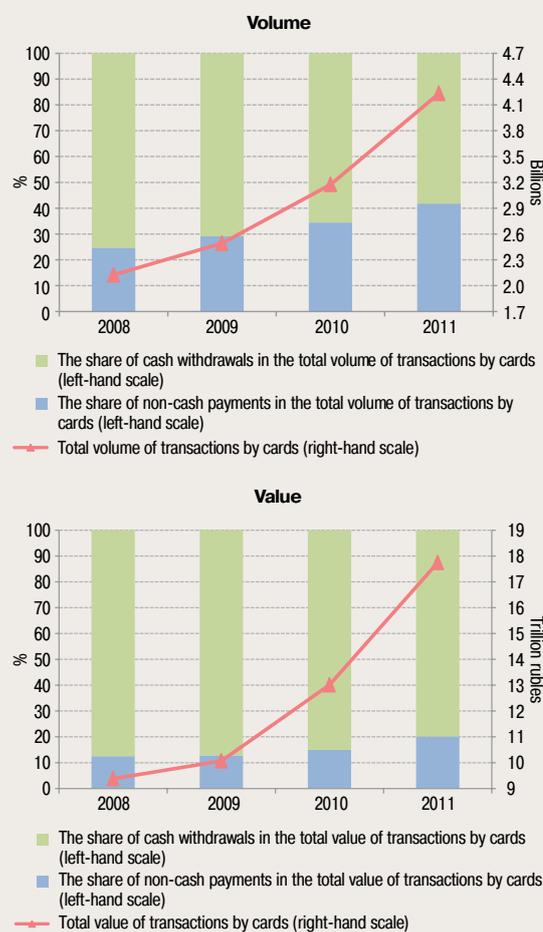
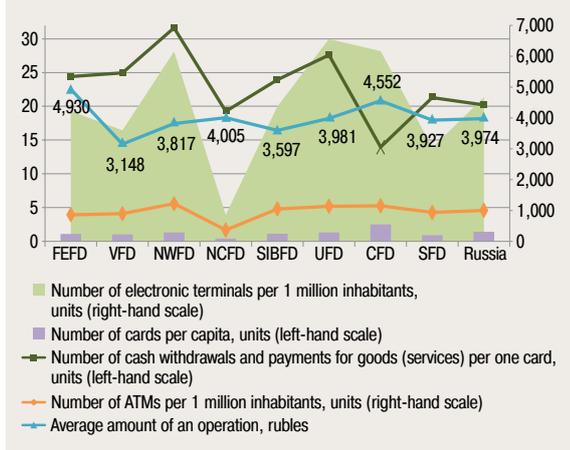


Chart 1.26. The structure of transactions using bank cards in 2008–2011



¹¹ Including prepaid cards.

Chart 1.27. The Russian bank card market in 2011, by federal district, units



rose by more than a half (to 188.1 million operations), and the value – 1.5 times (to 217.8 million rubles).

There was also registered a considerable growth of bank card payments made at points of sale and services (in volume 1.6 times and in value 1.7 times) assisted in its turn by an increase in the number of terminals and imprints installed at points of sale (by 17.9% to 557,400).

In addition, bank card holders actively used the possibilities of this payment instrument to manage their own funds stored on bank accounts: the volume and value of money transfers from a card to a card, from a card to a deposit account, etc. grew by more than a half.

The nature of bank card market development in Russian regions differed considerably due to a number of factors. Thus, the most favourable environment for dynamic development of the bank card market was observed in the Central Federal District: initially, it had a developed bank infrastructure, concentrated financial resources, dense population, etc. As a result, this district surpassed other Russian federal districts in the number of cards issued per capita, infrastructure developed to accept bank cards, as well as in value and volume of transactions with their use. The Central Federal District was followed by the Urals Federal District and the Northwestern Federal District. The Volga Federal District and the Siberian Federal District had average values, and the Southern Federal District and the North Caucasus Federal District closed the list.

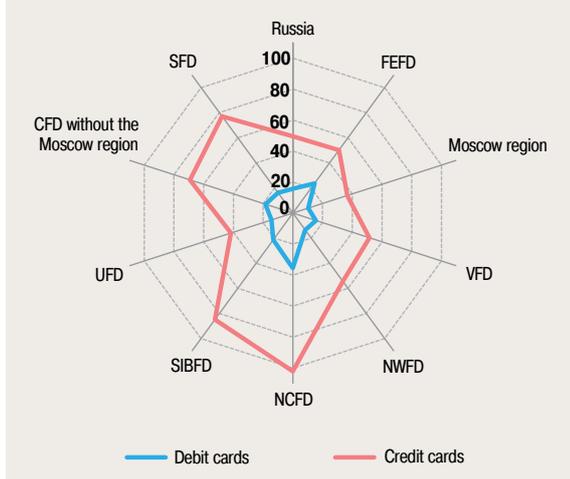
The Central Federal District and the Northwestern Federal District showed the best ratios of cash and non-cash transactions by bank cards. The share of non-cash payments in the total number of transactions using bank cards stood at 48.3% in the Central Federal District and 44.5% in the Northwestern Federal District. The lowest ratios were registered in the Southern Federal District and the North Caucasus Federal District – 32.5 and 30.4%, respectively.

Debit and credit cards

Traditionally, debit cards prevailed in the bank card structure: at the end of 2011, their share of the total number of cards issued by credit institutions accounted for 73.9%. More than a third of the total number of debit cards was issued in the Central Federal District, of which 70% were issued to the residents of the Moscow Region. Low values were still registered in the North Caucasus Federal District (2.4%), Far Eastern Federal District (4.2%) and Southern Federal District (7.11%).

Amid growth of consumer lending in Russia, a significant rise in the number of cards issued to households was observed: over the year, their number grew by 50% (in 2010, only by 5.6%). In six out of eight federal districts, this indicator was above the national average. At the same time, higher growth rates were observed in those federal districts where average per capita income was the lowest. In the North Caucasus Federal District and the Siberian Federal District, where average per capita income was 15,300 rubles and 16,300 rubles, respectively, the volume of credit cards grew 2.0 times and 1.8 times. At the same time, in the Central Federal District and the Northwestern Federal District with average per capita income of 26,600 rubles and 21,500 rubles, the growth rates were considerably lower – 40.5 and 54.6%, respectively.

Chart 1.28. Rates of growth in the number of debit and credit cards in 2011, by federal district, %



Card frauds

Amid modern information technology development, the prevailing types of fraud are aimed at obtaining confidential information on a potential victim (a card number, owner name, validity of the card, PIN-code, secret code, etc.), which is used for fraudulent activities.

Types of fraud can be divided into two major groups: social (the human factor is used) and technological (with use of special software/hardware).

Social types of fraud

Phone fraud. Fraudsters use a phone call, SMS message or an autoinformer to establish a contact with a card holder. During the conversation, fraudsters introduce themselves as bank employees or employees of other organisations (for example, radio stations) and under various pretexts (for example, database updates, a suspicion that a card has been compromised, or needs to be reissued, new service connection, receipt of a prize, etc.) they lure a victim to disclose confidential information, or make a money transfer to a bank account or a mobile phone number the fraudsters have access to.

Phishing. Fraudsters create Internet sites that look like the existing sites of banks or trade (service) providing companies by selecting visually similar website addresses and/or copying the content of the original page and making slight changes. At the same time, by various means, including mass mailing of letters by email (so-called spam), letters and messages in social networks, distribute links to the fraudulent site. While visiting this site, a client is always asked to provide, besides usual data, confidential information (for example, a PIN-code, security card code, security word, etc.), which is never requested to be provided on the official sites of a bank or trade (service) company.

One may identify the following types of phishing:

- spearphishing – a type of phishing when fraudsters pick up a certain group of people in advance (working at the same company, being members of a club, etc.) and attack this group;
- twinphishing – a type of phishing when instead of mass mailing letters by e-mail there is a mailing of letters that look like official letters of existing banks or other organisations;
- smishing – sms-messages are used as an attack channel;
- vishing – an emulation of a call from a call-centre of a bank is used as attack channel;
- whalephishing – top managers and/or principals of companies are targets of fraudsters. Prior to each attack, fraudsters collect a great volume of personal information on a potential victim that increases the probability of phishing success.

Technological types of fraud

Trapping – “the Lebanese loop”. A perpetrator inserts into an ATM’s or payment terminal’s card slot a special device, a so called Lebanese loop, which blocks the inserted card making it impossible to eject the card after the end of servicing. By deception or with the help of earlier installed devices (for example, a strip on the keyboard or a miniature camera, etc.), a PIN-code of the victim is obtained. Once the victim has left the ATM or terminal (for example, to go to a bank or make a call), the perpetrator retrieves the loop and the trapped card.

Skimming. There are two types of skimming:

- fraud with use of a special device (skimmer) illegally installed in an ATM, terminal or locker at the entrance into a 24-hour self-service area for customers. If the skimmer is installed in an ATM or terminal, then it is often used in conjunction with a device aimed at receiving a PIN-code (for example, a strip on the keyboard or miniature camera, etc.);
- skimming at points of sale. Employees of companies providing services or sale of merchants capture a customer’s card information from a magnetic strip when the skimmer has possession of the victim’s card out of his/her immediate view.

One of the reasons explaining high growth rates of credit cards is the fact that not only banks are interested in using them (a possibility of earning interest and fee income), but households benefit as well (credit cards provide a possibility of getting a no-purpose loan, which can be spent at any time for any purpose). In addition, once the loan is repaid, the card holder can use the credit card again (for example, to pay for goods) without renewing the loan agreement.

Primary use of credit cards as a non-cash payment instrument is viewed as a positive trend: in 68 cases out of 100, the card holder uses it for making non-cash trans-

Chart 1.29. Credit card growth rates and household average per capita income, by federal district

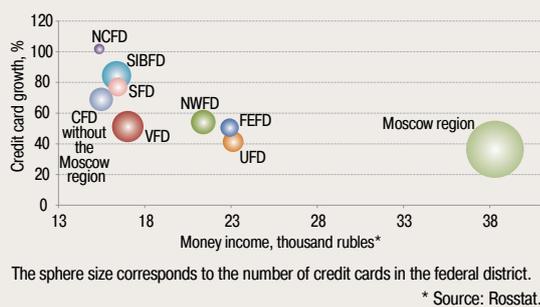


Chart 1.30. The volume of cash withdrawals and non-cash transactions, by card type, %

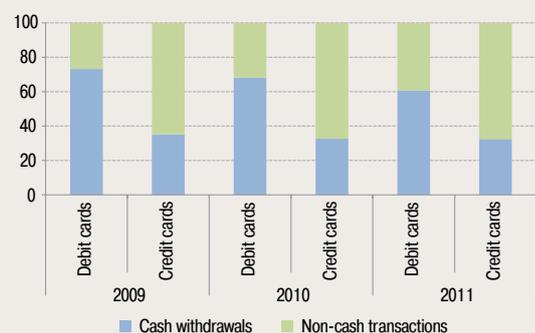


Chart 1.31. The value of cash withdrawals and non-cash transactions, by card type, %

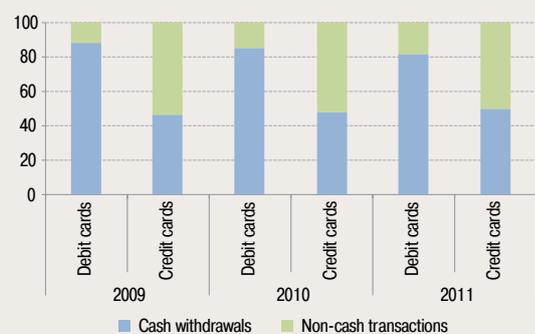


Chart 1.32. The volume and value of transactions using prepaid cards in 2008–2011



actions, and only in 32 cases – to withdraw money. As for debit cards, this ratio is in favour of withdrawal transactions (61 against 39), which is mainly due to the fact that the majority of debit cards are issued within the framework of salary and social service projects, and their card holders still prefer to use them for cash withdrawal. At the same time, a positive trend has been observed reflecting an increase of non-cash operations share in the total volume of operations conducted with the use of debit cards: as compared with 2010, it grew by more than 7 percentage points to 39.2%.

Prepaid cards

As of the end of 2011, 42 credit institutions issued prepaid bank cards of 21 payment systems. It is necessary to note, that, in contrast to debit and credit cards, cards of the Russian payment systems prevailed among prepaid cards. The share of the prepaid cards of the Russian payment systems stood at 96.5%, while that of debit and credit cards – only at 7.0%.

The share of active¹² cards in the total volume of issued bank cards is one of the indicators that characterise the development of prepaid cards. The number of active prepaid cards during the reporting quarter exceeded their number as of the end of the quarter, because cards of this category are basically intended for payments of small amounts and, as a rule, they are issued for one-time payments, i.e. holders of cards having effected an one-time payment do not replenish them afterwards (i.e. they expire after the prepaid amount has been spent). In 2011, the number of active prepaid cards averaged 17.1 million per quarter as against 8.7 million cards in 2010.

Household demand for prepaid cards is demonstrated by high growth rates of operations with their use over the years. Only in 2011, the volume of such operations rose by more than a third, and the value almost 3 times. This was primarily due to the increase in the volume of payments for goods (services) processed via Internet usually in small amounts.

1.2.5. Cheques

Cheques hold the smallest share in the structure of non-cash payment instruments. A total of 5,900 cheque payments worth 8.0 billion rubles were effected in 2011. Payments made by legal entities other than credit institutions credit institutions accounted for 64.5% of the total volume and 6.2% of the total value of these payments, while individual payments accounted for 6.4% and 11.0%, respectively, and credit institutions' own payments made up 29.1% and 82.8%. Cheques were used most actively in the Central Federal District (59.3% by volume and 96.9% by value) and the Siberian Federal District (37.7% and 3.0%, respectively).

1.2.6. Bank orders

Bank orders are widespread in banking practice and are used primarily when making systematic and massive transactions. In 2011, 78.3% of the total volume of a credit institution's (branch's) own payments and 9.4% of

¹² Here and below, active cards are those used in at least one operation related to cash withdrawal and (or) payment for goods and services during the reporting period.

Regulation of electronic money in Russia

Before the adoption of the NPS Law, the Russian electronic money market was at legal risk. The electronic money market has become legal and regulated as the NPS Law came into force, meeting the requirements of modern market structure and its peculiarities.

Under new NPS law provisions, money becoming electronic does not change its essence: it is a non-cash means accounted by an e-money operator and is used for execution of customer money obligations to third parties.

The Russian model of the e-money system is a banking one: only credit institutions can be e-money operators, including a new type of non-bank credit institutions with a simplified regime of establishment and regulation. There was a transitional period determined (15 months from the date of the NPS Law official publication) so that players of this payment market segment could bring their activities in accordance with new regulation.

According to the NPS Law requirements, customer orders to transfer e-money can be conducted only by electronic means of payment (EMP). Individual customers can use EMP for their identification procedure (personified EMP – e-money balance at any moment should not exceed 100,000 rubles), and without identification procedure as well (non-personified EMP – e-money balance should not exceed 15,000 rubles). In addition, there are limits established on the volume of operations with the use of a non-personified EMP, which may not exceed 40,000 rubles within a calendar month.

Legal entities may use EMP to make e-money payments (corporate EMP). There is a number of restrictions envisaged for legal entities, which regulate, among others, the maximum balance in the amount of 100,000 rubles, a possibility to remit money for replenishing the corporate EMP balance only from the corporate bank account, as well as to remit e-money from corporate EMP only to personified EMP of individuals.

It is necessary to note that the NPS Law envisages a possibility for e-money operators to involve bank payment agents:

- to take cash from individuals for increasing the balance and making e-money transfer, as well as for disbursing cash to individuals by personified EMP (return of e-money balance);
- to provide customers with EMP and a possibility of their use;
- to identify individuals to replenish the balance and transfer e-money.

As for the protection of consumer rights, the Law stipulates a number of requirements relating to information provision to customers by an e-money operator:

- a customer has a right to obtain information in advance on all terms and conditions of e-money operations;
- a customer shall be notified on the results of e-money operations.

E-money use in the European Union

G-20 leaders at the 2009 Toronto summit emphasised the necessity to enhance efforts for increasing household service access and identified innovative types of payments (for example, payments via Internet and using NFC technology) as an important instrument to achieve the goal. E-money payments belong to such types.

In accordance with the European Central Bank definition, electronic money is a monetary value, represented by a claim on the issuer which is stored on an electronic device and accepted as means of payment by undertakings other than the issuer.

The attractiveness of e-money is in its simplicity of the use and affordability to a wide range of customers. Customers may pay with e-money for goods and services at any convenient place where there is an access to Internet or mobile phone communications. The main advantage is that a payment is effected immediately.

Data of the CPSS Red Book Statistical Update^[1] show that from 2006 to 2010, the volume of cards with e-money payment function per capita increased. If there was 0.62 card per one resident in Switzerland at the end of 2006, at the end of 2010 this indicator was 0.64. The majority of e-money payment cards was issued in the Netherlands and France (in 2010, their number rose by 21.2%), in Italy (by 16.3%) and in Germany (by 10.9%).

Chart 1.33. The number of cards with an e-money function issued as of end of year, millions

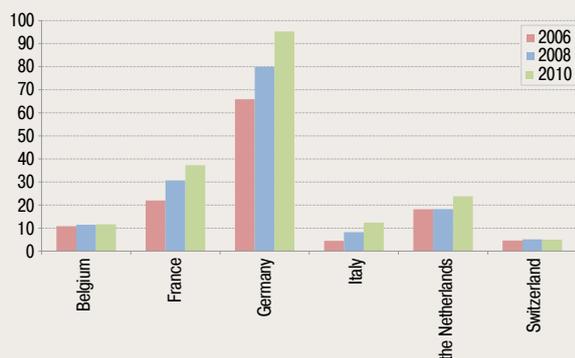
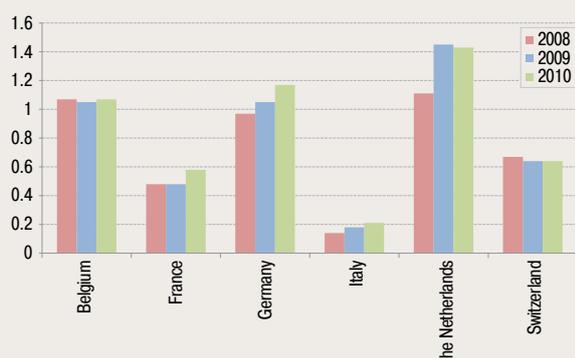


Chart 1.34. The number of cards with an e-money function per one inhabitant issued as of end of year, millions



E-money cards are issued in countries where the level of electronic money use is relatively high. They are accepted mainly in phone booths, vending machines, parking meters, etc.

In Germany, from 2000 to 2010, the average growth rate of e-money operations stood at 11.5%^[2]. The German GeldKarte is the largest European retail payment system by the number of smart cards issued. This card is based on the e-wallet principal, i.e. the owner possesses only the amount, which is loaded to the card using an ATM, terminal, or via Internet. Two types of cards with an integrated chip function operate in the GeldKarte system:

- cards connected with a customer current bank account and loaded via ATMs;
- cards independent from the customer bank account. They can be sold to anyone and are loaded in the bank cash department or using a terminal with two card slots.

The GeldKarte system was established in 1996 and is used mainly to pay for public transport or parking tickets, as well as to prove a holder age at cigarette vending machines. There is no need to enter a PIN-code while making a payment, and the terminal operates in an off-line mode.

In 2010, there were 45 million of payments worth 129 million euros processed through the GeldKarte system with an average value of 3.02 euro. There are 600,000 terminals installed in Germany that accept cards of this system.

In the Netherlands, the electronic money market is represented by its own system – Chipknip. All bank cards issued in the Netherlands are equipped with a chip, and they can be loaded via Chipknip loading stations and ATMs as well. The system operates in an off-line mode. There is a maximum amount allowed for a Chipknip card, which is enough to make payments in retail stores and for transportation. In 2010, there were 178 million transactions processed using Chipknip with an average amount of 2.68 euro.

^[1] BIS publication “Statistics on payment, clearing and settlement systems in the CPSS countries”. <http://www.bis.org/publ/cpss99.pdf>

^[2] According to European Central Bank data.

the total value were carried out with the use of this settlement document. The average amount of a payment stood at 11,400 rubles.

1.3. METHODS OF EFFECTING PAYMENTS

1.3.1. Methods of forwarding payments to credit institutions and the Bank of Russia

With an active use of modern information technologies by bank customers in Russia, as in many other countries, the share of payments sent to credit institutions and the Bank of Russia electronically is increasing every year.

Although Russia still falls behind the majority of BIS CPSS member countries by the volume of payments sent by bank customers electronically, it takes one of the leading places in annual growth rates of such payments. Thus, if in the developed countries this indicator averaged about 8% from 2006 to 2010, in developing countries, average

Bank orders

Until recently, a memorial order was widely used to register bank internal operations, including settlements with customers. To streamline the practice of memorial order use in the bank workflow, the Bank of Russia issued Ordinance No. 2161-U, dated December 29, 2008, “On the Procedure for Memorial Order Preparation and Execution”, excluding the possibility of memorial order use as a settlement document.

This meant that to execute such operations as writing down bank charges for settlement and cash services, calculation of interest on individual bank deposits, etc., which were usually systematic and widespread in nature, banks prepared payment orders and payment claims. These payment documents included certain data (e.g., a bank identification code of sender/recipient, correspondent account number of payer/payee bank) that were not required for making transfers within the same credit institution. In addition, the procedure for execution of payment orders and payment claims was rather time-consuming: two signatures (first and second) of persons authorised to sign settlement documents were required, and an imprint of a seal registered in a card with samples of signatures and a seal).

So, the use of payment orders or payment claims for execution of the above-mentioned operations would greatly increase the paperwork, labour and material costs of credit institutions.

To address these problems, the Bank of Russia has developed a new settlement document, a bank order, used by a credit institution for settlement transactions on customer accounts opened with this credit institution, in cases where the payer or the payee is a credit institution itself.

A bank order combines the properties of a payment order, payment claim and memorial order. Unlike payment orders and payment claims applicable only to settlements in rubles, a bank order is used in settlements in rubles and in foreign currency.

At the end of 2009, the Bank of Russia issued Ordinance No. 2360-U, “On the Procedure for Bank Order Preparation and Execution” setting out the procedure for the application of this new settlement document in making money transfers within the same credit institution.

A bank order is prepared by a credit institution electronically or as a hard copy and does not contain “too many” data; it is allowed to include additional data in the bank order, the list whereof shall be determined by the credit institution. In addition, a bank order may be a consolidated one, i.e. it may register operations, on which one account corresponds with several other accounts.

The procedure for execution of a bank order, unlike payment orders and payment claims, is significantly simplified. The bank CEO and a chief accountant, whose signatures are in a bank sample signature card, do not need to sign bank orders, as persons delegated the right of the first and second signatures of the bank order shall be approved by the CEO of the credit institution (branch).

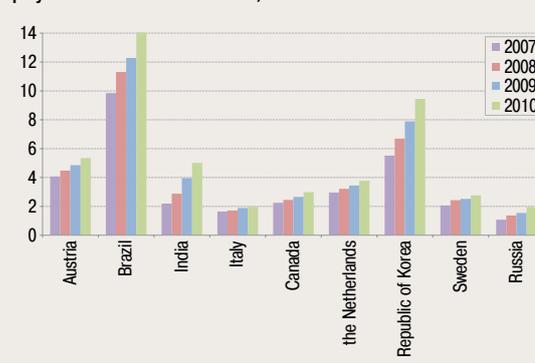
Unlike a memorial order, a bank order may be placed into a file of settlement documents unpaid on time and executed in part by a payment order.

annual growth rates varied from 13% in Brazil to 34% in India. In Russia, the indicator stood at 23%, while in 2010 it was the largest among all BIS CPSS member countries (27.5%) year on year.

Credit institutions

In 2011, credit institution customers¹⁴ continued to actively use electronic technologies when making payments. The volume and value of non-cash payments conducted in 2011 on the basis of orders sent by customers to credit institutions electronically, including bank cards, increased by 44.2 and 23.0%, respectively, to 2.6 billion operations worth 305.2 trillion rubles. The share of payments sent by customers of credit institutions electronically reached 66.6% of the total volume and 80.6 % of the total value of their payments. Of those payments, 23.7% of the volume and 56.9% of the value were made via Internet and mobile phones.

Chart 1.35. The volume of non-bank electronic payments¹³ in 2007–2010, billions



¹³ Includes non-cash credit transfers and operations with payment cards issued in the country.

¹⁴ Individuals, legal entities other than credit institutions.

Attitude of Russian citizens towards remote banking services: barriers and incentives for use^[1]

In 2011, to study the structure and peculiarities of innovative payment technology use by various socio-demographic groups of Russian population, the National Agency for Financial Studies (NAFS) conducted a poll, in which residents of 140 settlements from 42 Russian regions participated.

The survey showed that although financial institutions were actively developing innovative payment technologies, most respondents preferred to execute payments at a bank branch (68%), and only every seventeenth person made payments at least via one remote access channel (by a bank card via Internet, a personal office of the Internet-banking system, mobile banking or using e-money).

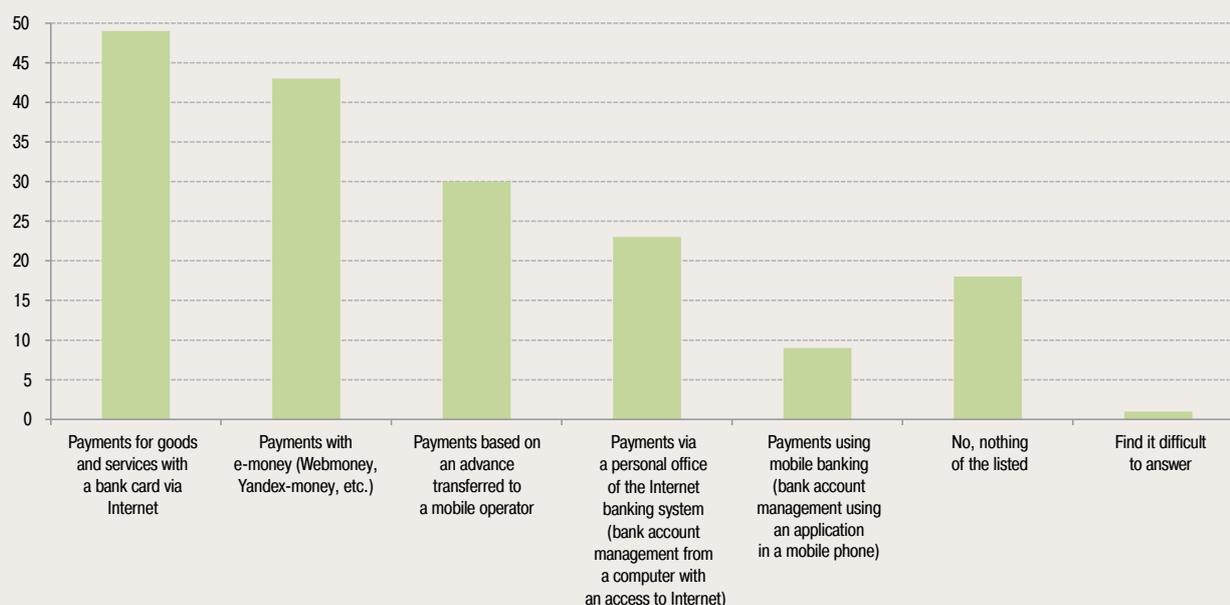
Every tenth Russian at the age of up to 44 years uses innovative payment technologies for regular payments. Among those whose age is over 45 years, the share of people preferring to use these access channels is low (less than 4%).

The smaller the settlement, the lower is the percentage of users of innovative payment technologies. Thus, in the largest cities of Russia – Moscow and St. Petersburg – it was the biggest and stood at 14%.

Active Internet users comprise the audience of regular users of innovative payment technologies. About one in seven of those using Internet, prefers to make regular payments using innovative technologies. Russians, less actively using Internet or not using it at all, in 98 cases out of 100 choose other methods of payment (for example, at cash desks of bank branches).

Every second Internet user from large cities paid for goods and services with a bank card via Internet. About as many people used e-money for payment, every third paid by advance payment transferred to a mobile operator, every fourth used a personal office of the Internet banking system. Mobile banking and the Internet banking system were the least popular channels for goods and services payments.

Chart 1.36. Demand for methods of paying for goods and services among Internet users in Russian large cities, %



Among Internet users who pay for goods and services using innovative technologies, on average, one respondent has two payment options of those listed above.

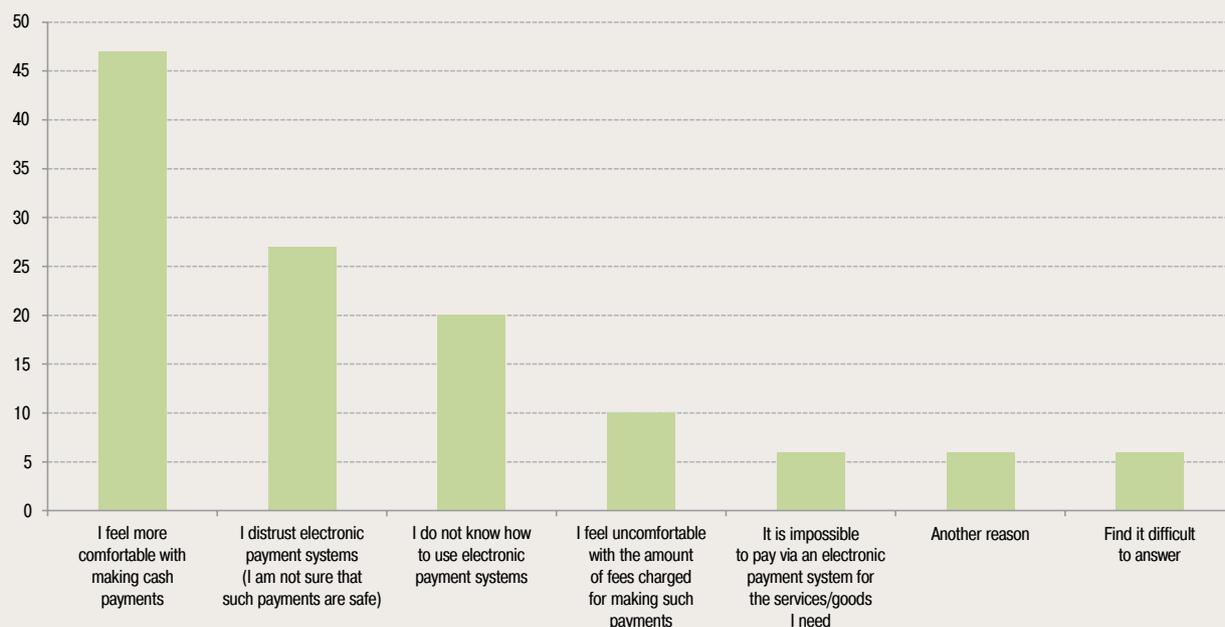
It turned out that male Internet users apply innovative systems of payment for goods and services more actively than female ones. In particular, men use e-money more often than women.

Internet users from Moscow and St. Petersburg significantly more often than users from other cities pay for goods and services with a bank card via Internet, and among them, the use of Internet banking is spread much wider.

81% of Internet users heard about the existence of electronic payment systems^[2], with one in four of them with an experience of using these systems. At the same time, 17% of Internet users are not aware of this possibility.

About half of the Internet users have called their preference to cash payment as the main reason for absence of willingness to use electronic payment systems. Approximately every fourth does not trust electronic payment systems, and every fifth does not know how to use them. Every tenth is uncomfortable with the amount of fees charged for making payments via these systems.

Chart 1.37. Factors constraining the use of electronic payment systems*, %



* The total of responses exceeds 100%, as the question is multiple-choice.

With increasing age of Internet users the chance that they have heard of electronic payment systems is lower. Respondents aged from 18 to 24 years demonstrated the highest level of awareness, the lowest level – in the age group of 60 years and older.

Older respondents more often prefer to pay by cash, rather than use electronic payment systems since they find cash more convenient.

^[1] Information is based on NAFS data.

^[2] Yandex.Money, WebMoney, PayPal and other are considered as the electronic payment systems within the framework of the NAFI study.

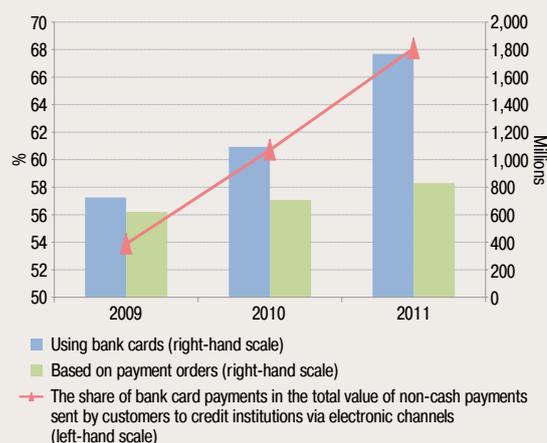
In the structure of non-cash payments sent by customers to credit institutions, electronic payments based on payment orders accounted for the main share in value, and those based on bank cards – in volume: the payment orders made up 32.0% of the total volume of transactions and 98.8% of their total value, and for bank cards – 68.0 and 1.2%, respectively.

In 2011, 71 of 100 payment orders were sent by customers to credit institutions using electronic technologies¹⁵ (as against 67 in 2010). During the year, the volume and value of these payments increased by 17.1 and 22.5%, respectively, to 832.0 billion payments worth 301.6 trillion rubles.

Legal entities other than credit institutions used electronic technologies more actively than individuals sending in 2011 electronically 77.4% of payment orders that made up 83.2 % of total value of payments (in 2010, 73.5 and 81.8%, respectively). More than half of them were payments made via Internet. As in previous years, the rates of growth in electronic payments in 2011 exceeded the rates of growth in paper-based payments: the volume and value of payment orders sent electronically rose by 14.8 and 22.5%, respectively, while the volume of paper payments fell by 6.9% and their value increased by 11.6%.

¹⁵ Payments based on payment orders sent via telecommunication channels, Internet, mobile phones, automated system “Customer – Bank”, etc.

Chart 1.38. Payments sent to credit institutions via electronic channels, by volume



Individuals also started to more actively use electronic payment technologies: the share of payment orders sent electronically in the total volume of payment orders grew from 34.4% in 2010 to 41.3% in 2011, and in total value it slightly rose (from 13.2 to 12.2%).

At the same time, the volume and value of payment orders sent to a credit institution via Internet and mobile phones increased 1.6-fold and 1.5-fold during the year, respectively.

In 2011, 63 out of 100 payment orders were forwarded by individuals to a credit institution via Internet as against 55 in 2010, 17 – via a mobile phone (the same number in 2010) and 20 – using other methods of remote access¹⁶ (27 in 2010).

Bank of Russia

Out of 100 payments of Bank of Russia customers other than credit institutions, 96 were sent using electronic technologies and only 4 – in the paper form. In 2011, the volume of paper-based payments decreased by 10.3% and there was a 3.2% increase in the volume of payments sent electronically. The value of electronic payments reached 74.7 trillion rubles, which made up 98.0% of total value of payments effected by Bank of Russia customers other than credit institutions. The average amount of an electronic payment sent by non-banks increased by 18.5% to 427,400 rubles during the year, and the average amount of a paper-based payment – only by 2.1% to 217,500 rubles. As compared with 2010, the value of electronic payments grew by 22.2%, and the value of paper-based payments fell by 8.4%.

1.3.2. Methods of effecting payments by credit institutions¹⁷

In 2011, credit institutions handled 3.0 billion payments of non-banks to payees worth 406.6 trillion rubles. Of these, payments made through the correspondent accounts of credit institutions and non-resident banks accounted for 6.4% by volume and 10.5% by value, those effected through inter-branch settlement accounts made up 13.9 and 21.6%, payments carried out within one branch of a credit institution represented 49.0 and 24.5%, respectively, while payments conducted through the Bank of Russia payment system accounted for 30.7% by volume and 43.3% by value.

The overwhelming majority of payments carried out by credit institutions was effected electronically – 78.3% of the total volume and 93.3% of the total value of payments by non-banks. Paper-based payments accounted for 21.7 and 6.7%, respectively. The amount of an average electronic payment stood at 162,400 rubles, which was almost 4-fold as much as the average amount of a paper-based payment.

The vast majority of payments carried out by credit institutions through inter-branch settlement accounts, the

¹⁶ Payments using the automated system “Customer – Bank”, mobile banking, etc.

¹⁷ Do not include non-cash payments using bank cards.

Bank of Russia Payment System¹⁸ and correspondent accounts of credit institutions in favour of payees was executed electronically (a total of about 98% both in volume and value), while paper-based payments made up a large share within one branch of the credit institution (42.8% by volume and 21.1% by value).

Box 10

Automated clearing house: international experience

According to the BIS definition, *an automated clearing house (ACH)* is an electronic clearing system in which payment orders are exchanged among financial institutions, primarily via magnetic media or telecommunications networks, and handled by a data processing centre^[1].

The main advantage of the ACH is a fast execution of payments, which is thereby increasing the availability of funds and reducing operational costs for ACH participants.

The ACH is used in a most effective way when processing large volumes of regular payments (e.g. utilities, insurance services, loan repayments, depositing payroll and pensions to the bank accounts of employees and retirees, interest payments, dividends, etc.).

USA

The ACH system is widely developed in the United States. The Federal Reserve participated in its establishment and financing of the studies on its creation.

Different categories of financial institutions are ACH participants in the United States: commercial banks, savings banks, savings and loan associations, credit unions, and foreign bank branches in the United States. In addition, on behalf of a participant, transactions can be made by a specialised organisation transmitting messages to the ACH and receiving them.

The ACH can process credit transfers and direct debits. They are carried out in several stages:

- in case of transfers which are systematic, the payer and the payee agree on certain types of transactions. In case of a direct debit, the payer authorises the ACH for a transaction;
- a customer of a financial institution (payer or payee) sends to this institution an instruction for a transaction (in case of a credit transfer, the customer provides necessary funds);
- the financial institution servicing the customer, an originator of the operation, verifies the acquired information and sends this instruction to the ACH;
- the ACH passes the instruction of the operation originator to a financial institution servicing a counterparty (payee or payer);
- a financial institution receiving the instruction debits or credits the required funds. In case of a direct debit, the funds shall be transferred to the payee;
- then a settlement between the financial institutions involved in the transaction takes place.

The Netherlands

Functioning of pan-European Equens in the Netherlands is another example of an ACH functioning in the field of non-cash retail turnover.

Banks use Equens for making regular retail payments of their customers (e.g. salaries, utilities, phone, and Internet payments) and one-time payments for goods and services. Payments processed by Equens are formed by its participating banks and effected in accordance with standards established by Currence^[2], namely: Acceptgiro (direct debit), Incasso/Machtigen (a national form for direct debit) and iDEAL (Internet payment for goods (services) with remote access to an account). In addition, Equens processes PIN debit cards (local debit cards), Chipknip (e-wallet built in to the PIN payment card), debit and credit cards of international payment systems (MasterCard, Visa, JCB, China UnionPay, American Express).

Thus, Equens simultaneously performs functions of an ACH and pan-European processing center on payment card transactions.

Processing of retail payments at Equens takes place in two systems:

- Telegiro urgent payment system where settlements between participating banks are carried out on a gross basis. Telegiro system effects payments within a few minutes, guaranteeing the payee that the payment is executed and confirming its irrevocable character. It is often used for large-value payments (e.g. in real estate transactions). The payment guarantee in the Telegiro system is secured by a payment within the limit of an account of the payer bank (Equens participant) opened with the Netherlands Bank;

¹⁸ Including credit institution own payments and payments by their customers other than credit institutions made by credit institutions through correspondent accounts (sub-accounts) opened with the Bank of Russia.

- the clearing and settlement system (CSS) for bulk retail payments, where settlements are made on a net basis. The system automatically processes payment documents received from Equens participating banks: the paying bank's position is automatically reduced and the position of the receiving bank is increased for each payment document received within a clearing period of 30 minutes. There are 19 clearing periods during a day. At the end of each period, net positions of participating banks are determined. Based on Equens instruction, participating bank accounts opened with the Netherlands Bank are debited or credited by the difference between the total debit and credit positions.

Equens, along with ACH functions, is also a processing centre for a network of payment terminals (500,000) and ATMs (12,000), located in the Benelux countries, Germany and Italy. In addition, Equens, as a pan-European processing centre has a channel with clearing-settlement facilities that serve payment cards issued by EU and US banks.

^[1] Glossary of terms used in payment and settlement systems. The Committee on Payment and Settlement Systems of the Bank for International Settlements.

^[2] Currence is an independent organisation possessing uniform payment products. It was founded on January 1, 2005 at the initiative of eight Dutch banks (ABN AMRO, Rabobank, ING, Fortis, SNS Bank, Friesland Bank, Van Lanschot Bankiers and BNG).

Box 11

The use of the SWIFT system in Russia in 2011

In 2011, the Russian traffic in the SWIFT system increased significantly at a relatively stable number of Russian users. The FIN^[1] service was mostly used, InterAct and FileAct services were rarely applied.

Table 1.8. Consolidated data on SWIFT use in Russia

	Number of organisations connected to SWIFT	Number of messages sent, thousands	Number of messages received, thousands	Growth rate as % of previous year
2010	546	31,633	28,666	13.4
2011	560	42,528	40,496	37.7

Table 1.9. Main Russian correspondents in SWIFT in 2011

Country		Average daily number of messages, thousands	Growth rate as of % 2010
Russia		84.3	50
USA	to	12.3	12
	from	14.5	11
Germany	to	9.5	17
	from	9.6	9
Belarus	to	3.8	11
	from	1.5	7
Ukraine	to	3.6	20
	from	0.8	6
Kazakhstan	to	2.6	18
	from	1.6	22

Table 1.10. SWIFT traffic functional structure in 2011, %

Message category	Share of the Russian traffic	Share of the global traffic
Payments	82.4	48.7
Securities	8.3	43.9
Treasury	8	6.2
Trade	0.3	0.98

In 2011, SWIFT traffic growth allowed Russia to climb two places in the ranking of countries using SWIFT and take the 18th place, followed by Austria. Russia accounts for about 1% of global SWIFT traffic. The average number of messages per one participant of the system made up 74. For comparison, in Austria, occupying the 19th place in the overall ranking of countries by SWIFT use, this indicator stood at 338 messages. Thus, Russian participants still do not use SWIFT services actively enough. It is also important that about 2/3 of all SWIFT traffic in Russia refers to interaction with Russian correspondents and only 1/3 – with foreign banks.

Functionally, the SWIFT traffic in Russia mainly comprises messages associated with money transfer (Payments). Another feature of the Russian structure of the SWIFT traffic is a relatively high proportion of messages related to funds management (Treasury) as compared with the share of messages on operations with securities and derivatives (Securities). Messages related to trade operations (Trade), make up a small proportion.

^[1] FIN is the main SWIFT service, allowing participants to exchange messages asynchronously. INTERACT is a SWIFT service, allowing participants to exchange messages in real time. FILEACT is a SWIFT service, allowing participants to share files. Data listed below are on the FIN service.

1.4. ACCESSIBILITY OF PAYMENT SERVICES

1.4.1. Payment infrastructure of the banking system of Russia

The development of Russian banking payment infrastructure reflected modern global trends specific for the payment services market, in particular, it was upgraded on the basis of innovative technology solutions to enhance customer access to payment services.

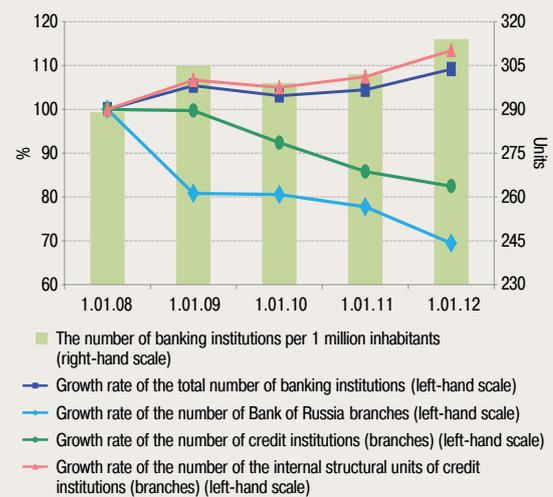
In 2011, the number of banking institutions¹⁹ increased by 4.5% and amounted to 44,800 as of end of 2011. As the number of credit institutions and Bank of Russia establishments decreased by 3.4 and 10.7%, respectively, the growth of payment operations reflected a higher workload on the banking system. As in previous years, the overall number of banking institutions rose due to growth in the number of internal divisions of credit institutions (by 5.6%), primarily due to a significant growth in the number of their operations offices (1.8 times).

The decrease in the number of credit institutions and their branches was observed in all federal districts, except for the North Caucasus Federal District, where a slight increase (by 1.3%) was registered. The largest decrease rate was registered in the Northwestern Federal District (11.6%) and the Far Eastern Federal District (6.9%). As in previous years, this was largely attributable to the reorganisation of credit institutions by acquisition (during the year, there were 18 such credit institutions excluded from the State Register), as well as to continued efforts by Sberbank to optimise the structure of its branch network (the number of its branches fell during the year by 8.7%).

Despite a decrease in the number of additional offices and cash operations departments outside cash settlement centres as compared with 2010, they accounted for a considerable number of internal divisions of credit institutions: 55.3 and 26.6%, respectively. The number of operations offices and credit and cash offices increased by 13.1 and 4.2%, respectively, as of end of 2011. An active growth in the number of operations offices of credit institutions was observed in all the federal districts: the highest growth rates were registered in the Far Eastern Federal District and the Northwestern Federal District (2.5 times and 2.2 times, respectively), while the lowest increase was observed in the North Caucasus Federal District (by 27.8%). The growth rates in the number of credit and cash offices in all federal districts except for the North Caucasus Federal District were considerably lower than the growth rates of operations offices and ranged from 5.3% in the Siberian Federal District to 38.1% in the Southern Federal District.

As of end of 2011, the number of banking institutions per 1 million inhabitants was 314 (as against 302 institutions, year on year). The largest accessibility to payment services was observed in the Volga Federal District and the Central Federal District (350 and 336 banking institutions for every million inhabitants, respectively, in Mos-

Chart 1.39. The number of banking institutions per 1 million inhabitants (January 1, 2008 = 100%)



¹⁹ Bank of Russia branches, credit institutions and their branches, additional offices, operations offices, credit and cash offices, and cash operations departments outside cash settlement centres.

cow and the Moscow Region this indicator was 379) and the lowest – in the North Caucasus Federal District, Siberian Federal District and the Far Eastern Federal District (135, 292 and 296, respectively). This indicator rose in all federal districts, but the largest growth was registered in the Far Eastern Federal District (by 8.4%).

Amid rapid development of information and communication technologies nowadays, remote banking (provided via Internet, mobile phones, bank cards and the “Customer – Bank” system) is a perspective and fastly growing area of banking activity. Its development becomes an important indicator characterising the level of payment service accessibility. As of the end of 2011, 93.3% of operating credit institutions offered their customers remote access to their accounts for effecting payments; of these, 83.9% provided access to customer accounts via Internet and 9.9% via mobile phones. Over the year, the number of credit institutions providing their customers with an access to their accounts via Internet grew by 4.4%, and via mobile phones – by 13.9% (it was almost twice as much as the 2010 indicator).

The number of remote access accounts opened with credit institutions by individuals and legal entities other than credit institutions rose by more than one third (to 81 million), that made up almost half (48.6%) of the total number of active accounts²⁰.

There was also a considerable increase in the number of accounts accessed by bank customers via Internet and mobile phones (1.8 times and 2.2 times, respectively). However, despite a rapid growth in the number of these accounts, their share in the total number of remote access accounts remained modest: accounts accessed via Internet made up 27.9% (21% as of end of 2010) and accounts accessed via mobile phones – 22.2% (13.5% as of end of 2010).

According to a NAFS survey²¹, only 3% of respondents make payments (for housing and utilities, telecommunication services, penalties, credits, etc.) via Internet using bank cards, and by 1% – via Internet-banking and mobile banking. Thus, Internet users more actively make payments via innovative channels. According to an Internet-survey conducted by NAFS jointly with the leading Russian company Online Market Intelligence (OMI), a half of Internet user-respondents made payments for goods and services by bank cards via Internet, via a personal office of the Internet banking system – 22%, via mobile banking – 10%²². The corresponding indicators obtained as a result of a NAFS survey conducted as private formal interviews in apartments, were significantly lower: 3, 1 and 1%, respectively.

Further development of remote banking service via Internet and mobile phones is connected in many aspects with the increase in the number of Internet and mobile communications users, improvement of the quality of access to Internet in regions (currently, about half of the population uses Internet), enhancing the level of financial and

Table 1.11. The share of individuals (households) having access to Internet (based on Rosstat data), %

Name of federal district /region	2009	2010	2011
Far Eastern Federal District	30.6	36.6	49.1
Volga Federal District	24.6	34.0	45.2
Northwestern Federal District	39.4	50.1	58.7
including St. Petersburg	46.8	57.9	68.9
North Caucasus Federal District	nav	19.1	19.7
Northern Federal District	25.9	34.1	43.2
Urals Federal District	31.8	42.9	51.9
Central Federal District	31.4	42.3	48.2
including Moscow	53.0	71.9	70.8
Southern Federal District	19.9	26.5	39.5
Russia	28.0	37.0	45.7

²⁰ Accounts through which at least one non-cash transaction has been conducted since the beginning of the year.

²¹ Source: NAFS, April 2011. Sample size – 1,600 people in 150 settlements of 40 Russian regions.

²² Source: NAFS, OMI, April 2011. Sample size – 3,446, of these, 51% are men, 49% – women. People of under 34 years old account for 76% of respondents.

Table 1.12. Factors effecting Internet-banking market development in Russia²³

↑	↓
Increase in the number of Internet and mobile communications users	Low level of household access to Internet outside cities
Higher level and quality of access to Internet, as well as mobile network coverage	Psychological non-readiness of some households for making non-cash payments on their own (without the involvement of bank employees)
Expansion of retail services provided by Internet shops, mobile operators and other organisations	Traditionally important role of cash in effecting retail payments, household distrust to non-cash payments
Households real income growth	Household savings rate growth as a result of economic uncertainty
Growth of households financial and computer literacy	Risk of losses as a result of fraudulent actions
Improvement of payment system legislation, regulating the market and stimulating competition	Banks concerns for the encashment executed via Internet banking
Higher quality of Internet banking systems offered by outsourcing companies at reduced prices	Cut-down of bank expenses on IT technologies as a result of the financial crisis

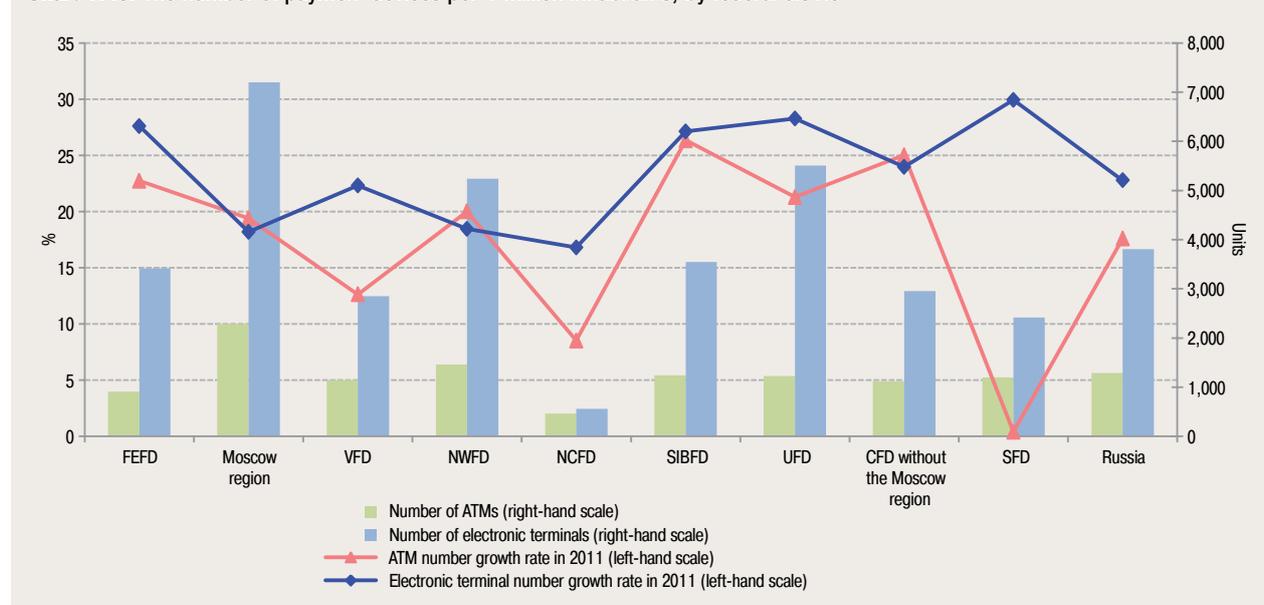
computer literacy among the population, trust to non-cash payments, information security, as well as development of legislation in the area of payments, remittances, and electronic document exchange.

1.4.2. Devices of credit institutions used in effecting payments

The most popular types of remote banking services among households comprise payments via ATMs, payment terminals, imprinters and electronic terminals established at points of sale (POS), as well as remote terminal units (RTU). Thus, in 2011, about 40% of households used ATMs and payment terminals (in Moscow and St Petersburg 38% of households made payments via ATMs and 40% – via terminals, in other cities – 39 and 34%, respectively, whereas in rural areas – 26 and 34%)²⁴.

In 2011, the number of credit institution devices allowing to effect payments outside credit institution branches

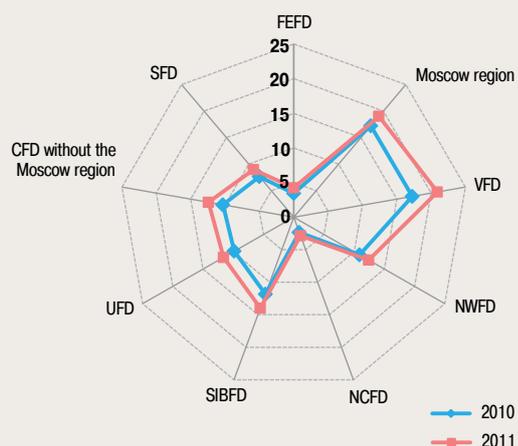
Chart 1.40. The number of payment devices per 1 million inhabitants, by federal district



²³ Based on the article by O. Dyachenko “Three whales of Internet banking: security, accessibility, functionality” // National Banking Journal, No. 92, January 2012.

²⁴ Source: NAFS, April 2011. Sample size – 1,600 people in 150 settlements in 40 Russian regions.

Chart 1.41. Number of ATMs allowing card holders to make payments in 2011, by federal district, thousands



increased by 20.3% to 757,400 units at the end of the year. Indicator growth rates ranged from 13.7% in the North Caucasus Federal District to 28% in the Urals Federal District, while in a number of federal districts they slowed down considerably compared to the previous year.

As of end of 2011 there were 184,200 ATMs operating in Russia – an increase of 17.6% on the previous year. The highest rates of growth were registered in the Siberian Federal District (26.3%) and the Far Eastern Federal District (22.7%).

The ATM density increased by 16.8% to 1,289 machines per 1 million inhabitants as compared with 2010. This indicator was higher than the national average in the Central Federal District (1,684) (in the Moscow Region – 2,284) and the Northwestern Federal District (1,458). In other federal districts, this figure varied from 462 ATMs in the North Caucasus Federal District to 1,241 ATMs in the Siberian Federal District.

In recent years, functionality has become the main trend in the development of ATM network. ATMs tend to allow card holders both to withdraw and load cash and to make payments. The share of such ATMs in the total number of ATMs with a cash withdrawal function stood at almost 95%.

The number of POS terminals rose by 17.3% during the year to 106,400 devices, at the same time growth rates were fairly uniform in all federal districts and differed from 14% in the Northwestern Federal District to 21.7% in the North Caucasus Federal District.

ATMs with a cash-loading function became increasingly popular among households. Their number increased by almost a third during the year. The highest rates of growth were observed in the Siberian Federal District and the Urals Federal District (1.5 times in both). In the Southern Federal District their number slightly decreased (by 3.7%). However, it should be noted that this increase was largely due to functionality expansion in already existing ATMs.

There was a continued growth in number of POS terminals for making payments using bank cards, as well as RTUs (their total number rose by 22.8% to 544,400 devices in 2011). The highest growth rates were observed in the Sothern Federal District, and the lowest – in the North Caucasus Federal District (16.8%).

In 2011, there were 3,809 electronic terminals per 1 million inhabitants, which exceeded the respective figure for 2010 by 21.9%. The highest density of these devices was observed in the Urals Federal District (5,504), the Northwestern Federal District (5,237) and the Central Federal District (5,013), which was attributable to the largest number of these devices registered in big Russian cities (in Moscow and the Moscow Region, there were 7,199 terminals, in St Petersburg – 7,999 terminals). In other federal districts, this figure was lower than the national average. The minimum level of electronic terminals per capita was again registered in the North Caucasus Federal District (561).

The data show an increase in the gap between federal districts with the minimum and maximum value of the indicator characterising the density of electronic terminals (at the beginning of 2011, the gap stood at 3,730 electronic terminals per 1 million inhabitants as against 4,943 at the end of the year). Nevertheless, it does not lead to

Chart 1.42. Number of electronic terminals and retail trade turnover in 2011, by federal district

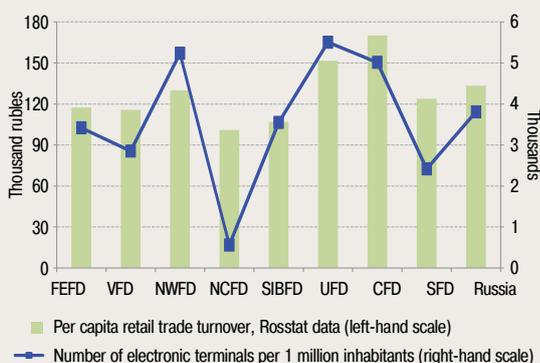
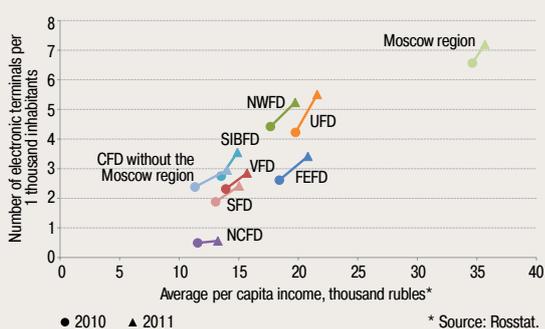


Chart 1.43. Number of electronic terminals and average per capita income in 2010-2011, by federal district

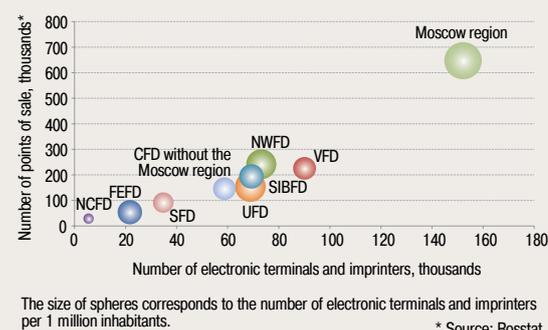


an unambiguous conclusion that interregional differentiation in electronic terminal density strengthened, since in a number of federal districts with less developed network of electronic terminals, higher growth rates of this indicator were observed in comparison with federal districts where there was a higher number of electronic terminals.

In addition, there is a correlation between the number of points of sale operating in a federal district and the number of electronic terminals per capita. The same correlation can be identified in the per capita income as well. Thus, the indicator of electronic terminal density in the region with the highest per capita income (the Moscow region) was 12.8 times as much as the respective figure in the region with the lowest per capita income (the North Caucasus Federal District).

In 2011, the concentration ratio of credit institution payment services in terms of devices used to make non-cash payments²⁵ grew by 1.8 percentage points to 57.8% in Russia as a whole. It was largely attributable not to expansion of the payment infrastructure of the largest credit institutions but to a reorganisation of credit institutions by acquisition.

Chart 1.44. Number of electronic terminals and imprinters and number of points of sale



²⁵ The share of devices owned by the five largest credit institutions in the total number of payment devices and installed in the Russian Federation (ATMs with a payment function, RTUs, POS terminals and imprinters).

Chapter 2. **RUSSIAN PAYMENT SYSTEMS
AND FINANCIAL MARKET
INFRASTRUCTURES**

Chart 2.1. Volume of payments effected through the Bank of Russia Payment System, millions

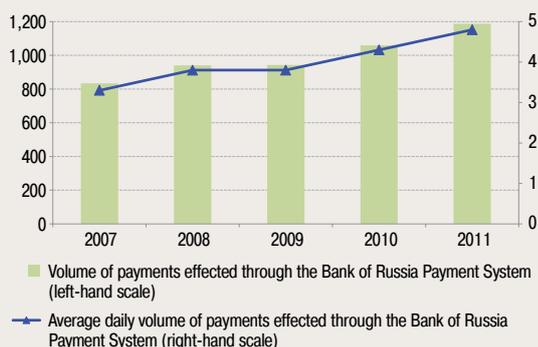


Chart 2.2. Value of payments effected through the Bank of Russia Payment System

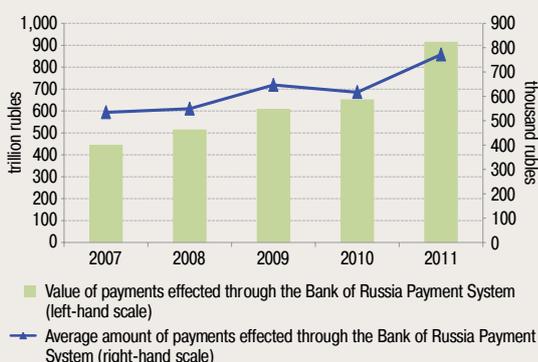
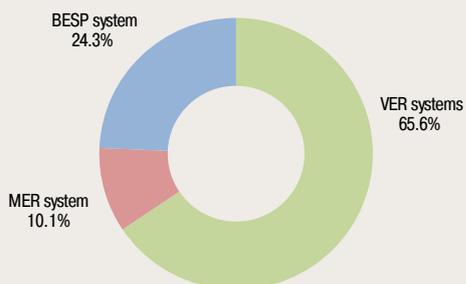


Chart 2.3. Share of credit institutions' payments in the total value and volume of payments effected through the Bank of Russia Payment System, %



Chart 2.4. Value of payments effected in 2011 through the Bank of Russia Payment System, by payment system*



*The share of payments using letters of advice accounted for 0.04% of the total value of payments.

2.1. THE BANK OF RUSSIA PAYMENT SYSTEM IS THE KEY ELEMENT OF THE NATIONAL PAYMENT SYSTEM

The Bank of Russia Payment System performs a number of functions aimed at achieving Bank of Russia major objectives established by Russian legislation. It provides a wide range of payment services to credit institutions and government authorities being the least risky and a key stabilising element of the national payment system.

Paragraph 11 of Article 22 of the NPS Law stipulates the systemic importance of the Bank of Russia Payment System.

2.1.1. Bank of Russia Payment System operation

In 2011, the Bank of Russia Payment System performance demonstrates a long-term growth trend of payment turnover and the use of services provided to meet transactions demand, mostly of credit institutions.

The ratio of the value of payments effected via the Bank of Russia Payment System to GDP has been recorded over a number of years and is a major indicator of the payment system efficiency. In 2011, it rose by 2.3 points to 16.8.

The volume and value of payments made via the Bank of Russia Payment System increased by 12.1 and 40.2%, respectively, to 1,187.6 million payments worth 916.2 trillion rubles, the average daily volume grew from 4.3 million payments in 2010 to 4.8 million payments in 2011.

As in previous years, payments by credit institutions (their branches) dominated the total payments effected via the Bank of Russia Payment System, both by volume 84.6% (1,005.0 million payments) and value 77.1% (706.1 trillion rubles). The average daily volume of payments of credit institutions (their branches) made via the Bank of Russia Payment System grew from 3.5 million units in 2010 to 4.1 million units in 2011.

Payments through the systems for intraregional electronic payments (VER) accounted for 75.7% of the total volume and 65.6% of the total value of payments effected via the Bank of Russia Payment System (77.4 and 68.0% in 2010), payments through the systems for interregional electronic payments (MER) – 24.2 and 10.1% as against 22.5 and 12.4% in 2010.

Payments via VER systems accounted for 898.7 million payments worth 600.6 trillion rubles as against 819.3 million payments worth 445.0 trillion rubles in 2010, and payments via MER systems – 287.6 million payments worth 92.4 trillion rubles (238.5 million payments worth 81.3 trillion rubles in 2010).

The share of payments made through payment systems using letters of advice remained insignificant (less than 0.1% both in volume and value).

The share of VER and MER systems in the structure of payment flows in the Bank of Russia Payment System changed as the volume of interregional payments of credit institutions due to the optimisation of their correspondent accounts (sub-accounts) increased, as well as the value of payments made through the Banking Electronic Speedy Payment system (BESP system).

2.1.2. The Banking Electronic Speedy Payment system (BESP system)

Ensuring further development of the BESP system is among main efforts taken by the Bank of Russia to improve its own payment system. The BESP system ensures functioning of a full-fledged mechanism for credit institutions' large-value speedy payments carrying out financial market payments, the Federal Treasury and its regional offices payments, as well as the Bank of Russia own payments.

The institutional changes in the Russian banking system influenced BESP system participants. As compared with 2010, their number decreased by 95, of which the number of special participants (SPs) fell by 13, of direct participants (DPs) – by 64, of associated participants (APs) – by 18. The decrease in the number of SPs was due to the reduction of Bank of Russia settlement cash centres; the cutback in the number of DPs and APs was mostly a result of a transforming the branches of credit institutions into their internal divisions.

As of January 1, 2012, the BESP system comprised 2,887 credit institutions (branches), or 98.1% of the total number of credit institutions (branches) participating in the electronic document exchange with the Bank of Russia whose correspondent accounts (sub-accounts) were opened with Bank of Russia settlement cash centres that were BESP system participants. The remaining 56 credit institutions (branches) (1.9%) were not BESP system participants because of on-going activities on making them BESP system participants, reorganisation, or closure of credit institution branches.

In 2011, the payments processed through the BESP system continued to grow increasing their share of the total value of payments made through the BESP system to 24.3% (19.5% in 2010). There were 626,100 payments effected through the BESP system that was 3 times as many as payments made in 2010 (205,100). The total value of payments made through the BESP system in 2011 amounted to 222.8 trillion rubles, an increase of almost two times, as against 127.3 trillion rubles in 2010, mainly due to the growth of credit institution (branch) payments processed through the BESP system. At the same time, as in 2010, credit institutions (branches) accounted for the major share of payments processed via the BESP system, which stood at 92.1% by volume and 61.8% by value.

2.1.3. Ensuring efficiency and continuity of the Bank of Russia Payment System operation

The Federal Law “On the Central Bank of the Russian Federation” (Bank of Russia) is amended by Chapter XII.1 “Ensuring the Stability and Development of the National Payment System” within the framework of implementation of the NPS Law. According to Article 82.2 of this Chapter, the Bank of Russia arranges and provides efficient and continuous operation of its payment system and performs its oversight.

Paragraph 5 of Article 31 of the NPS Law defines oversight as Bank of Russia activities with respect to money transfer operators, payment system operators, payment infrastructure service providers (observed organisations) improving their operations and the services they render,

Chart 2.5. Number of participants in the BESP system in 2011

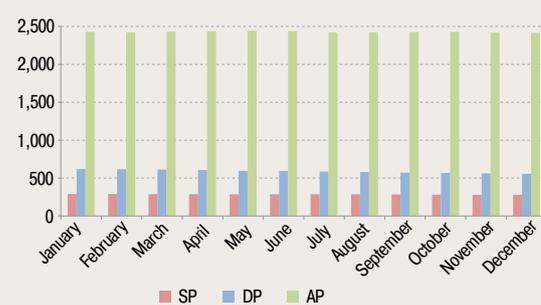


Chart 2.6. Value of payments effected through the BESP system in 2011, by type of participant, trillion rubles

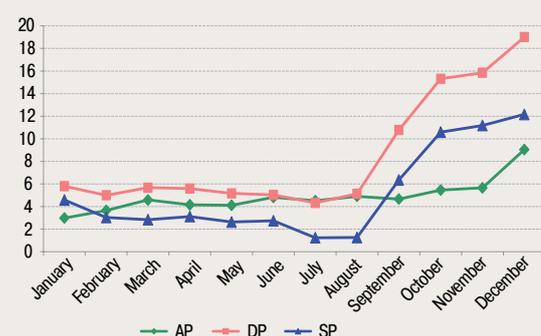
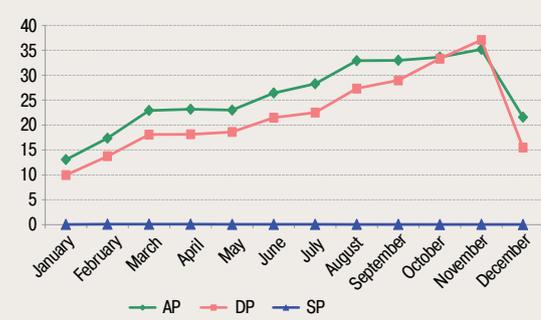


Chart 2.7. Volume of payments effected through the BESP system in 2011, by type of participant, thousands



and also with respect to the development of payment systems and the payment infrastructure (oversight objects) on the basis of Bank of Russia recommendations.

To ensure its payment system continuous operation, the Bank of Russia monitors and oversees it, and assesses the systems accessibility for money transfers and settlements.

In 2011, the average monthly accessibility ratios of the Bank of Russia Payment System (its ability to accept electronic settlement documents from Bank of Russia customers with an access to e-message transfer services) ranged between 97.98 and 99.98% (99.62 and 99.95% in 2010). The ratios meet the international standards on the accessibility of systemically important payment systems.

In 2011, efforts were made to develop and improve banking settlement technologies of the Bank of Russia Payment System.

To expand the use of electronic settlements in the Bank of Russia Payment System, these settlements were introduced in the whole territory of the Russian Federation.

In 2011, 99.9% of the total volume of payments made through the Bank of Russia Payment System was processed using electronic technologies. The share of payments received by the Bank of Russia Payment System via communication channels of credit institutions (their branches) accounted for 98.2% in the total volume of their payments, and payments of customers other than credit institutions – for 96.1%. As of January 1, 2012, the share of the Bank of Russia customers-credit institutions (branches) participating in the exchange of electronic messages with the Bank of Russia stood at 98.4% of the total number of credit institutions (branches). The share of the Bank of Russia customers other than credit institutions (branches) made up 17.2% of the total number of the Bank of Russia customers other than credit institutions (branches). The Federal Treasury and its regional branches participate in the exchange of electronic messages with the Bank of Russia.

In 2011, an online interaction service between Bank of Russia customers was introduced to clarify and verify the accuracy of settlement document details, while making electronic payments through the Bank of Russia settlement system. A significant growth of electronic messages standing at 474,400 during the period from August to December 2011 testified to demand for such Bank of Russia information services.

Amid advanced information and communication technologies, the focus was made to enhance the use of electronic documents in the interaction between banks and tax authorities. The work on the arrangement of electronic document flow between banks and tax authorities through the Bank of Russia provided for by the Tax Code of the Russian Federation was completed. Regulations of the Bank of Russia and the Federal Tax Service stipulate procedures for sending documents to a bank by tax authorities, while fulfilling their responsibilities regulated by the law on taxes and duties; and procedures for forwarding specified electronic information via communication channels by banks to tax authorities (including requested by tax authorities).

Thus, all documents used by tax authorities to ensure payments to the budget in accordance with the Tax Code of the Russian Federation may be sent electronically. As a

result, tax authorities became the first collectors, who were able to send to a payer's bank an electronic order on the recovery of funds to the budget. The test of the electronic message exchange system under the above-mentioned regulations was conducted successfully during 2011.

Free of charge telecommunication resources using unified data transmission channels, software and hardware, and information security systems provided by the Bank of Russia for making public payments promoted the strengthening of the Russian banking system and stability of the national payment system.

The Bank of Russia ensured further centralisation of the electronic message exchange between the Bank of Russia and multi-branch credit institutions. The identification system of the participants of the Bank of Russia Payment System was improved to ensure the compliance of the bank identification codes of the credit institutions (branches) effecting payments through the Bank of Russia settlement system and SWIFT international bank identification codes.

An important step towards the improvement of the BESP system was expanding a list of settlement documents by including collection orders and payment claims, as well as services on intraday liquidity management for DPs. It will allow Bank of Russia structural divisions to debit accounts in the BESP system, based on electronic collection orders, and financial market infrastructures – to complete settlements with funds placed in financial market participants' correspondent accounts opened with the Bank of Russia, including the use of delivery versus payment and payment versus payment mechanisms.

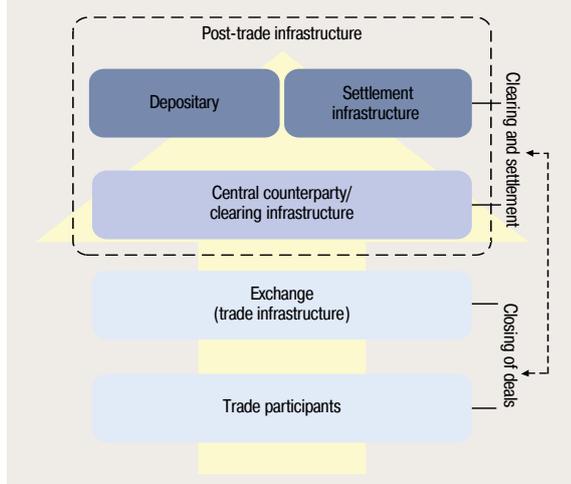
Another line of improving the BESP system which might help to achieve additional competitiveness is identification of the terms of the SWIFT use in the exchange of electronic messages with the BESP system. Since August 19, 2011, the Bank of Russia has put into operation the interaction subsystem between the BESP system and the SWIFT (BESP – SWIFT Gateway) that provides DPs with a possibility of exchanging electronic messages with the BESP system using the SWIFT through mutual transformation of electronic messages.

2.2. FINANCIAL MARKET INFRASTRUCTURES

Financial market infrastructures play a major role in the national payment system along with the Bank of Russia Payment System. They form a trade infrastructure, ensuring the organisation and conducting of trade, and a post-trade infrastructure that provides clearing and settlements on transactions made at organised trades, as well as on OTC transactions in various financial instruments and other assets.

The value and structure of assets traded in the exchange trade infrastructure affect the functioning of the post-trade infrastructure significantly (in respect of liquidity management and risks arising during clearing and settlement, among others). In turn, the technical capabilities of the post-trade infrastructure are one of the important factors that determine the range of services provided by the trade infrastructure.

Chart 2.8. Elements of trade and post-trade infrastructures



Amid Russian stock-exchange infrastructure consolidation, risk management is becoming of major importance, therefore, post-trade infrastructure performance indicators presented in this section, have been sampled to reflect the relationship of trade and post-trade infrastructure and its impact on risks associated with clearing and settlement.

2.2.1. Changes in the post-trade infrastructure

The clearing and settlement infrastructures of the Russian stock exchanges – the MICEX and RTS Groups – were the most significant post-trade infrastructures operating on the Russian financial market in 2011²⁶ and providing clearing and settlements on transactions conducted at organized trades (including in the exchange) and in over-the-counter market.

Table 2.1. Changes in the post-trade infrastructure of MICEX Group, RTS Group and MICEX–RTS Group

Market segments	Clearing infrastructure			Settlement organisation (cash)			Settlement organisation (securities)		
	MICEX Group	RTS Group	MICEX–RTS Group	MICEX Group	RTS Group	MICEX–RTS Group	MICEX Group	RTS Group	MICEX–RTS Group
Stock market	CJSC MICEX ²⁷ NCC ²⁸ (CCP)	RTS CC (CCP) DCC (DVP)	NCC (CCP) RTS CC (CCP) DCC (DVP)	NSD	RTS CH	NSD RTS CH	NSD	DCC SDC	NSD DCC SDC
Derivatives market	CJSC MICEX (CCP)	RTS CC (CCP)	RTS CC (CCP)	NSD	RTS CH	RTS CH	nap	nap	nap
Government securities and money market	CJSC MICEX	—	MICEX	NSD	—	NSD	NSD	—	NSD
Foreign currency market	NCC (CCP)	RTS CC (CCP)	NCC (CCP)	NSD	RTS CH	NSD RTS CH	nap	nap	nap
Commodity derivatives market	CJSC MICEX (CCP)	—	RTS CC (CCP)	NSD	—	RTS CH (CCP)	nap	nap	nap
OTC market	NSD (DVP)	DCC (DVP)	NSD (DVP)	NSD	RTS CH	NSD	NSD	DCC	NSD DCC

List of abbreviations²⁹ used:

CJSC MICEX – the Moscow Interbank Currency Exchange, a closed joint-stock company

NCC – the National Clearing Centre, a closed joint-stock commercial bank

RTS CC – RTS Clearing Centre, a closed joint-stock company

DCC – the Depository and Clearing Company, a closed joint-stock company

NSD – the National Settlement Depository, a non-bank credit institution

RTS CH – RTS Clearing House, a non-bank credit institution

SDC – Settlement Depository Company, a closed joint-stock company

CCP – central counterparty

DVP – Delivery versus Payment mechanism is implemented

nap – non applicable

— – service is not provided

²⁶ Here and below, if not specified otherwise, the year 2011 means the period from January 1, 2011 to December 16, 2011 – the closing date of the legal procedure of MICEX and RTS Groups merger. All the data in this section are provided for the indicated period.

²⁷ Until November 1, 2011.

²⁸ Since November 1, 2011.

²⁹ Abbreviations used in the Table will be employed hereinafter.

Commodity exchanges

There are commodity exchanges functioning in the Russian Federation along with stock exchanges. The active involvement of commodity exchanges, the growth of their trade turnover, together with the enactment of the NPS Law and Bank of Russia regulations adopted in accordance with it, bring to attention an acute problem of settlements on transactions concluded on commodities exchanges.

In accordance with Federal Law No. 2383-1, dated February 20, 1992, "On Commodity Exchanges and Exchange Trade", a "commodity exchange" means a legal entity forming a wholesale market by the arrangement and regulation of exchange trade carried out in the form of open public auctions at a pre-defined location and time pursuant to the established rules.

CJSC St Petersburg International Commodity Exchange (SPCEX), Interregional Exchange of Oil and Gas Industry, a non-profit partnership (IEXOGI), CJSC Saint-Petersburg Stock Exchange (SPEX) were the largest commodity exchanges in 2011. Petroleum products account for the largest share of exchange commodities traded on the SPCEX and the SPEX; the IEXOGI specialises exclusively on petroleum products. The SPCEX was the leader in trading petroleum products in 2011. Its share of the exchange turnover stood at 87.2% as against 10.9% of the IEXOGI and 1.9% of the SPEX. At the same time, the total value of trades in all segments of the largest commodity exchange SPCEX in 2011, despite an active growth, totalled 284.8 billion rubles and was significantly lower than the total value of trades on the MICEX and RTS, which for the same period amounted to 297.9 trillion rubles.

The SDC, a part of the RTS Group, provides clearing services for transactions concluded on the SPCEX and the SPEX. The IEXOGI performs clearing independently. Settlements on transactions concluded on these exchanges are made by authorised banks, OJSC Sberbank of Russia, OJSC Gasprombank, OJSC VTB Bank, OJSC Alfa Bank, in particular. Participants in trades shall have to open a bank account with one of the authorised banks to make settlements on transactions.

In 2011, on the initiative of the Federal Antimonopoly Service of Russia, these exchanges began a transition to a single trading session (STS) on the petroleum product market. Trades shall be held in a counter-auction mode under uniform rules for all participants within the framework of STS. Concluded transactions shall be formalised with a standard delivery agreement and clearing shall be made under uniform rules and requirements of the clearing organisation.

The formalisation of the merger between the MICEX and RTS Groups with establishing a new legal entity OJSC MICEX–RTS³⁰ (hereinafter referred to as the MICEX–RTS Group), was one of the major events on the Russian financial market in 2011. Exchange merger will have a significant impact on the post-trade infrastructure, including clearing and payment services, and in the long term will lead to the strengthening of the relationship between various elements of the financial market infrastructure. The Table above lists providers of clearing and settlement services within the MICEX and RTS Groups, before and after the merger, by different market segment.

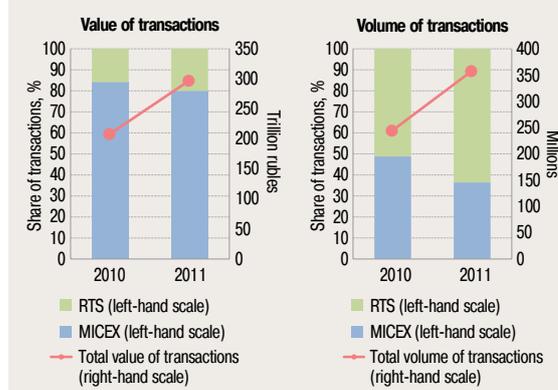
2.2.2. Clearing and settlement indicators

2.2.2.1. Clearing

In 2011, the volume and value of transactions cleared by post-trade infrastructures of the MICEX–RTS Group amounted to 358.2 million worth 297.8 trillion rubles. MICEX Group clearing infrastructures accounted for 36.4% of these transactions by volume and 79.9% by value (130.5 million transactions worth 237.9 trillion rubles), and RTS Group clearing infrastructures – 63.6% of transactions by volume and 20.1% by value (227.7 million transactions worth 59.9 trillion rubles).

³⁰ This name was given as of the completion of the legal procedure of MICEX and RTS Groups merger. Currently, it is renamed into OJSC Moscow Exchange.

Chart 2.9. Transactions cleared, by clearing infrastructure



Clearing of liabilities and payments

At present, there are two types of clearing services provided in the Russian Federation: clearing of liabilities^[1] and clearing of payments.

Under Federal Law No. 7-FZ of February 7, 2011, "On Clearing and Clearing Activities" (hereinafter referred to as the Law on Clearing), clearing of liabilities is understood as identification of liabilities to be met that have arisen from contracts, including liabilities resulting from netting, and preparation of documents (information) which serves as the grounds for termination and/or execution of these liabilities. A clearing organisation provides clearing services under a licence issued by the Federal Financial Markets Service (FFMS). The clearing organisation approves rules regulating clearing services and duly registers them with the FFMS. The clearing of liabilities provides for netting (full or partial termination of liabilities admitted for clearing by way of netting or another method established by clearing rules (hereinafter referred to as netting of liabilities). Under this definition, new liabilities emerged as a result of liabilities netting executed by clearing participants lead to the termination of their initial liabilities due to the fact that parties to the initial liabilities are the same clearing participants.

Clearing of payments, pursuant to the NPS Law, is understood as the procedure for accepting for fulfilment of orders by payment system participants or other actions stipulated by this Law. The clearing of payments is made by a clearing centre that does not need to have a licence. At the same time, the clearing of payments is carried out under payment rules developed by a payment system operator in accordance with the NPS Law and other rules and regulations. The clearing position of a payment system participant can be calculated on a gross and/or net basis. Under the NPS Law, the calculation of the clearing positions of payment system participants on a net basis does not lead to the termination of initial payment liabilities, parties to which are clients of the payment system participants or indirect participants of the payment system.

^[1] For the purpose of this Section, the term "clearing of liabilities" is similar to the term "clearing" defined pursuant to Federal Law No. 7-FZ of February 7, 2011, "On Clearing and Clearing Activities".

In 2011, the clearing organisation CJSC MICEX, **as part of the MICEX Group**, provided clearing services for transactions concluded in the following market segments:

- the stock market³¹;
- the government securities market and money market;
- the derivatives market ;
- the commodity derivatives market.

All transactions in the abovementioned segments were concluded against 100% advance depositing of assets and clearing was made without CCP participation.

From November 1, 2011, the MICEX clearing organisation stopped clearing of transactions concluded on the stock market, by having delegated this function to the NCC clearing organisation that had previously performed CCP functions on the foreign exchange market to introduce a CCP on the stock market. This change was the first significant step towards the conclusion of transactions with a partial advanced deposit and deferred payment T+N planned in 2012 on the stock market segment of the MICEX-RTS Group.

As compared with 2010, the total value of transactions cleared by the MICEX Group clearing organisations (CJSC MICEX and NCC) increased by 36% to 237.9 trillion rubles, while the value of transactions on the stock market rose by 45% to 92.5 trillion rubles, on the government securities market and money market it grew 1.9-fold to 57.8 trillion rubles, on the foreign exchange market it expanded by 9% to 86.8 trillion rubles. The value of transactions concluded on the derivatives market decreased by 51% to 0.7 trillion rubles and on the commodity derivatives market – by 49% to 0.02 trillion rubles.

³¹ Until November 1, 2011.

Transactions on the stock market dominated the structure of transactions by value and their share increased from 36.5 to 38.9% as compared with 2010. Transactions on the foreign exchange market took the second place with their share decreasing from 45.3 to 36.5% as compared with 2010. The share of transactions cleared on the government securities market and money market grew from 17.3 to 24.3% remaining in the third place by value. The share of transactions on the derivatives market and the commodity derivatives market fell by 0.6% and did not exceed 1% in total.

As in 2010, transactions on the stock market dominated the structure of transactions by value and their share increased from 92.5 to 95.3% standing at 124.4 million. Transactions on the foreign currency and derivatives markets with respective shares of 2.7 and 1.8% took the second and third places, while the share of transactions on the derivatives market decreased from 5.7 to 1.8% as compared with 2010. The aggregate share of transactions on the government securities market, money market and commodity futures market accounted for no more than 1%.

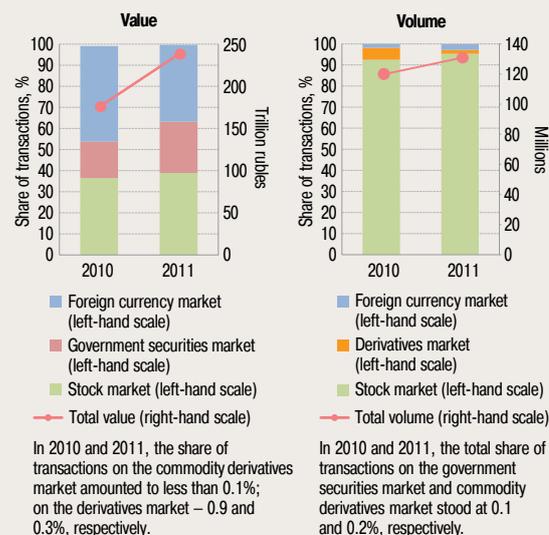
The RTS Clearing Centre, **as part of the RTS Group**, performed CCP functions on the stock, futures and foreign exchange markets, while the DCC provided clearing of transactions on the OTC market.

The total value of transactions cleared by RTS Group clearing infrastructures (the RTS Clearing Centre and DCC) rose 1.8 times to 59.7 trillion rubles as compared with 2010. The growth of the total transaction value was mainly due to a 1.9 times increase of the transaction value on the futures market (to 56 trillion rubles). At the same time, the value of transactions on the stock market decreased by 1% to 3.7 trillion rubles.

Transactions on the derivatives market dominated the structure of transactions cleared by clearing organisations – 94.2% by volume and 93.8 % by value as against 93.2 and 88.7%, respectively, in 2010. As compared with 2010, the share of transactions on the stock market fell from 6.85 to 5.8% by volume and from 11.3 to 6.2% by value.

Algorithmic trading, which is becoming very popular among investors, is one of the factors explaining a significant prevalence of transactions on the stock market of the MICEX Group and on the derivatives market of the RTS Group in volume as compared with other segments.

Chart 2.10. Structure of transactions cleared by MICEX Group clearing infrastructures



Box 14

Algorithmic trading

Algorithmic trading is trading on the stock exchange with the use of specialised computer systems – automated trading systems or “trading robots” (hereinafter referred to as ATS) for making or withdrawing applications for financial instruments or assets. In particular, these systems take decisions on pricing or the quantity of assets purchased or sold, on the time of placement or withdrawal of applications, etc. in accordance with a specified algorithm and, as a rule, without human intervention.

ATS significantly expand the capabilities of market participants, primarily due to a high speed of information analysis and transactions, unachievable for a human being, an automation of routine operations, and a possibility of flexible adjustment of an operation algorithm. At the same time, the speed of making a decision on the placement or withdrawal of applications depends not only on ATS features and on the speed of the realised algorithm but also on the speed of the ATS interaction with the exchange trading system. Due to a high frequency of placement or withdrawal of applications, any delay when sending and receiving data by ATS can affect its profitability^[1].

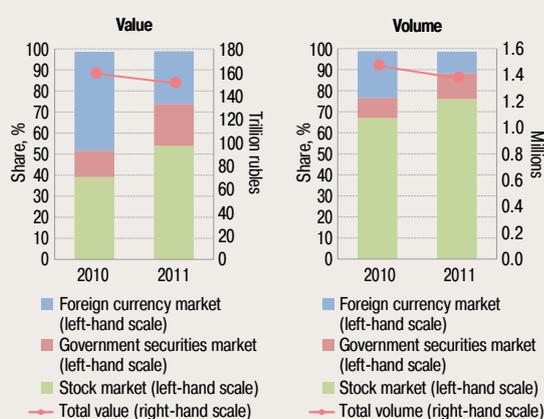
On the other hand, a high share of ATS operations can cause a significant disruption in the functioning of both exchange trade and post-trade infrastructures. Thus, even in the absence of significant events with relatively stable trading, the ATS can trigger operational failures at processing applications, placing and withdrawing them more often than ordinary trade participants. Furthermore, ATS, unlike ordinary trade participants, are programmed to perform specific operations in response to any changes on the market or market-related events and to have minimum behavioural variability. Therefore, there is a high probability of making a large volume of single-type one-way transactions, since many ATS will react to a significant event equally, which, in turn, will trigger a liquidity shortage in making a settlement.

All of the above indicates to a need for exchanges and government bodies concerned to take a number of regulatory and restrictive measures for ATS operations to mitigate related risks^[2], settlement risks, in particular.

^[1] The RTS Group provides, as a separate service, a high-speed access to the system for traders implementing high-frequency trading strategies.

^[2] Within the RTS Group, an exchange fee is charged for applications placed by trading robots, which eventually have not led to transactions, if their volume exceeds a certain limit. The MICEX Group tracks the behaviour of traders by specific criteria to identify ATS among them and to block their operations if they threaten trading system stability.

Chart 2.11. Structure of settlements on MICEX Group exchange transactions



In 2010 and 2011, the share of settlements on transactions on the commodity derivatives market was less than 0.1% and that of on the derivatives market – 1.4 and 1.1%, respectively.

In 2010 and 2011, the share of settlements on transactions on the commodity derivatives market was less than 0.2 and 0.1% and that of on the derivatives market – 1.1 and 1.4%, respectively.

2.2.2.2. Settlements³²

In 2011, the settlement infrastructures of MICEX and RTS Group post-trade infrastructures made 1.6 million settlements worth 255.5 trillion rubles. Of these, the NSD accounted for 87.5% of the total volume and 94.8% of the total value of these transactions (1.4 million settlements worth 242.2 trillion rubles). RTS settlement infrastructures accounted for 12.5% settlements by volume and 5.2% by value, respectively (0.2 million settlements worth 13.3 trillion rubles).

The NSD, which was part of the MICEX Group in 2011, made cash settlements on the stock market, government securities market and money market, foreign exchange market, on OTC repos with the Bank of Russia, and also transferred margins on transactions concluded on the derivatives and commodity derivatives markets. In addition, the NSD conducted settlements on securities.

In 2011, the NSD made 1.4 million settlements worth 150.1 trillion rubles on exchange transactions³³.

The value of settlements on exchange transactions increased by 31.1% to 81.4 trillion rubles, on the government securities and money markets by 49.7% to 29.9 trillion rubles. The value of settlements on the foreign exchange market decreased by 49.3% to 37.8 trillion rubles, on the futures market and the commodity futures market by 25.9 and 29.5% to 1.6 trillion rubles and 0.01 trillion rubles, respectively. All segments except for the foreign exchange market, showed a direct correlation between changes in the value of settlements and changes in the value of transactions processed by clearing. The foreign exchange market, however, showed an inverse correlation, when a 9%-increase of cleared transaction value (from 79.5 trillion rubles to 86.8 trillion rubles as compared with 2010) corresponded to a 49.3%-decrease of settlement value (from 74.7 trillion rubles to 37.8 trillion rubles).

The structure of settlements by value underwent changes as compared with 2010. As mentioned above,

³² For the purpose of this Section, here and below settlements mean money transfer on transactions concluded on the organised market, as well as on OTC transactions using various financial instruments and other assets.

³³ Similar data on the settlement organisations of the RTS Group post-trading infrastructure for the year 2011 are not available.

the value of settlements on transactions on the foreign exchange market declined substantially, both in relative and absolute terms, which led to a redistribution of shares. Thus, the share of settlements on transactions on the foreign exchange market fell from 47% in 2010 to 25.1% in 2011. The share of settlements on transactions on the futures market also decreased from 1.4 to 1.1%. The share of settlements on transactions on the stock market, government securities market and money market increased to 54.0 and 19.8%, respectively, as against 39.1 and 12.6% in 2010.

The structure of settlements by volume underwent the same changes. The volume of settlements on foreign exchange transactions declined 2.3-fold as compared with 2010. The share of settlements on foreign exchange transactions decreased from 22.2 to 10.3%. The share of settlements on transactions on the stock market, government securities and money markets increased to 76.0 and 12.2%, respectively, due to an increase in the value of settlements in these segments in 2011 and a decrease in the share of settlements on foreign exchange transactions. The share of settlements on transactions on the futures market also increased, from 1.1 to 1.4%, while the share of settlements on transactions on the commodity futures market decreased from 0.2 to 0.1%.

Box 15

Individual indicators of post-trade infrastructure functioning

To quantify netting over a certain period, a netting ratio calculated by the following formula is applied:

$$K_n = \frac{Q_{clear}}{Q_{trans}}$$

where:

Q_{clear} – the value of cleared transactions;

Q_{trans} – the value of settlements on these transactions over a certain period of time.

To assess the role of a payment system, in which settlements are made on stock exchange and OTC transactions, within the scope of the national payment system over a certain period, an indicator of the share of settlements made within post-trading infrastructure is used. It is calculated by the following formula:

$$W = \frac{Q_{trans}}{Q_{NPS}}$$

where:

Q_{trans} – the value of settlements on exchange and OTC transactions;

Q_{NPS} – the value of payments effected by the Russian payment system over a certain period.

In a risk management system, for selection of methods to ensure the execution of obligations by system participants in particular, an indicator of the share of settlements of the largest participants (i) is used. It is calculated by the following formula:

$$C_i = \frac{Q_{sample}}{Q_{trans}}$$

where:

Q_{sample} – the value of settlements on operations of the largest settlement participants (i);

Q_{trans} – the total value of settlements made at the exchange over a certain period. Indicator C_5 reflecting the share of settlements on operations of five largest participants will be examined in this Section.

Chart 2.12. MICEX Group netting ratio, the value of cleared transactions and settlements in 2011

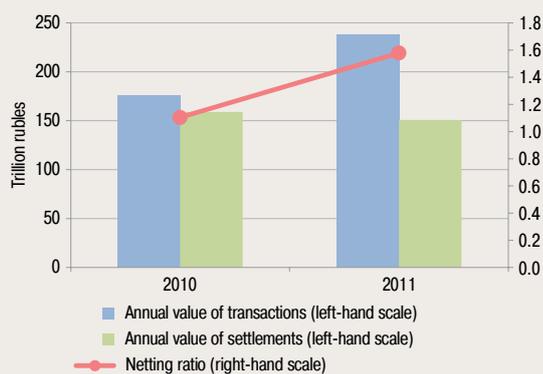
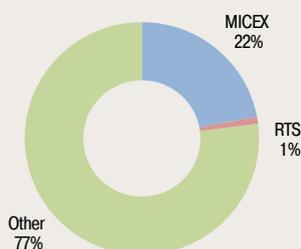


Chart 2.13. Share of settlements made within the post-trade infrastructure in 2011



2.2.2.3. Quantitative characteristics of post-trade infrastructure functioning

Key quantitative indicators specifying the functioning of post-trade infrastructure include a netting ratio³⁴, the share of settlements conducted in the post-trading infrastructure, as well as the share of settlements of five largest participants on the financial market. The netting ratio for the MICEX Group increased from 1.1 to 1.58³⁵ as compared with 2010. Its substantial growth is related to a multi-directional movement of the total value of cleared transactions and the value of settlements. The latter's decrease was due to a significant fall in the value of settlements on foreign exchange transactions. Higher netting ratio was indicative of the fact that liabilities contracted more efficiently during 2011, including those on the foreign exchange market, and as a consequence, a load on the settlement organisations of post-trade infrastructure reduced, and as well as the probability of settlement risk realisation.

The share of settlements made in 2011 within the post-trade infrastructure of the MICEX and RTS Groups totalled 23% of the aggregate value of payments effected by the Russian payment system.

Box 16

Settlement risk

Settlement risk^[1] is a risk of the failure to make a settlement by a payment system due to various reasons within a specified period and/or in line with other approved terms. Realisation of credit risk, liquidity risk and operational risk could lead to settlement risk materialisation.

Credit risk emerges as a clearing participant fails to settle the full value of an obligation – neither when it becomes due, nor at any time thereafter.

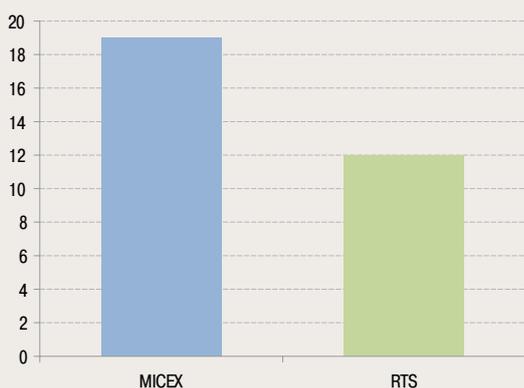
Liquidity risk arises from the failure of a clearing participant to fully meet his obligations when they become due because of insufficiency of funds. Nevertheless, this does not mean that the participant is insolvent, since it may be able to effect the required settlement at some unspecified time thereafter.

Operational risk is the risk that deficiencies in information systems or internal controls, human error or management failure and external unfavourable events will result in unexpected losses.

Realisation of any of the above risks leads to the failure of the settlement between two or more payment system participants, and in case of contagion, it can become a source of a systematic risk.

[1] Risks are defined according to the European Central Bank glossary.

Chart 2.14. Share of settlements of five largest settlement participants in 2011, %



In 2011, the share of settlements of five largest participants of the MICEX Group amounted to 19%, and that of RTS – 12%. This is significantly below the threshold value of this indicator (80%), which demonstrates an extremely high concentration of settlements, requiring special measures to prevent systematic risk.

³⁴ For the purpose of this Section, here and below clearing and netting mean clearing and netting of liabilities in relation to cash settlement. Data on clearing of payments are not shown separately because liabilities did not contract within the clearing of payments in 2011. Obligations on securities are not included in the calculation of indicators.

³⁵ Netting ratios for the MICEX Group are provided for the full year 2011 based on the data of the stock market, government securities and money markets, futures market and commodity futures market and foreign exchange market. Data on the settlement organisations of the RTS Group post-trading infrastructure for 2011, necessary for the netting ratio calculation are not available.

ADDENDUM

**PAYMENT SERVICES PROVIDED
BY CREDIT INSTITUTIONS BY REGION**

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Table 1. Credit transfers³⁶ (in rubles and foreign currency): by volume

thousands

Russian federal district/territory	Total credit transfers		of which made using					
			payment orders		letters of credit		individuals documents	
	2010	2011	2010	2011	2010	2011	2010	2011
1	2	3	4	5	6	7	8	9
Far Eastern Federal District	57,149	61,279	43,562	47,437	1	2	13,586	13,840
Amur Region	5,983	7,293	4,449	5,571	0	0	1,535	1,722
Jewish Autonomous Region	696	652	567	440	0	0	129	212
Kamchatka Territory	2,956	3,071	2,301	2,459	0	0	655	612
Magadan Region	2,323	1,665	996	1,087	0	0	1,327	578
Primorye Territory	16,335	18,862	11,288	13,121	0	1	5,046	5,740
Republic of Sakha (Yakutia)	7,747	6,708	4,998	4,475	0	0	2,749	2,233
Sakhalin Region	4,971	4,890	4,265	4,239	0	0	706	651
Khabarovsk Territory	15,707	17,798	14,364	15,857	1	1	1,343	1,939
Chukotka Autonomous Area	430	341	334	188	0	0	96	153
Volga Federal District	521,245	507,351	193,695	218,230	4	6	327,545	289,115
Kirov Region	10,486	12,481	8,246	9,004	0	0	2,239	3,477
Nizhny Novgorod Region	52,616	57,685	32,416	35,582	0	1	20,199	22,102
Orenburg Region	20,225	23,229	8,627	9,123	0	1	11,598	14,105
Penza Region	19,888	19,016	6,548	6,534	1	1	13,340	12,481
Perm Territory	33,883	35,658	18,646	22,417	0	0	15,237	13,241
Republic of Bashkortostan	42,182	60,280	25,030	31,159	0	0	17,152	29,120
Republic of Mari El	7,795	7,383	2,522	3,003	0	0	5,273	4,380
Republic of Mordovia	8,706	9,840	3,625	3,665	0	0	5,081	6,175
Republic of Tatarstan (Tatarstan)	51,147	62,572	27,050	34,007	1	0	24,097	28,564
Samara Region	215,433	159,559	25,626	27,537	0	1	189,807	132,022
Saratov Region	20,594	16,909	14,517	12,680	0	0	6,077	4,228
Udmurtian Republic	16,299	15,992	9,279	10,498	1	0	7,020	5,493
Ulyanovsk Region	13,245	12,200	6,160	7,309	0	0	7,085	4,890
Chuvash Republic – Chuvashia	8,746	14,547	5,405	5,712	0	0	3,341	8,835
Northwestern Federal District	274,573	264,332	136,615	143,701	6	8	137,952	120,623
Arkhangelsk Region	11,749	12,353	8,191	8,623	0	0	3,558	3,730
Vologda Region	21,051	17,332	11,738	9,358	0	0	9,313	7,973
Kaliningrad Region	28,798	21,877	6,466	6,832	0	0	22,333	15,045
Leningrad Region	23,192	5,660	6,040	3,300	0	0	17,152	2,360
Murmansk Region	17,237	16,271	4,744	4,757	0	0	12,493	11,514
Novgorod Region	9,912	9,975	3,756	3,873	0	0	6,156	6,102
Pskov Region	9,305	8,796	3,262	3,250	0	0	6,044	5,547
Republic of Karelia	11,998	11,272	3,928	3,956	0	0	8,070	7,316
Komi Republic	11,212	11,274	5,657	6,568	0	0	5,555	4,706
St. Petersburg	130,118	149,523	82,834	93,185	6	7	47,279	56,330
North Caucasus Federal District	27,173	32,887	18,067	20,388	1	1	9,106	12,499
Kabardino-Balkarian Republic	1,851	2,526	924	1,140	0	0	927	1,385
Karachayo-vo-Circassian Republic	1,244	1,422	530	783	0	0	714	639
Republic of Daghestan	2,392	3,657	1,025	2,488	0	0	1,367	1,169
Republic of Ingushetia	399	475	254	265	0	0	145	210
Republic of North Ossetia – Alania	1,526	1,495	1,302	1,042	0	0	224	453
Stavropol Territory	18,770	22,279	13,865	14,464	0	0	4,905	7,815
Chechen Republic	991	1,034	168	206	0	0	823	828
Siberian Federal District	238,089	240,524	143,987	152,480	5	7	94,097	88,037
Altai Territory	26,431	23,659	19,870	13,584	0	0	6,560	10,075
Trans-Baikal Territory	4,866	5,553	3,448	3,843	0	0	1,417	1,710
Irkutsk Region	16,138	17,157	12,381	13,374	1	1	3,757	3,782
Kemerovo Region	32,588	44,146	16,884	18,745	0	0	15,704	25,400
Krasnoyarsk Territory	26,384	24,251	15,458	16,537	1	1	10,925	7,712
Novosibirsk Region	73,254	63,533	37,866	44,429	1	2	35,387	19,101
Omsk Region	31,086	34,580	22,851	26,050	1	1	8,235	8,529

³⁶ Including payments by the customers of credit institutions (individuals and legal entities other than credit institutions) and credit institution own payments.

Russian federal district/territory	Total credit transfers		of which made using					
			payment orders		letters of credit		individuals documents	
	2010	2011	2010	2011	2010	2011	2010	2011
1	2	3	4	5	6	7	8	9
Republic of Altai	1,164	1,273	576	640	0	0	588	633
Republic of Buryatia	7,586	8,583	5,203	5,318	0	0	2,383	3,265
Republic of Tyva	880	1,191	356	376	0	0	524	815
Republic of Khakassia	3,426	3,438	2,392	2,100	0	0	1,034	1,337
Tomsk Region	14,288	13,160	6,703	7,482	0	0	7,585	5,677
Urals Federal District	195,454	208,719	100,390	110,457	6	5	95,057	98,257
Kurgan Region	5,127	5,958	3,297	2,925	0	0	1,830	3,034
Sverdlovsk Region	71,457	78,032	42,592	52,901	0	1	28,865	25,130
Tyumen Region	44,774	40,535	31,693	29,343	5	2	13,076	11,190
Chelyabinsk Region	74,095	84,193	22,809	25,287	1	2	51,285	58,903
Central Federal District	993,550	1,059,038	419,548	464,010	29	26	573,973	595,002
Belgorod Region	12,067	13,140	7,340	7,133	0	0	4,727	6,006
Bryansk Region	9,454	7,321	4,076	3,926	0	0	5,378	3,395
Vladimir Region	15,743	17,111	8,779	9,376	0	0	6,963	7,735
Voronezh Region	38,014	34,534	12,229	13,202	0	0	25,785	21,332
Ivanovo Region	11,488	10,302	5,576	5,181	0	0	5,912	5,121
Kaluga Region	13,185	15,836	5,139	5,485	0	0	8,046	10,351
Kostroma Region	11,565	10,400	3,997	4,390	0	0	7,568	6,011
Kursk Region	8,008	7,919	5,093	5,031	0	0	2,915	2,888
Lipetsk Region	8,274	10,236	6,550	5,910	0	0	1,724	4,326
Moscow and Moscow Region	779,677	844,669	322,519	362,144	27	23	457,130	482,502
Orel Region	4,364	5,912	3,033	3,665	0	0	1,331	2,248
Ryazan Region	10,359	9,903	5,502	5,865	1	0	4,856	4,037
Smolensk Region	13,610	14,694	4,329	4,426	0	0	9,281	10,268
Tambov Region	5,700	6,079	2,762	3,210	0	0	2,938	2,868
Tver Region	15,936	14,612	6,279	6,297	0	0	9,658	8,314
Tula Region	15,178	13,020	6,557	6,385	0	0	8,622	6,634
Yaroslavl Region	20,927	23,349	9,788	12,384	0	0	11,139	10,965
Southern Federal District	173,876	153,434	75,498	77,403	1	2	98,377	76,029
Astrakhan Region	10,644	11,050	3,405	3,138	0	0	7,238	7,912
Volgograd Region	20,563	20,657	11,702	12,953	0	0	8,861	7,704
Krasnodar Territory	63,380	63,345	32,094	32,804	0	1	31,285	30,541
Republic of Adygea (Adygea)	3,066	2,983	1,293	1,152	0	0	1,773	1,830
Republic of Kalmykia	776	958	490	538	0	0	286	420
Rostov Region	75,448	54,442	26,514	26,819	1	1	48,933	27,622
Russia total	2,481,109	2,527,565	1,131,362	1,234,106	54	57	1,349,692	1,293,402

Table 2. Credit transfers³⁷ (in rubles and foreign currency): by value

billion rubles

Russian federal district/territory	Total credit transfers		of which made using					
			payment orders		letters of credit		individuals documents	
	2010	2011	2010	2011	2010	2011	2010	2011
1	2	3	4	5	6	7	8	9
Far Eastern Federal District	7,649	8,598	7,498	8,428	3	6	148	164
Amur Region	957	1,124	943	1,105	0	0	14	18
Jewish Autonomous Region	31	28	30	27	0	0	1	1
Kamchatka Territory	287	324	277	314	0	0	10	10
Magadan Region	184	230	178	224	0	0	6	7
Primorye Territory	2,387	2,741	2,339	2,686	1	2	47	53
Republic of Sakha (Yakutia)	814	798	790	773	0	0	24	25
Sakhalin Region	538	578	523	565	0	0	14	13
Khabarovsk Territory	2,387	2,717	2,355	2,679	2	2	30	36
Chukotka Autonomous Area	64	57	63	55	0	0	1	2
Volga Federal District	34,353	39,371	33,829	38,769	11	23	513	580
Kirov Region	785	904	770	886	0	0	15	18
Nizhny Novgorod Region	7,271	8,274	7,206	8,200	1	7	64	67
Orenburg Region	1,343	1,246	1,311	1,211	2	3	30	32
Penza Region	518	626	499	602	1	1	18	23
Perm Territory	3,397	4,307	3,342	4,251	0	1	55	55
Republic of Bashkortostan	3,720	4,591	3,649	4,496	0	2	70	93
Republic of Mari El	257	298	251	291	0	0	6	7
Republic of Mordovia	439	523	431	512	0	0	7	10
Republic of Tatarstan (Tatarstan)	7,758	8,436	7,686	8,338	2	3	71	96
Samara Region	4,792	5,574	4,698	5,482	3	3	91	89
Saratov Region	1,762	1,736	1,722	1,695	1	0	39	40
Udmurtian Republic	1,145	1,256	1,123	1,231	1	1	21	24
Ulyanovsk Region	698	899	683	883	0	0	15	16
Chuvash Republic – Chuvashia	466	701	458	690	0	1	8	10
Northwestern Federal District	28,761	31,549	28,375	31,127	30	33	356	389
Arkhangelsk Region	980	950	963	931	1	0	16	18
Vologda Region	1,143	1,291	1,120	1,269	3	1	20	21
Kaliningrad Region	1,133	1,361	1,113	1,343	0	0	20	18
Leningrad Region	767	458	726	436	0	0	40	23
Murmansk Region	582	616	560	596	0	0	22	20
Novgorod Region	349	374	339	366	0	0	10	9
Pskov Region	287	336	279	329	0	0	8	7
Republic of Karelia	326	365	313	353	0	0	13	12
Komi Republic	960	911	935	885	0	0	25	26
St. Petersburg	22,232	24,885	22,025	24,619	25	31	182	236
North Caucasus Federal District	2,702	2,916	2,635	2,836	2	2	66	78
Kabardino-Balkarian Republic	253	299	247	292	0	0	6	7
Karachayevo-Circassian Republic	93	131	91	128	0	0	2	3
Republic of Daghestan	267	363	249	340	0	0	18	22
Republic of Ingushetia	92	73	90	71	0	0	2	2
Republic of North Ossetia – Alania	128	156	126	152	0	0	2	4
Stavropol Territory	1,772	1,765	1,738	1,730	2	1	32	34
Chechen Republic	98	128	94	123	0	0	4	5
Siberian Federal District	18,980	22,826	18,664	22,475	8	12	309	339
Altai Territory	2,005	2,044	1,975	2,013	0	0	30	31
Trans-Baikal Territory	310	397	298	384	0	0	12	13
Irkutsk Region	2,228	2,549	2,182	2,498	2	3	44	48
Kemerovo Region	2,375	3,287	2,339	3,239	1	1	36	47
Krasnoyarsk Territory	2,402	2,760	2,356	2,709	2	2	44	49
Novosibirsk Region	5,821	7,351	5,739	7,264	2	4	80	82
Omsk Region	2,236	2,648	2,210	2,620	1	1	25	27

³⁷ Including payments by the customers of credit institutions (individuals and legal entities other than credit institutions) and credit institution own payments.

Russian federal district/territory	Total credit transfers		of which made using					
			payment orders		letters of credit		individuals documents	
	2010	2011	2010	2011	2010	2011	2010	2011
1	2	3	4	5	6	7	8	9
Republic of Altai	60	40	58	37	0	0	2	2
Republic of Buryatia	405	433	393	420	0	0	11	13
Republic of Tyva	38	45	36	43	0	0	2	2
Republic of Khakassia	249	225	241	215	0	0	8	9
Tomsk Region	851	1,048	837	1,033	0	0	14	15
Urals Federal District	20,389	25,718	19,738	24,681	345	675	306	362
Kurgan Region	297	366	288	356	0	0	9	10
Sverdlovsk Region	7,927	9,935	7,818	9,790	2	3	107	142
Tyumen Region	7,975	10,348	7,516	9,561	341	667	117	120
Chelyabinsk Region	4,190	5,068	4,117	4,973	2	4	72	90
Central Federal District	236,922	257,461	235,179	255,410	183	251	1,560	1,799
Belgorod Region	1,496	1,644	1,476	1,624	1	1	19	19
Bryansk Region	519	572	509	562	0	0	9	10
Vladimir Region	878	948	864	933	0	0	13	15
Voronezh Region	1,932	2,318	1,895	2,282	1	2	36	34
Ivanovo Region	492	498	482	488	0	0	10	10
Kaluga Region	619	712	602	692	0	0	17	20
Kostroma Region	368	490	358	482	0	0	10	8
Kursk Region	818	968	806	954	0	3	11	12
Lipetsk Region	1,003	1,114	989	1,098	0	0	15	16
Moscow and Moscow Region	224,025	242,589	222,520	240,794	178	242	1,327	1,554
Orel Region	362	476	355	467	0	0	7	8
Ryazan Region	568	649	556	635	1	1	12	13
Smolensk Region	548	625	535	609	0	0	13	16
Tambov Region	314	381	305	371	0	0	10	10
Tver Region	693	750	677	734	0	1	16	16
Tula Region	1,021	1,088	1,005	1,073	0	0	16	15
Yaroslavl Region	1,264	1,639	1,244	1,614	0	1	20	24
Southern Federal District	10,387	12,519	10,167	12,237	4	8	215	275
Astrakhan Region	370	447	355	430	0	0	15	16
Volgograd Region	1,785	2,080	1,746	2,036	1	2	38	41
Krasnodar Territory	4,528	5,572	4,433	5,444	2	3	93	126
Republic of Adygea (Adygea)	72	104	70	101	0	0	2	3
Republic of Kalmykia	39	42	38	40	0	0	1	2
Rostov Region	3,592	4,275	3,525	4,187	1	2	66	86
Russia total	360,143	400,957	356,084	395,964	586	1,008	3,472	3,985

Table 3. Direct debits³⁸ (in rubles and foreign currency): by volume

thousands

Russian federal district/territory	Total direct debits		of which made using			
	2010	2011	payment claims		collection orders	
			2010	2011	2010	2011
1	2	3	4	5	6	7
Far Eastern Federal District	2,526	2,829	1,721	1,739	806	1,090
Amur Region	163	204	116	126	47	78
Jewish Autonomous Region	51	11	44	6	8	6
Kamchatka Territory	123	121	97	76	26	45
Magadan Region	117	72	99	48	18	24
Primorye Territory	828	788	651	527	177	262
Republic of Sakha (Yakutia)	291	346	229	223	62	123
Sakhalin Region	73	99	13	38	61	61
Khabarovsk Territory	878	1,185	472	693	406	492
Chukotka Autonomous Area	1	1	1	1	0	0
Volga Federal District	12,838	18,781	8,543	13,663	4,295	5,118
Kirov Region	505	725	270	456	235	269
Nizhny Novgorod Region	1,152	1,556	809	1,115	343	442
Orenburg Region	524	381	313	164	211	217
Penza Region	635	418	551	295	83	123
Perm Territory	1,265	5,114	890	4,767	376	347
Republic of Bashkortostan	1,733	1,775	1,409	1,353	324	423
Republic of Mari El	311	373	273	319	39	54
Republic of Mordovia	311	295	275	245	35	50
Republic of Tatarstan (Tatarstan)	896	1,016	541	565	355	450
Samara Region	3,028	3,186	1,360	1,278	1,668	1,908
Saratov Region	616	490	445	240	172	250
Udmurtian Republic	1,189	2,832	881	2,501	308	330
Ulyanovsk Region	381	268	297	147	84	122
Chuvash Republic – Chuvashia	291	352	230	218	62	134
Northwestern Federal District	10,957	9,107	8,717	6,455	2,239	2,653
Arkhangelsk Region	1,200	969	1,073	797	127	172
Vologda Region	1,175	1,197	911	915	263	282
Kaliningrad Region	594	661	503	508	91	153
Leningrad Region	410	144	373	110	38	34
Murmansk Region	357	236	276	147	81	89
Novgorod Region	172	135	113	77	59	57
Pskov Region	206	149	126	90	80	58
Republic of Karelia	271	257	201	149	70	108
Komi Republic	498	1,263	414	1,153	84	110
St. Petersburg	6,074	4,096	4,728	2,507	1,346	1,589
North Caucasus Federal District	1,042	1,284	794	784	247	500
Kabardino-Balkarian Republic	74	69	51	27	24	42
Karachayevo-Circassian Republic	34	46	16	12	18	34
Republic of Daghestan	102	141	79	113	23	28
Republic of Ingushetia	9	3	5	1	4	3
Republic of North Ossetia – Alania	31	49	15	10	16	38
Stavropol Territory	787	970	627	622	160	348
Chechen Republic	5	6	2	0	2	6
Siberian Federal District	12,151	14,892	8,653	10,911	3,498	3,981
Altai Territory	571	579	446	405	125	174
Trans-Baikal Territory	248	318	213	255	35	62
Irkutsk Region	719	888	467	487	252	400
Kemerovo Region	1,684	3,155	1,363	2,879	322	276
Krasnoyarsk Territory	2,171	1,876	1,885	1,553	286	323
Novosibirsk Region	2,669	3,065	1,065	1,138	1,604	1,927
Omsk Region	2,448	2,689	2,285	2,481	163	207

³⁸ Including payments by the customers of credit institutions (individuals and legal entities other than credit institutions) and credit institution own payments.

Russian federal district/territory	Total direct debits		of which made using			
	2010	2011	payment claims		collection orders	
			2010	2011	2010	2011
1	2	3	4	5	6	7
Republic of Altai	53	37	44	24	9	14
Republic of Buryatia	293	344	213	254	79	90
Republic of Tyva	407	274	6	7	401	267
Republic of Khakassia	217	420	161	363	56	57
Tomsk Region	669	1,247	504	1,065	165	182
Urals Federal District	11,293	12,931	8,013	9,125	3,280	3,807
Kurgan Region	101	127	65	75	36	52
Sverdlovsk Region	5,909	6,598	3,923	4,271	1,986	2,327
Tyumen Region	3,191	3,897	2,414	3,001	776	896
Chelyabinsk Region	2,092	2,309	1,610	1,778	482	531
Central Federal District	68,197	43,764	24,717	24,147	43,480	19,617
Belgorod Region	663	490	549	375	114	115
Bryansk Region	207	244	145	171	62	73
Vladimir Region	493	586	383	450	110	135
Voronezh Region	1,281	1,312	540	557	741	756
Ivanovo Region	202	149	76	51	126	98
Kaluga Region	619	326	567	198	52	128
Kostroma Region	488	404	434	297	54	107
Kursk Region	1,288	442	1,238	335	51	107
Lipetsk Region	522	369	460	290	63	80
Moscow and Moscow Region	59,951	37,116	18,441	19,773	41,510	17,343
Orel Region	118	192	82	141	37	51
Ryazan Region	371	313	258	194	113	119
Smolensk Region	278	412	219	317	60	94
Tambov Region	168	111	84	52	85	59
Tver Region	421	411	356	322	65	89
Tula Region	507	443	408	330	98	113
Yaroslavl Region	619	444	479	294	140	150
Southern Federal District	18,265	14,709	16,274	12,295	1,991	2,413
Astrakhan Region	494	490	255	217	239	273
Volgograd Region	876	746	604	504	272	242
Krasnodar Territory	10,426	7,702	9,431	6,380	995	1,322
Republic of Adygea (Adygea)	345	224	324	189	20	35
Republic of Kalmykia	26	14	20	8	6	5
Rostov Region	6,098	5,534	5,639	4,998	459	536
Russia total	137,269	118,296	77,432	79,118	59,837	39,178

Table 4. Direct debits³⁹ (in rubles and foreign currency): by value

billion rubles

Russian federal district/territory	Total direct debits		of which made using			
	2010	2011	payment claims		collection orders	
			2010	2011	2010	2011
1	2	3	4	5	6	7
Far Eastern Federal District	46	37	23	26	23	11
Amur Region	9	5	4	4	5	1
Jewish Autonomous Region	0	0	0	0	0	0
Kamchatka Territory	2	2	1	1	1	1
Magadan Region	1	1	0	1	0	0
Primorye Territory	7	10	6	8	1	2
Republic of Sakha (Yakutia)	4	4	2	3	2	1
Sakhalin Region	8	4	0	3	8	1
Khabarovsk Territory	14	9	9	6	5	4
Chukotka Autonomous Area	0	0	0	0	0	0
Volga Federal District	219	245	174	207	45	38
Kirov Region	9	12	8	10	1	1
Nizhny Novgorod Region	54	43	51	39	3	4
Orenburg Region	7	7	4	6	2	1
Penza Region	2	1	1	1	1	1
Perm Territory	36	34	33	31	3	3
Republic of Bashkortostan	25	53	22	48	4	5
Republic of Mari El	3	4	2	4	0	0
Republic of Mordovia	3	4	2	3	1	1
Republic of Tatarstan (Tatarstan)	20	15	11	11	9	4
Samara Region	33	30	17	18	16	12
Saratov Region	4	4	2	3	2	2
Udmurtian Republic	15	23	13	20	2	3
Ulyanovsk Region	3	3	2	2	1	1
Chuvash Republic – Chuvashia	6	11	6	10	1	1
Northwestern Federal District	112	111	89	89	22	22
Arkhangelsk Region	15	16	12	13	3	3
Vologda Region	15	17	12	15	3	2
Kaliningrad Region	5	5	4	4	1	1
Leningrad Region	5	2	5	1	1	0
Murmansk Region	2	2	1	1	1	1
Novgorod Region	2	4	1	3	1	1
Pskov Region	2	2	2	2	0	0
Republic of Karelia	2	5	2	4	1	1
Komi Republic	9	9	7	7	1	2
St. Petersburg	54	50	43	39	10	11
North Caucasus Federal District	22	30	17	26	5	4
Kabardino-Balkarian Republic	2	4	2	4	0	0
Karachayevo-Circassian Republic	1	1	0	1	0	0
Republic of Daghestan	3	4	2	3	1	1
Republic of Ingushetia	2	1	0	0	2	1
Republic of North Ossetia – Alania	5	5	5	5	0	0
Stavropol Territory	8	15	7	14	1	1
Chechen Republic	1	0	1	0	0	0
Siberian Federal District	289	312	236	286	54	26
Altai Territory	32	30	27	28	5	2
Trans-Baikal Territory	1	1	1	1	0	1
Irkutsk Region	8	14	6	11	3	3
Kemerovo Region	29	46	25	42	4	4
Krasnoyarsk Territory	61	64	57	60	4	4
Novosibirsk Region	58	45	24	37	33	8
Omsk Region	79	87	77	86	1	1

³⁹ Including payments by the customers of credit institutions (individuals and legal entities other than credit institutions) and credit institution own payments.

Russian federal district/territory	Total direct debits		of which made using			
	2010	2011	payment claims		collection orders	
			2010	2011	2010	2011
1	2	3	4	5	6	7
Republic of Altai	1	1	1	1	0	0
Republic of Buryatia	5	3	4	2	1	0
Republic of Tyva	1	1	0	0	1	1
Republic of Khakassia	4	3	3	2	0	1
Tomsk Region	11	17	9	15	2	1
Urals Federal District	216	295	191	266	26	29
Kurgan Region	3	6	3	6	0	0
Sverdlovsk Region	82	144	71	131	12	13
Tyumen Region	102	123	93	113	9	11
Chelyabinsk Region	29	21	24	16	5	5
Central Federal District	606	753	516	679	90	74
Belgorod Region	5	3	4	3	1	1
Bryansk Region	2	1	1	1	1	1
Vladimir Region	12	13	11	12	1	1
Voronezh Region	8	8	6	5	3	3
Ivanovo Region	3	2	1	1	2	1
Kaluga Region	2	2	1	1	1	1
Kostroma Region	2	2	1	1	1	1
Kursk Region	2	2	1	1	1	1
Lipetsk Region	10	5	8	5	1	1
Moscow and Moscow Region	485	693	411	637	74	56
Orel Region	3	1	3	1	0	0
Ryazan Region	2	3	1	2	1	1
Smolensk Region	1	2	1	1	1	1
Tambov Region	2	3	1	1	1	1
Tver Region	3	3	2	1	1	2
Tula Region	63	4	62	3	1	1
Yaroslavl Region	4	4	3	3	1	1
Southern Federal District	59	61	44	43	15	18
Astrakhan Region	1	1	0	0	1	1
Volgograd Region	9	8	7	5	2	2
Krasnodar Territory	28	30	19	19	9	11
Republic of Adygea (Adygea)	1	1	1	1	0	0
Republic of Kalmykia	1	0	1	0	0	0
Rostov Region	19	21	16	17	4	4
Russia total	1,569	1,843	1,289	1,621	279	222

Table 5. Bank cards: by number

thousands

Russian federal district/territory	Number of bank cards issued in region ⁴⁰							
	Total		of which					
			payment		credit		prepaid	
	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012
1	2	3	4	5	6	7	8	9
Far Eastern Federal District	5,448	6,861	5,014	6,205	434	652	0	4
Amur Region	776	1,011	674	893	102	114	0	4
Jewish Autonomous Region	117	146	106	133	12	13	0	0
Kamchatka Territory	280	348	251	318	29	30	0	0
Magadan Region	114	143	103	130	10	12	0	0
Primorye Territory	1,671	1,962	1,587	1,842	84	120	0	0
Republic of Sakha (Yakutia)	656	832	609	780	46	51	0	0
Sakhalin Region	388	524	361	480	27	44	0	0
Khabarovsk Territory	1,415	1,865	1,293	1,599	122	266	0	0
Chukotka Autonomous Area	32	31	30	29	2	1	0	0
Volga Federal District	25,523	30,047	24,213	27,978	1,310	1,985	0	85
Kirov Region	887	1,087	843	1,029	45	58	0	0
Nizhny Novgorod Region	2,966	3,313	2,804	3,062	162	252	0	0
Orenburg Region	1,648	1,957	1,578	1,848	69	108	0	0
Penza Region	773	978	742	921	31	57	0	0
Perm Territory	2,261	2,713	2,133	2,488	128	225	0	0
Republic of Bashkortostan	4,115	4,727	3,824	4,326	291	401	0	0
Republic of Mari El	333	438	323	418	10	20	0	0
Republic of Mordovia	486	587	476	555	11	23	0	9
Republic of Tatarstan (Tatarstan)	4,054	4,382	3,871	4,062	182	245	0	76
Samara Region	2,919	3,486	2,757	3,265	162	221	0	0
Saratov Region	1,685	2,229	1,601	2,091	84	138	0	0
Udmurtian Republic	1,479	1,736	1,408	1,617	71	119	0	0
Ulyanovsk Region	1,018	1,263	976	1,189	42	73	0	0
Chuvash Republic – Chuvashia	898	1,150	877	1,106	21	44	0	0
Northwestern Federal District	15,187	17,294	13,181	14,952	773	1,193	1,233	1,149
Arkhangelsk Region	1,000	1,191	939	1,097	61	92	0	2
Vologda Region	928	1,131	892	1,058	36	72	0	0
Kaliningrad Region	880	1,059	841	992	39	67	0	0
Leningrad Region	722	975	697	918	25	57	0	0
Murmansk Region	1,064	1,184	1,012	1,090	52	94	0	0
Novgorod Region	590	697	552	641	38	56	0	0
Pskov Region	441	556	424	519	18	37	0	0
Republic of Karelia	667	753	634	694	33	60	0	0
Komi Republic	825	1,020	792	948	34	72	0	0
St. Petersburg	8,070	8,727	6,400	6,996	437	585	1,233	1,146
North Caucasus Federal District District	2,711	3,737	2,615	3,542	97	196	0	0
Kabardino-Balkarian Republic	300	410	290	387	11	23	0	0
Karachayevo-Circassian Republic	111	172	109	166	2	7	0	0
Republic of Daghestan	350	521	346	514	4	7	0	0
Republic of Ingushetia	60	88	60	87	0	1	0	0
Republic of North Ossetia – Alania	210	324	206	313	4	11	0	0
Stavropol Territory	1,573	2,035	1,498	1,889	75	146	0	0
Chechen Republic	106	186	106	186	0	0	0	0
Siberian Federal District	17,103	21,536	15,863	19,250	901	1,665	339	621
Altai Territory	1,647	2,041	1,556	1,890	91	151	0	0
Trans-Baikal Territory	547	774	514	705	33	68	0	0
Irkutsk Region	2,085	2,561	1,965	2,353	120	208	0	0
Kemerovo Region	2,784	3,336	2,662	3,124	122	212	0	0
Krasnoyarsk Territory	2,643	3,579	2,496	3,159	147	420	0	0
Novosibirsk Region	3,029	3,807	2,582	2,991	173	268	273	548

⁴⁰ Including bank cards issued for residents of this region by credit institutions (branches) located in this or other regions.

Russian federal district/territory	Number of bank cards issued in region							
	Total		of which					
			payment		credit		prepaid	
	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012
1	2	3	4	5	6	7	8	9
Omsk Region	1,881	2,283	1,804	2,169	77	114	0	0
Republic of Altai	106	143	100	132	6	11	0	0
Republic of Buryatia	889	1,146	777	992	47	81	65	73
Republic of Tyva	161	217	144	194	17	22	0	0
Republic of Khakassia	373	490	353	457	19	33	0	0
Tomsk Region	960	1,161	910	1,084	50	77	0	0
Urals Federal District	13,762	15,895	13,160	15,044	601	851	0	0
Kurgan Region	536	637	503	583	33	53	0	0
Sverdlovsk Region	4,766	5,593	4,546	5,283	221	311	0	0
Tyumen Region	4,452	5,194	4,283	4,949	169	245	0	0
Chelyabinsk Region	4,008	4,471	3,829	4,228	178	242	0	0
Central Federal District	54,530	92,509	44,659	50,352	5,519	7,754	4,353	34,402
Belgorod Region	1,265	1,512	1,210	1,409	55	100	0	3
Bryansk Region	945	1,082	907	1,013	38	66	0	3
Vladimir Region	977	1,206	922	1,116	54	83	0	8
Voronezh Region	1,495	1,902	1,420	1,782	75	121	0	0
Ivanovo Region	777	814	753	770	23	45	0	0
Kaluga Region	630	819	604	769	26	50	0	0
Kostroma Region	402	476	383	442	18	34	0	0
Kursk Region	949	1,131	901	1,058	48	73	0	0
Lipetsk Region	802	980	750	908	52	72	0	0
Moscow and Moscow Region	40,560	75,607	31,341	34,567	4,867	6,651	4,352	34,389
Orel Region	509	678	480	628	29	50	0	0
Ryazan Region	758	909	719	840	39	68	0	0
Smolensk Region	659	778	620	703	39	74	0	0
Tambov Region	494	661	462	606	32	55	0	0
Tver Region	865	1,042	835	981	30	61	0	0
Tula Region	1,340	1,562	1,298	1,492	41	71	0	0
Yaroslavl Region	1,103	1,351	1,052	1,270	51	81	0	0
Southern Federal District	10,154	12,290	9,082	10,549	412	730	660	1,011
Astrakhan Region	1,089	1,239	1,049	1,161	40	63	0	16
Volgograd Region	1,923	2,312	1,850	2,185	73	126	0	1
Krasnodar Territory	4,263	5,173	3,478	3,921	130	264	655	988
Republic of Adygea (Adygea)	145	223	134	204	6	13	5	5
Republic of Kalmykia	143	199	124	173	19	26	0	0
Rostov Region	2,592	3,144	2,448	2,905	144	240	0	0
Russia total	144,419	200,170	127,787	147,872	10,047	15,026	6,585	37,272

Table 6. Payments by bank cards issued in federal district/territory: by volume

thousands

Russian federal district/territory	Payments for goods (work, services)				Customs payments and other transactions	
	in Russia		abroad		2010	2011
	2010	2011	2010	2011		
1	2	3	4	5	6	7
Far Eastern Federal District	37,470	60,788	1,747	2,842	1,647	4,376
Amur Region	4,752	8,327	57	137	161	448
Jewish Autonomous Region	813	1,060	10	21	26	61
Kamchatka Territory	2,533	3,460	77	144	106	202
Magadan Region	806	1,665	47	85	60	129
Primorye Territory	6,159	11,255	752	1,151	644	1,769
Republic of Sakha (Yakutia)	8,242	11,077	92	177	109	360
Sakhalin Region	2,010	4,739	224	361	169	449
Khabarovsk Territory	11,880	18,832	479	750	352	909
Chukotka Autonomous Area	275	374	9	15	19	48
Volga Federal District	173,144	278,498	3,953	7,028	4,319	11,303
Kirov Region	6,368	11,430	80	178	237	616
Nizhny Novgorod Region	17,588	28,650	614	1,055	461	1,245
Orenburg Region	8,815	11,274	128	224	305	299
Penza Region	2,876	4,825	61	133	189	376
Perm Territory	29,223	62,573	611	1,128	585	2,043
Republic of Bashkortostan	22,812	36,926	469	796	318	1,135
Republic of Mari El	1,423	3,264	32	71	90	520
Republic of Mordovia	1,824	2,978	18	57	42	134
Republic of Tatarstan (Tatarstan)	20,602	32,455	629	1,032	262	1,152
Samara Region	19,950	26,333	576	1,043	637	1,270
Saratov Region	9,881	14,104	225	425	434	724
Udmurtian Republic	21,800	27,920	345	523	324	802
Ulyanovsk Region	6,760	9,287	97	195	271	441
Chuvash Republic – Chuvashia	3,220	6,478	70	169	164	546
Northwestern Federal District	178,283	224,648	9,381	15,778	2,898	6,295
Arkhangelsk Region	8,968	16,562	266	450	519	1,100
Vologda Region	7,897	13,590	134	249	281	562
Kaliningrad Region	5,582	9,232	676	1,151	138	203
Leningrad Region	3,661	6,071	198	388	236	322
Murmansk Region	18,492	27,312	645	1,071	139	812
Novgorod Region	3,471	4,710	81	139	143	228
Pskov Region	3,295	4,391	132	250	161	189
Republic of Karelia	6,536	9,127	314	533	220	318
Komi Republic	7,015	12,713	141	275	225	677
St. Petersburg	113,366	120,939	6,795	11,271	836	1,884
North Caucasus Federal District	11,068	20,704	288	606	815	2,093
Kabardino-Balkarian Republic	846	1,577	20	50	46	163
Karachayo-vo-Circassian Republic	493	938	9	21	42	110
Republic of Daghestan	861	1,484	47	91	48	127
Republic of Ingushetia	105	291	3	7	11	45
Republic of North Ossetia – Alania	552	1,158	27	60	35	113
Stavropol Territory	8,040	14,306	177	359	631	1,410
Chechen Republic	170	951	5	19	4	125
Siberian Federal District	120,925	196,182	3,514	6,533	4,548	12,851
Altai Territory	15,259	26,047	225	387	486	1,366
Trans-Baikal Territory	5,128	8,942	35	79	108	406
Irkutsk Region	16,484	30,448	458	745	622	2,142
Kemerovo Region	19,449	27,807	303	996	322	987
Krasnoyarsk Territory	13,818	24,436	839	1,307	685	1,563
Novosibirsk Region	18,281	27,731	1,000	1,914	267	2,239
Omsk Region	9,836	15,224	339	557	223	467
Republic of Altai	746	1,386	4	8	68	176
Republic of Buryatia	10,753	16,036	41	84	169	410
Republic of Tyva	726	1,279	5	9	136	266

Russian federal district/territory	Payments for goods (work, services)				Customs payments and other transactions	
	in Russia		abroad		2010	2011
	2010	2011	2010	2011		
1	2	3	4	5	6	7
Republic of Khakassia	1,968	2,671	18	46	93	233
Tomsk Region	8,476	14,175	248	402	1,370	2,596
Urals Federal District	118,384	178,973	3,350	5,562	3,108	7,309
Kurgan Region	3,837	6,210	65	116	108	285
Sverdlovsk Region	40,349	63,068	1,375	2,199	919	2,454
Tyumen Region	55,361	80,814	1,274	2,166	1,585	3,109
Chelyabinsk Region	18,837	28,881	637	1,082	496	1,461
Central Federal District	303,102	542,371	30,256	49,067	28,462	49,208
Belgorod Region	7,725	13,188	146	275	267	483
Bryansk Region	5,139	8,334	76	150	200	549
Vladimir Region	6,009	9,259	100	203	112	389
Voronezh Region	9,505	17,599	308	568	307	743
Ivanovo Region	1,958	3,640	59	128	101	171
Kaluga Region	2,739	5,207	112	239	101	332
Kostroma Region	1,798	3,353	38	71	82	257
Kursk Region	8,361	12,418	61	120	170	350
Lipetsk Region	7,042	10,326	139	236	108	287
Moscow and Moscow Region	220,532	405,019	28,422	45,533	26,133	43,205
Orel Region	3,214	6,009	52	119	61	209
Ryazan Region	3,152	5,394	84	167	110	357
Smolensk Region	2,871	5,526	151	272	155	407
Tambov Region	1,894	3,950	41	90	104	256
Tver Region	4,722	8,401	124	240	143	461
Tula Region	6,420	11,257	137	275	99	326
Yaroslavl Region	10,021	13,493	205	380	207	422
Southern Federal District	49,343	77,794	1,841	3,398	1,530	4,096
Astrakhan Region	4,907	6,920	61	127	204	367
Volgograd Region	12,039	17,563	317	578	363	671
Krasnodar Territory	17,986	28,559	809	1,475	479	1,501
Republic of Adygea (Adygea)	364	722	7	21	18	82
Republic of Kalmykia	338	865	10	24	70	195
Rostov Region	13,709	23,164	637	1,173	395	1,279
Russia total	991,718	1,579,959	54,332	90,816	47,326	97,532

Table 7. Payments by bank cards issued in federal district/territory: by value

million rubles

Russian federal district/territory	Payments for goods (work, services)				Customs payments and other transactions	
	in Russia		abroad		2010	2011
	2010	2011	2010	2011		
1	2	3	4	5	6	7
Far Eastern Federal District	39,498	72,960	8,939	13,044	24,345	53,377
Amur Region	3,356	7,655	318	616	1,590	4,227
Jewish Autonomous Region	473	812	49	75	227	468
Kamchatka Territory	2,909	4,715	461	782	1,583	3,056
Magadan Region	1,504	3,126	208	312	900	2,224
Primorye Territory	8,804	16,458	4,195	5,768	11,590	22,036
Republic of Sakha (Yakutia)	4,871	8,137	402	685	1,321	4,468
Sakhalin Region	4,154	8,549	1,188	1,703	1,960	5,121
Khabarovsk Territory	12,987	22,833	2,082	3,055	4,793	10,855
Chukotka Autonomous Area	441	675	37	49	380	922
Volga Federal District	111,533	232,553	16,466	26,306	31,412	76,327
Kirov Region	2,987	7,232	330	603	1,695	3,740
Nizhny Novgorod Region	14,565	25,029	2,432	3,803	4,163	9,592
Orenburg Region	4,340	8,237	682	1,008	1,583	2,016
Penza Region	1,912	3,674	328	536	889	1,891
Perm Territory	22,771	56,763	2,177	3,857	7,631	16,651
Republic of Bashkortostan	14,097	26,508	1,845	2,820	1,808	5,819
Republic of Mari El	724	1,762	115	240	423	1,607
Republic of Mordovia	541	1,128	78	191	357	839
Republic of Tatarstan (Tatarstan)	14,041	26,733	2,654	4,170	2,277	13,113
Samara Region	13,682	33,737	3,240	4,969	4,447	7,357
Saratov Region	6,421	13,615	1,126	1,688	2,394	3,870
Udmurtian Republic	10,565	18,593	808	1,267	1,425	4,757
Ulyanovsk Region	2,677	5,078	370	638	1,459	2,475
Chuvash Republic – Chuvashia	2,212	4,463	281	515	862	2,601
Northwestern Federal District	172,795	297,692	35,960	55,260	54,594	93,888
Arkhangelsk Region	8,226	16,282	785	1,284	4,226	8,280
Vologda Region	5,732	11,345	524	898	2,145	3,980
Kaliningrad Region	5,391	9,573	1,994	3,230	761	1,469
Leningrad Region	4,221	7,971	646	1,177	1,663	2,148
Murmansk Region	23,793	34,750	1,611	2,659	1,667	6,762
Novgorod Region	3,255	5,121	285	461	814	1,128
Pskov Region	2,200	3,785	346	587	916	1,074
Republic of Karelia	6,018	10,824	768	1,391	1,792	2,377
Komi Republic	7,021	14,096	502	828	1,611	4,869
St. Petersburg	106,937	183,946	28,499	42,745	38,999	61,800
North Caucasus Federal District	7,505	15,803	2,952	4,268	6,090	17,759
Kabardino-Balkarian Republic	445	1,002	227	344	362	1,420
Karachayevo-Circassian Republic	189	499	93	159	312	897
Republic of Daghestan	803	1,548	872	957	1,033	2,619
Republic of Ingushetia	51	129	61	152	147	618
Republic of North Ossetia – Alania	401	946	192	322	276	964
Stavropol Territory	5,536	11,292	1,327	1,908	3,903	9,703
Chechen Republic	80	387	181	426	58	1,538
Siberian Federal District	97,113	184,924	13,179	21,168	35,596	79,867
Altai Territory	9,101	17,633	767	1,142	5,109	8,139
Trans-Baikal Territory	3,184	6,709	208	366	1,426	3,557
Irkutsk Region	16,572	32,799	1,806	2,900	8,715	16,736
Kemerovo Region	13,038	23,063	1,482	2,627	2,331	5,860
Krasnoyarsk Territory	12,724	27,379	2,719	4,579	5,941	14,463
Novosibirsk Region	19,164	33,670	3,681	5,737	3,192	11,904
Omsk Region	6,878	13,436	1,327	1,966	1,631	3,809
Republic of Altai	442	1,119	19	28	350	1,076
Republic of Buryatia	6,503	11,617	191	368	1,531	3,238
Republic of Tyva	315	577	23	32	725	1,600

Russian federal district/territory	Payments for goods (work, services)				Customs payments and other transactions	
	in Russia		abroad		2010	2011
	2010	2011	2010	2011		
1	2	3	4	5	6	7
Republic of Khakassia	847	1,695	115	205	620	1,372
Tomsk Region	8,343	15,229	841	1,217	4,026	8,113
Urals Federal District	112,884	203,631	14,109	21,281	38,157	99,914
Kurgan Region	2,756	5,141	239	343	610	1,501
Sverdlovsk Region	39,817	68,868	5,990	9,020	16,018	52,836
Tyumen Region	53,331	94,984	5,078	7,677	18,277	36,091
Chelyabinsk Region	16,980	34,637	2,803	4,241	3,252	9,486
Central Federal District	502,273	895,533	171,804	241,262	385,354	743,745
Belgorod Region	6,286	11,744	699	1,236	1,493	2,968
Bryansk Region	3,424	6,691	322	547	2,118	4,487
Vladimir Region	3,490	6,617	455	724	948	2,932
Voronezh Region	9,418	19,511	1,277	1,903	2,611	6,514
Ivanovo Region	1,959	3,940	269	475	618	1,201
Kaluga Region	2,802	6,092	486	889	816	2,665
Kostroma Region	1,154	2,540	176	261	544	1,192
Kursk Region	4,424	7,502	274	455	1,076	2,528
Lipetsk Region	4,679	8,407	530	763	640	1,708
Moscow and Moscow Region	437,022	771,983	164,147	228,807	366,350	697,927
Orel Region	1,897	4,075	182	331	397	1,410
Ryazan Region	3,847	6,504	451	708	785	2,476
Smolensk Region	3,501	6,352	429	746	1,272	3,083
Tambov Region	1,620	3,646	195	333	598	1,606
Tver Region	4,454	8,534	502	859	1,449	3,997
Tula Region	4,561	8,951	618	969	789	2,734
Yaroslavl Region	7,737	12,446	791	1,254	2,850	4,315
Southern Federal District	42,383	75,886	10,001	15,223	13,142	33,758
Astrakhan Region	3,377	6,016	320	478	1,168	2,182
Volgograd Region	7,115	12,177	1,368	2,002	2,725	5,855
Krasnodar Territory	17,275	31,766	5,047	7,552	5,275	14,307
Republic of Adygea (Adygea)	353	692	30	69	147	532
Republic of Kalmykia	365	798	30	65	406	1,325
Rostov Region	13,899	24,437	3,207	5,057	3,421	9,557
Russia total	1,085,984	1,978,983	273,410	397,813	588,691	1,198,635

Table 8. Bank card accepting devices by federal district/territory: by number

Russian federal district/ territory	Number of ATMs				Number of POS terminals				Number of imprinters			
	ATMs with a cash withdrawal function		ATMs with a payment function		in points of sale		in cash points		in points of sale		in cash points	
	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012
1	2	3	4	5	6	7	8	9	10	11	12	13
Far Eastern Federal District	3,665	4,454	3,426	4,239	16,643	21,197	5,153	5,710	142	94	279	308
Amur Region	425	522	403	500	1,893	2,435	656	725	3	3	49	48
Jewish Autonomous Region	98	103	96	103	235	319	149	151	0	1	8	8
Kamchatka Territory	243	276	209	254	1,003	1,204	351	368	19	15	17	30
Magadan Region	95	117	86	117	528	796	172	202	3	3	3	3
Primorye Territory	1,173	1,336	1,070	1,262	4,134	4,956	1,767	1,847	52	13	87	107
Republic of Sakha (Yakutia)	419	595	402	562	2,893	3,532	468	747	9	8	3	1
Sakhalin Region	290	367	270	351	1,664	2,191	382	405	25	24	41	41
Khabarovsk Territory	903	1,116	871	1,068	4,235	5,658	1,169	1,210	30	26	71	70
Chukotka Autonomous Area	19	22	19	22	58	106	39	55	1	1	0	0
Volga Federal District	18,844	21,659	17,273	20,916	68,502	83,435	19,211	23,014	1,317	4,721	900	806
Kirov Region	641	771	639	768	2,586	3,438	919	1,111	7	4	7	3
Nizhny Novgorod Region	2,423	2,604	2,286	2,455	8,249	9,633	2,269	2,433	203	134	183	173
Orenburg Region	1,114	1,301	1,048	1,230	3,659	4,189	1,241	1,390	124	286	28	21
Penza Region	664	791	620	789	1,343	1,842	1,000	990	57	126	9	4
Perm Territory	1,802	2,120	1,032	2,073	8,305	11,615	1,787	2,010	127	71	109	101
Republic of Bashkortostan	2,524	2,959	2,442	2,873	10,686	11,880	2,349	4,159	56	22	15	7
Republic of Mari El	238	305	237	305	619	976	271	453	7	9	4	8
Republic of Mordovia	429	465	426	463	727	633	417	547	0	0	0	0
Republic of Tatarstan (Tatarstan)	2,979	3,354	2,727	3,114	10,836	13,671	2,678	2,892	272	88	257	224
Samara Region	2,560	2,843	2,451	2,743	7,548	7,922	2,185	2,418	359	3,215	76	64
Saratov Region	1,172	1,377	1,079	1,337	3,591	4,327	1,469	1,550	36	425	115	112
Udmurtian Republic	957	1,197	953	1,196	6,607	8,083	1,268	1,483	19	6	61	57
Ulyanovsk Region	665	753	663	752	2,001	2,603	809	907	25	323	6	4
Chuvash Republic – Chuvashia	676	819	670	818	1,745	2,623	549	671	25	12	30	28

Russian federal district/ territory	Number of ATMs				Number of POS terminals				Number of imprinters			
	ATMs with a cash withdrawal function		ATMs with a payment function		in points of sale		in cash points		in points of sale		in cash points	
	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012
1	2	3	4	5	6	7	8	9	10	11	12	13
Northwestern Federal District	11,486	12,812	10,881	12,407	58,568	69,901	9,723	11,463	2,765	1,841	546	485
Arkhangelsk Region	828	1,011	815	997	3,647	4,847	853	851	16	14	74	76
Vologda Region	765	939	755	912	3,191	3,887	710	919	9	6	65	59
Kaliningrad Region	908	845	867	828	3,891	4,482	722	739	38	20	49	15
Leningrad Region	720	855	709	842	1,390	3,728	454	2,571	66	67	10	18
Murmansk Region	920	934	874	926	4,133	5,274	842	676	28	14	6	6
Novgorod Region	464	544	459	541	4,309	1,993	630	504	46	0	0	1
Pskov Region	345	406	340	402	791	1,227	514	531	13	11	97	98
Republic of Karelia	412	493	409	488	1,467	2,161	601	647	3	100	70	69
Komi Republic	618	715	607	687	3,169	4,144	987	1,105	21	15	18	11
St. Petersburg	5,506	6,070	5,046	5,784	32,580	38,158	3,410	2,920	2,525	1,594	157	132
North Caucasus Federal District	2,460	2,902	2,339	2,847	4,505	5,153	2,488	2,561	25	93	80	51
Kabardino-Balkarian Republic	212	247	199	240	245	243	244	351	4	4	3	36
Karachayev-Republic	116	139	116	138	111	160	77	85	0	0	0	0
Republic of Dagestan	266	324	241	320	222	248	164	304	4	4	2	2
Republic of Ingushetia	49	56	49	68	6	12	32	41	1	1	0	0
Republic of North Ossetia – Alania	360	195	283	193	325	281	420	187	1	1	65	2
Stavropol Territory	1,351	1,799	1,345	1,778	3,593	4,193	1,535	1,553	15	83	9	10
Chechen Republic	106	142	106	110	3	16	16	40	0	0	1	1
Siberian Federal District	13,208	15,323	11,828	13,988	52,316	66,600	12,222	17,213	567	833	301	461
Altai Territory	1,546	1,588	1,428	1,480	5,827	6,950	1,441	2,878	58	4	92	86
Trans-Baikal Territory	360	446	338	435	1,696	2,610	617	1,184	2	3	0	0
Irkutsk Region	1,573	1,922	1,304	1,809	8,206	10,400	1,626	2,989	61	84	4	153
Kemerovo Region	1,967	2,337	1,765	2,209	5,980	7,768	1,656	1,929	16	27	26	30
Krasnoyarsk Territory	1,876	2,208	1,740	2,057	7,530	9,633	1,812	1,966	44	52	75	23
Novosibirsk Region	2,521	2,590	2,171	2,337	8,064	10,197	1,657	2,195	319	426	57	58
Omsk Region	1,314	1,803	1,276	1,491	6,391	8,157	1,387	1,532	33	182	23	92
Republic of Altai	85	99	84	96	182	282	127	132	0	0	0	0
Republic of Buryatia	602	683	573	662	3,704	4,358	525	633	10	8	6	1
Republic of Tyva	88	97	87	96	126	175	109	112	1	1	2	2

Russian federal district/ territory	Number of ATMs						Number of POS terminals						Number of imprinters					
	ATMs with a cash withdrawal function			ATMs with a payment function			in points of sale			in cash points			in points of sale			in cash points		
	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012	1.01.2011	1.01.2012		
	2	3	4	5	6	7	8	9	10	11	12	13						
1																		
Republic of Khakassia	313	369	276	349	669	810	441	446	2	3	0	1						
Tomsk Region	963	1,181	786	967	3,941	5,260	824	1,217	21	43	16	15						
Urals Federal District	10,123	12,092	9,835	11,615	51,385	65,605	8,321	13,974	1,170	2,167	417	348						
Kurgan Region	352	429	349	426	1,630	2,165	543	973	12	24	24	24						
Sverdlovsk Region	3,576	4,264	3,438	4,055	18,753	25,168	2,891	5,014	655	1,448	105	87						
Tyumen Region	3,810	4,608	3,719	4,442	20,135	26,455	2,553	4,149	164	386	219	175						
Chelyabinsk Region	2,385	2,791	2,329	2,692	10,867	11,817	2,334	3,838	339	309	69	62						
Central Federal District	29,213	33,524	27,514	31,416	157,107	183,819	30,414	35,970	23,162	17,891	1,514	1,329						
Belgorod Region	799	1,033	775	1,005	4,780	6,220	1,122	1,869	8	3	7	7						
Bryansk Region	681	786	672	779	1,934	2,891	389	416	6	5	38	1						
Vladimir Region	803	997	633	983	3,228	3,909	866	1,124	34	15	43	30						
Voronezh Region	1,226	1,458	1,202	1,422	7,085	8,490	1,649	2,030	150	26	16	8						
Ivanovo Region	491	642	476	618	1,628	1,917	592	555	53	12	11	11						
Kaluga Region	562	678	523	645	1,454	1,672	713	748	13	12	20	20						
Kostroma Region	270	334	256	330	1,038	1,189	333	514	69	24	28	28						
Kursk Region	707	766	705	759	3,763	4,839	622	1,105	7	2	1	1						
Lipetsk Region	600	667	589	651	3,830	4,552	811	1,346	10	10	3	2						
Moscow and Moscow Region	18,440	20,776	17,207	19,013	112,018	128,049	18,730	20,129	22,707	17,701	1,107	1,063						
Orel Region	386	497	379	418	2,102	2,813	441	827	5	3	2	2						
Ryazan Region	582	658	545	617	2,067	1,911	606	652	16	10	0	0						
Smolensk Region	543	617	529	614	2,029	2,245	527	611	19	14	78	78						
Tambov Region	279	349	277	343	1,497	1,921	630	1,143	7	3	1	1						
Tver Region	722	806	658	801	2,508	2,358	654	1,007	6	7	22	22						
Tula Region	1,037	1,229	1,016	1,206	3,229	4,312	750	790	3	3	19	19						
Yaroslavl Region	1,085	1,231	1,072	1,212	2,917	4,531	979	1,104	49	41	118	36						
Southern Federal District	8,088	9,349	7,637	8,967	25,492	32,801	7,113	8,081	208	1,215	258	271						
Astrakhan Region	610	727	566	655	2,298	3,342	605	759	6	6	7	6						
Volgograd Region	1,553	1,730	1,510	1,678	4,550	5,607	1,359	1,517	57	70	196	219						
Krasnodar Territory	3,495	4,050	3,242	3,921	10,284	13,432	2,586	2,974	74	435	33	33						
Republic of Adygea (Adygea)	98	142	96	139	394	506	184	220	15	15	0	0						
Republic of Kalmykia	88	126	76	100	158	274	91	108	1	1	0	0						
Rostov Region	2,244	2,574	2,147	2,474	7,808	9,640	2,288	2,503	55	688	22	13						
Russia total	97,087	112,115	90,733	106,395	434,518	528,511	94,645	117,986	29,356	28,855	4,295	4,059						