#### **UDC 33**

# The reasons of creation, problems and the development prospects of the national payment card system

### Elizaveta Yu. Sarmina

Graduate Student,

Financial University under the Government of the Russian Federation, 125993, 49, Leningradskii av., Moscow, Russian Federation; e-mail: elizavetasarmina@gmail.com

#### **Abstract**

The emergence and development of payment system is associated with the ever increasing need of banks and their customers for more efficient operation of the system. Increasing the availability of financial services, accelerating the payment of counterparties, the spread of non-cash payment instruments is impossible without the openness and interconnectedness of the elements of the financial and payment infrastructure at the international level. Moreover, there are two most important reasons for the introduction of non-cash settlements in international monetary and credit relations: the need to minimize operational risk and reduce transaction costs. The article is devoted to the analysis of the activities of the newly created national payment card system. This topic is relevant because of the activity of the payment system directly affects the entire financial system of the country. Based on a brief review of the literature on the problems of implementing its own payment system in the Russian Federation, the development of the payment infrastructure in the country as a whole, the main problems and prospects for the development of the national payment card system on the territory of the country and beyond its borders are determined. The emergence and development of payment system is associated with the ever increasing need of banks and their customers for more efficient operation of the system.

#### For citation

Sarmina E.Yu. (2017) The reasons of creation, problems and the development prospects of the national payment card system. *Ekonomika: vchera, segodnya, zavtra* [Economics: Yesterday, Today and Tomorrow], 7 (4A), pp. 102-109.

#### **Keywords**

Payment system, payment instruments, national payment card system, payment system "Mir", Visa, MasterCard, UnionPay, JCB, financial system.

#### Introduction

The emergence and development of payment system is associated with the ever increasing need of banks and their customers for more efficient operation of the system. Increasing the availability of financial services, accelerating the payment of counterparties, the spread of non-cash payment instruments is impossible without the openness and interconnectedness of the elements of the financial and payment infrastructure at the international level. Moreover, there are two most important reasons for the introduction of non-cash settlements in international monetary and credit relations: the need to minimize operational risk and reduce transaction costs.

## Main part

Nowadays there are a lot of definitions of "payment system". Bank for International Settlement (BIS) defines a payment system as a set of payment instruments, banking services and, as a rule, interbank payment systems which serve the circulation of money.

In Russia the term "payment system" appeared in the second half of 1990-s replacing the term "clearing system". According to the Federal Law No. 161-FZ of June 2011 "On the National Payment System", the term "payment system" is defined as the combination of money transfer operators (including electronic money operators), bank payment agents (subagents), payment agents, federal postal service organizations (when they are rendering payment services, in accordance with Russian federal law), payment system operators, and payment infrastructure service providers (national payment system entities). The appearance and use in our country the term "payment system" is associated with the increasing role of the Western payment systems such as Visa and MasterCard.

The efficiency of the payment system can only be achieved with the full collaboration of its elements. Under the efficiency of the payment system implies the timeliness and reliability of transfer of money resources for payment. If the payment system operates effectively, it allows banks to reduce its operating costs and improve management of liquidity. Various failures and delays in payment entail serious consequences, such as undermining confidence to the payment system by economic agents, such situation in turn could lead to increased costs of payment system participants and to payment crisis.

In addition, any payment system needs a durable legal basis, which implies the existence of rules, standards and laws established by legislative bodies, oversight bodies and operators of payment systems and defining the mechanisms for payment transactions.

The payment system can also include various agencies and organizations that provide customer accounts and tools, and provide payment, clearing and settlement services. Thus, the main participants in the payment system are the Central and commercial banks, non-banking institutions such as clearing and settlement centers.

One of the main elements of the payment system is a payment instrument that implies a set of procedures enabling the transfer of funds from the payer to the recipient [Abramova, Markina, 2014]. There are the following non-cash payment instruments: credit transfers, direct debits, cheques, E-money payment transactions, card payment. Payment cards both debit and credit are the most popular non-cash payment instruments in all countries (figure 1). The debit card holders have the right to withdraw money from their bank accounts and transfer their money, while credit card holders can use the credit line to make payments within the specified limit.

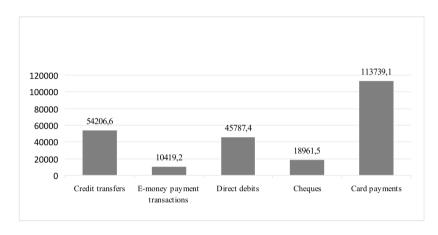


Figure 1. Frequency distribution of use non-cash payment instruments in 2015 (in millions of US dollars)

At all times strong and independent financial system was a key factor in security of any state. In March 2014, the Russian financial system showed one of its weaknesses. International payment systems Visa and MasterCard blocked card transactions for several Russian banks. This situation showed up the vulnerability of the Russian financial system and also the dependence of the western countries.

Such problem required immediate solutions; therefore, on March 27 of this year Vladimir Putin, the Russian President approved the establishment of the national payment card system (NSPK) to protect the interests of the country and its citizens. May 5, 2014 the president signed the law on creation of this system (Federal law dated 5 may 2014 No. 112-FZ "On amendments to the Federal Law "On the national payment system""), and in the spring of 2015, name and logo ("Mir") was defined for national payment system by citizens. The NSPK is a major step to economic sovereignty of our country.

For protection of the financial system government established operational payment and clearing centre NSPK that must be responsible for the processing of transactions by cards of international payment systems. In the spring of 2015 first results were achieved. 1 April 2015 all domestic transactions by cards of international payment systems were transferred on the processing NSPK. Currently, the payment system "Mir" included 359 participants (figure 2), 74 of whom are issuers of cards and 177 reveal its acquiring network, installed 160 000 terminals the payment system ATM is running 1.5 million post-terminals. Now participants of payment system issued about 5 million cards "Mir".

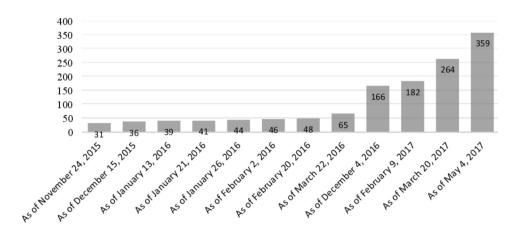


Figure 2. Evolution of growth in the number of participants of the payment system "Mir"

Creation of the national payment card system was based on the experience of countries such as Japan and China. Payments systems of these countries (the Japanese JCB and Chinese UnionPay) began its work as the national payment system but later they began a strong competitor for Visa, MasterCard and other international payment system. Nowadays JCB and UnionPay are among the five leaders by the amount of issued payment card around the world.

National payment card system developed rapidly. However, some problems continue to exist and its fact do not allow develop national payment system faster. Such problems include an imperfect of information transmission system of the Central Bank, the lack of a unified identifier for individuals and legal entities, low level of standardization in the payment field (about 20% instead of 70% as in developed countries), weak information efficiency of the payment system.

The main problem is the low level of awareness of citizens about the existence of the national payment system. This situation stems not only from a marketing program of the payment system, but also with the fact that the engagement in the use of payment products grows slowly, as the level of financial literacy. This problem leads to the fact that the demand for international payment system doesn't decrease. According to the report of the NSPK for 2015, Visa and MasterCard continue to lead in the Russian market (94,1%), while the share of the Russian payment systems remains at a small enough level (5,9%). Another important problem of the national payment card system is the problem of entering the international market where there is strong competition. The main question that worries many Russians: "How the card "Mir" will compete with Visa and MasterCard?"

Currently, the issue of attracting more citizens to use the card "the World" is one of the most important direction of development for the national payment card system. For this NSPK need to put more effort on brand promotion of the payment card "Mir", on card issuance "Mir" by all participants of the NSPK and on the expansion of the network of national payment cards. Lately, increasingly discussed method of promotion of the national payment system is a method proposed by the Central Bank of the Russian Federation. This method is to set a deadline for banks when they will have to give state employees a payment card Mir". The Central Bank of Russia proposed that from 1 January 2018 all transactions in the accounts, which received money from the national

budget, carried out only across the national payment cards. Also, NSPK is actively developing a network of reception of national cards. Main outlets which are most in demand (Svyaznoy, M. Video, AUCHAN, Globus, etc.), take the card "Mir". Moreover, the NSPK involved and is the sponsor of many social programs and activities (for example, NSPK is a sponsor of a very popular among the youth rock festival "Invasion"). Also, the card holders of the national payment system has all the same privileges that they had with other payment systems, one of which is the program of the refund with purchases.

Another direction where the NSPK should be actively developed is a spread of national payment cards on international markets. The national payment system has already signed 5 agreements about cobadging projects (Mir Maestro, Mir Visa, Mir JCB, Mir AmEx, Mir Union Pay) and 1 such project is in perspective (Mir MasterCard). Moreover, the NSPK is actively cooperating with the national payment systems of the participating countries of the Eurasian Economic Union for the development of payment infrastructure. To a greater extent this applies to the Belarusian system "BELCARD" and payment system of Armenia "ArmenianCard". But the main aim of a national payment card system is an acceptance of the main card "Mir" abroad. This requires that foreign banks can become participants of the national payment system. Currently, the participation of foreign banks in national payment system is prohibited by law. The NSPK looked forward to the adoption of amendments to the legislation allowing foreign banks to issue the national cards "Mir" and act as settlement banks of the national payment card system abroad.

The Russian market has high volatility and movement, which is related to such factors as: the sensitivity of the economy to the energy price; the ambiguity and variability of legislation in the sphere of taxation, currency and customs control; financial market instability; frequent fluctuations of the national currency; a significant dependence on the political situation in the country and in the world. So the prediction of macroeconomic indicators is a difficult process and it becomes almost impossible. All this factors affect the activity of the NSPK, since there are risks. There is no guarantee that decisions taken by the leadership of the NSPK will be effective in the case of changes in the economic and political situation in the country.

The main risks of the NSPK include:

- market risk;
- country risk;
- operational risk.

Market risk can be divided into currency risk and the risk associated with changing interest rates. NSPK gets part of its revenue through the provision of services to process transactions for international payment systems that pay for this service in foreign currency. While in 2016 this cooperation brought NSPK income of more than 4 billion rubles. In the case of the weakening of the dollar or the Euro by more than 20% profit of the national payment card system can be reduced by more than 500 million rubles. As for interest rates, this influence is also great. This is due to the fact that NSPK holds in bank deposits more than 5 billion rubles, which brought the payment

system additional income of \$ 432 million (interest paid on deposit accounts in 2016). Change of Interest rate by 1% can lead to a change in Profit Before Tax (PBT) by 39 million rubles.

Country risk is associated primarily with the political situation, as it is linked to the risk of non-payment by foreign partners. Nowadays the political situation in the world is still unstable, which causes the risk of the introduction of additional sanctions against the Russian Federation and the main organizations within its territory. Despite the fact that the NSPK collaborates mainly with domestic counterparties, there are also contracts with foreign agents, although not in large numbers. And hence, country risk is present and affects the activities of the national payment card system.

Operational risk is one of the main risks of the NSPK, as the performance of national payment system is directly related to high technology. Any failure in the system can lead to a loss of trust. Moreover, nowadays all transactions on payment cards in Russia are processed only by NSPK. This means that when operating fails, nobody will be able to perform any transaction on the territory of the Russian Federation.

#### Conclusion

Despite all the existing risks, the national payment card system is actively developing and has already showed a great progress for such a short period of time after its creation. For 2015 and 2016 year net profit of NSPK reached 3.8 billion rubles. The Central Bank, as the sole shareholder of the national payment card system, has invested in the establishment of a 4.3 billion. This means that the NSPK is paid for the most part spent money for its creation. Thanks to positive dynamics of development there is opportunity to assert that the objectives can be achieved despite the high level of competition with international payment systems. Note that the NSPK should be the infrastructure project that will allow developing other parts of the financial system of Russia.

#### References

- 1. Abramova M.A., Markina E.V. (eds.) (2014) *Denezhno-kreditnaya i finansovaya sistemy* [Monetary and financial systems]. Moscow: KNORUS Publ.
- 2. Aleksanov A. (2012) Bezopasnost' kartochnogo biznesa: biznes-entsiklopediya [Safety of the card business: business encyclopedia]. Moscow: Moscow Financial-Industrial Academy.
- 3. Beloglazova N.M. (2007) *Den'gi. Kredit. Banki* [Money. Credit. Banks]. Moscow: Yurait Publ.
- 4. *Glossarii Banka mezhdunarodnykh raschetov* [Glossary of the Bank for International Settlements].
- 5. Godovoi otchet AO "NSPK" [Annual report of JSC "NSPK"].
- 6. Ignatova O.V., Belyanchikova O.A. (2016) *Mezhdunarodnye raschety* [International settlements]. Moscow: Financial University.

- 7. Kokkola T. (2010) Payment System. Payments, securities and derivatives, and role of the Eurosystem. ECB.
- 8. Krivoruchko S.V., Lopatin V.A. (2013) *Natsional'naya platezhnaya sistema: struktura, tekhnologii, regulirovanie. Mezhdunarodnyi opyt, rossiiskaya praktika* [National payment system: structure, technology, regulation. International experience]. Moscow: KNORUS Publ.
- 9. Mussel' K.M. (2015) *Platezhnye tekhnologii: sistemy i instrumenty* [Payment technologies: systems and tools]. Moscow: KNORUS Publ.
- 10. Statistika po platezhnym, kliringovym i raschetnym sistema Banka mezhdunarodnykh raschetov (sentyabr' 2016 g.) [Statistics on payment, clearing and settlement systems of the Bank for International Settlements (September 2016)].

# Причины создания, проблемы и перспективы развития национальной системы платежных карт

# Сармина Елизавета Юрьевна

Студент,

Финансовый университет при Правительстве Российской Федерации, 125993, Российская Федерация, Москва, Ленинградский просп., 49; e-mail: elizavetasarmina@gmail.com

#### Аннотация

Статья посвящена анализу деятельности недавно созданной национальной системе платежных карт. Данная тема актуальна, так как деятельность платежной системы напрямую влияет на всю финансовую систему страны. На основе краткого обзора литературных источников по проблемам внедрения собственной платежной системы в Российской Федерации, развития платежной инфраструктуры в стране в целом определяются основные проблемы и перспективы развития национальной системы платежных карт на территории страны и за ее границами. Несмотря на все существующие риски, система национальных платежных карт активно развивается и уже добилась значительного прогресса за такой короткий период времени после ее создания. На 2015 и 2016 год чистая прибыль НСПК составила 3,8 млрд. Рублей. Центральный банк, будучи единственным акционером национальной системы платежных карточек, вложил средства в создание 4,3 миллиарда. Это означает, что NSPK выплачивается за большую часть потраченных денег за его создание. Благодаря положительной динамике развития есть возможность утверждать, что цели могут быть достигнуты, несмотря на высокий уровень конкурен-

ции с международными платежными системами. Отметим, что НСПК должен быть инфраструктурным проектом, который позволит развивать другие части финансовой системы России.

#### Для цитирования в научных исследованиях

Сармина Е.Ю. The reasons of creation, problems and the development prospects of the national payment card system // Экономика: вчера, сегодня, завтра. 2017. Том 7. № 4А. С. 102-109.

#### Ключевые слова

Платежная система, национальная система платежных карт, платежная система «Мир», Visa, MasterCard, UnionPay, JCB, финансовая система.

### Библиография

- 1. Абрамова М.А., Маркина Е.В. (ред.) Денежно-кредитная и финансовая системы. М.: КНОРУС, 2014. 448 с.
- 2. Алексанов А. Безопасность карточного бизнеса: бизнес-энциклопедия. М.: Московская финансово-промышленная академия, ЦИПСиР, 2012. 432 с.
- 3. Белоглазова Н.М. Деньги. Кредит. Банки. М.: Юрайт-Издат, 2007. 620 с.
- 4. Глоссарий Банка международных расчетов.
- 5. Годовой отчет АО «НСПК».
- 6. Игнатова О.В., Белянчикова О.А. Международные расчеты. М.: Финансовый университет, 2016. 108 с.
- 7. Криворучко С.В., Лопатин В.А. Национальная платежная система: структура, технологии, регулирование. Международный опыт, российская практика. М.: КНОРУС, 2013. 456 с.
- 8. Муссель К.М. Платежные технологии: системы и инструменты. М.: КНОРУС, 2015. 288 с.
- 9. Статистика по платежным, клиринговым и расчетным система Банка международных расчетов (сентябрь 2016 г.).
- 10. Kokkola T. Payment System. Payments, securities and derivatives, and role of the Eurosystem. ECB, 2010.