

## THE ROLE OF THE CENTRAL BANK IN THE NATIONAL PAYMENT SYSTEM: EVIDENCE FOR MACEDONIA

**Abstract:** The significance of the payment operations manifests itself through its important role in every market economy, as a vital component of the financial infrastructure. The payment system is an infrastructure that enables the transfer of funds between entities for the performance of their mutual obligations. The payment system is the basic means for efficient implementation of the monetary policy of the central bank. The design of the payment system should basically meet the specifications of a particular country. In this paper we analyze the importance of the payment system and the role of the Central bank. At the end, we linked the public policy, Central Bank and the National Payment System and its performance for developing payment operations.

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### 1. Introduction

Today, undoubtedly one of the most important processes that determines the position of each country, is the achieved level of scientific and technical and technological development and the degree of application of its achievements. Information technology and its structure and features allow the globalization of systems and their functioning, thus breaking down the classic forms of cooperation and opening up new horizons in the relationships between entities of all kinds.

There is no single and ideal way of organizing payment systems in the world. The modern organized payment operations are based on the use of information and communication technology. Payment operations are carried out by exchanging electronic messages through information systems. Electronic message is information that is electronically generated, sent, verified, applied, and preserved. The structure of the message is determined by a legislative body, usually the central bank. Payment operations cover all payments made between legal entities and natural persons. From the point of view of the persons participating in it, the payment operations can be internal and external. Domestic payment operations in each country include all cash and non-cash payments made between legal entities, that is, the legal entities and natural persons of that country. External payment operations like international

payment operations are a set of methods, instruments and rules that make payments between individuals and legal entities based in different countries.

International payment operations involve all forms of payment outside the territory of a country, where commercial banks appear as direct participants. All participants in the international payment operations can be seen as residents (persons performing economic activity in the country) and non-residents (persons performing economic activity outside the country), so international payment operations can also be defined as payments and payments between residents and non-residents.<sup>1</sup>

## **2. The importance of payment infrastructure**

Foreign trade and the international economic relations of the countries are very important because they are based on the economic interest of the countries and their economy. Every national economy in the process of co-operation with the world finds its interest, measures its position and cures larger or smaller uses of foreign trade, depending on the degree of openness of the economy towards the world and other factors affecting foreign trade. This is closely related to the payment operations. Payment operations represent all payments made in cash between domestic (legal entities and individuals), as well as between domestic and foreign entities. Payments between them are performed for goods and services and for the payment of financial transactions. These works are carried out through the commercial banks and the bank acts as an intermediary in its own name, and performs them on behalf of the client.

The payment system is an infrastructure that enables the transfer of funds between entities for the performance of their mutual obligations. The payment system is the basic means for efficient implementation of the monetary policy of the central bank. However, banks and the central bank can ensure secure, safe, efficient and fast execution of transactions must have developed payment instruments, pay infrastructure and an appropriate institutional framework, which as a whole form the national payment system. The design of the payment system should basically meet the specifications of a particular country. In practice, any payment is a complex process of transferring money to the payer's account at one financial institution on the account of the recipient to another financial institution, usually banks, where payers and recipients of funds as bank customers can be other banks, non-bank financial institutions, non-financial companies and individuals. Banks providing services to their clients are direct participants in the payment system and form it, called international payment system.<sup>2</sup> The institution through which payments in most countries are settled is the Central Bank, where the accounts of the banks are maintained, whereby the settlement is actually carried out within the money supply with the Central Bank.

In the process of payment operations, two parties are necessary: the one who makes the payment (the payer) and the other party that receive the money (receiver), and in accordance with the above definition, those parties may be individuals or legal entities, domestic or foreign.

Institutionally organized payment operations include:<sup>3</sup>

- Acceptance of a payment order
- Control of the correctness of the payment order
- Execution of the payment order like transfer of funds from the account of the account
- Notification of the participant in the payment operations for the payment made.

The basic function of the payment operations is a good organization, while respecting the principles of efficiency and economy.

## **3. Characteristics of international payment operations**

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1 Hadžić Miroljub "Banking" - Singidunum University, Belgrade 2009, p. 245.

2 Alexander, K., Dhumale, R. and Eatwell, J., Global Governance of Financial Systems, Oxford University Press, Oxford, 2006.

3 Payment Systems: Design, Governance and Oversight", edited by Bruce J. Summers, Central Banking Publications Ltd, London, 2012

Payment operations can be classified in several ways depending on the criteria for its monitoring, thus separating three divisions: on the basis of the manner of payment, on the basis of the type of payment and the third – the place of payment.

The first aspect, that is, from the point of view of the method of payment operations, distinguish between direct and indirect payment operations. The main difference between them is the inclusion or not the involvement of one or more parties in the payment operations itself. Thus, the direct payment operations are the direct payment between the payer and the recipient, while in the intermediate payment operations in the payment operations, there are also one or more organizations through which the payment itself or the payment is being paid. According to the second view, payment operations may be cash and non-cash. Cash payment operations are characteristic mainly for small or small payments, especially among the population, and it is done as the name itself in cash. Non-cash payment operations shall be such payment operations as the payment is made by transferring a certain amount of money from one or another account, or from a debtor's account to a creditor's account. This transfer of funds also requires certain travel orders that we call with a general name of non-cash payment orders. According to the third view, domestic and international payment operations are differentiated, and the criterion for this classification is where the persons participating in it are located. Thus, domestic payment operations implies all payments taking place at the border of one country by domestic currency, and international payment operations implies all payments that are established between persons who are in two or more countries in a foreign currency.

International payments from domestic payments vary by several characteristics. As international payments in interaction, a resident and a non-resident who, as a rule, use different currencies, enter at least two different currencies. It is said at least two, because in fact very often is used a third, convertible currency (usually US dollar), in which payments are made.<sup>4</sup> Thus, the paying party, as a rule, only has its own national currency, while the payment itself takes place in one of the strongest world currencies. Given that both the paying entity and the entity receiving the assets are, as a rule, only its national currency, it is an inevitable element in the international payments for converting one currency into another.<sup>5</sup> So it is inevitable to convert the currency during the process, so the exchange rate is also indefinable. This causes changes in the balance of payments, as a systematic overview of all intercountry payments made by one country to the rest of the world.

The international payment operations are characterized not only by spatial distance, but also by the fact that there is a place of residence for the subject in different countries, with different legislation and regulations. Therefore, it aims: to enable the execution of various foreign currency trading transactions (convertible, non-convertible, clearing and national currencies) using various payment instruments and in contact with entities that are often not known.<sup>6</sup> Namely, the entities that participate in the commodity and non-trade turnover are domiciled in different territories and are faced with elements of uncertainty and uncertainty. The payment operations are basically intermediary (service) banking operations. With the collection of a particular commission and eventual costs, the banks perform these things in their own name, but for another account. This type of banking does not necessarily involve funds for their potential in most cases. International payments today are performed exclusively through banks and in foreign currency, i.e. by transfer of claims in currencies on the accounts with the bank. Cash payments in effective currencies appear more rarely, mainly only in tourism, but are insignificant. International Payment Operations also implies procedures and procedures related to cash payments arising from the material-legal relationship of the participating entities.<sup>7</sup>

#### **4. Development of the payment system of the Republic of Macedonia**

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4 Payment systems and market infrastructure oversight report, ECB, Frankfurt am Main, July 2008.

5 Payment Systems Worldwide: a Snapshot. Outcomes of the Global Payment Systems Survey 2008, World Bank, Washington DC, June 2008.

6 Payment systems and market infrastructure oversight report, ECB, Frankfurt am Main, July 2008

7 Popovich N., (2007), Application to SWIFT Technologies in International Payment Transactions, Finance, Banking, Audit, Insurance, No.1 / 2007, Belgrade, p. 140-142

The development of the payment system of the Republic of Macedonia since its independence can be divided into two phases and a transition period, which can be placed in three periods.<sup>8</sup>

In the first phase, the national payment system was represented through the functioning of a public institution inherited from the former system before the independence of the Republic of Macedonia, known as the Bureau for Payment Operations (BPO). This institution performed the role of inter-bank and intrabank payment system for domestic payments for the needs of the economic entities and the state. However, for the functioning of a market-oriented economy it was necessary to implement a reform of the national payment system and introduce a new payment system that would be able to develop in accordance with the strategic determinations of the Republic of Macedonia for its integration into the European Union.

In the transition period from 30.07.2001 to 31.12.2001, in addition to the introduction of MIPS and KIBS, the functioning of the BPO as a specific payment system continued. With the process of transferring the accounts of the BPO to the banks, the scope of work of the BPO was reduced, and it was increasing to the new payment systems MIPS, KIBS and the internal systems of banks. At the end of the transition period, the BPO has stopped working with the overall migration of the accounts into the new payment systems, making the new payment systems in the Republic of Macedonia. Macedonia started functioning at full capacity.

The second phase shows successful functioning of the new payment system of the Republic of Macedonia. With the legal authorizations of the NBRM, which are prescribed by the Law on the National Bank of the Republic of Macedonia and the Law on Payment Operations, the NBRM as a modern central bank started to actively implement its roles in the payment system of the Republic of Macedonia.

The payment system successfully functions after the payment system reform in the country. In 2003, the NBRM successfully managed the Macedonian Interbank Payment System (MIPS) as a place where the final gross settlement was made in real time, and the banks successfully continued to perform the function of payment operations holders. In May / August 2003, the Financial Sector Evaluation Program in the Republic of Macedonia (FSAP) was conducted in order to assess the level of diversity of the financial system and to identify weaknesses and disadvantages, as well as assessing MIPS, for its compliance and the payment operations principles. It was thus concluded that the MIPS has been harmonized and that it is a reliable payment system

Thus, the payment operations holders are the National Bank of the Republic, the banks that have received consent for performing payment operations in accordance with the law and branches of foreign banks and the Treasury Department of the Ministry of Finance as a separate payment operations carrier for the budget users and spending units and the Treasury of the Health Insurance Fund of Macedonia, as a special bearer of the payment operations of the healthcare institutions.<sup>9</sup> A participant in the payment operations may be any domestic or foreign, legal or individual performing a registered activity or another natural person who makes payments in denars through the payment operations carriers. The participant in the payment operations may have several transaction accounts with one payment operations carrier or with several payment operations carriers.

The payment system in the Republic of Macedonia is comprised of the following subsystems:

- MIPS (Macedonian Interbank Payment System) - Real-time gross settlement system for processing high-value payments and urgent interbank payments.
- Clearing Interbank Systems - KIBS - System for delayed net settlement for processing low-value payments.
- International Card System AD KaSis - System for deferred net settlement for processing of payments with cards.

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<sup>8</sup> <http://www.nbrm.mk/>

<sup>9</sup> Law on Payment Operations ("Official Gazette of the Republic of Macedonia" No. 113/2007)

• Internal payment systems of banks for payments between clients depositors within the same bank. Here are those payments that do not cause a change in the balance on the account of the bank in the National Bank of the Republic of Macedonia.<sup>10</sup>

These subsystems are functionally connected and all of their activities are carried out with a predefined mode of operation and a strictly defined timetable.

### **5. Payment System of Macedonia**

The design of the payment system basically needs to satisfy the specifics of the particular country, the experiences point to a number of common factors on which depends the efficiency of the payment system, such as: the speed of execution of payments, settlement reliability, confidentiality and security, as well as the height of costs. An ineffective payment system can lead to inadequate allocation of financial assets and risk among participants, actual costs and loss for participants, and thus a loss of confidence in the financial system and monetary policy with long-term consequences for the overall economy.

An institution through which payments in the most countries are settled is the central bank where the accounts of the banks are maintained, whereby the settlement is actually carried out within the money supply with the central bank. Hence, the reliability, stability and efficiency of the payment system is the basis for unobstructed clearing and settlement of payments, as well as the basis for smooth functioning of the money and capital markets. Also, the payment system is the basic means for efficient implementation of the monetary policy of the central bank.

In modern terms, payments are usually made through the use of bank deposits. In order to make the payment, the orderer must issue an instruction, usually to the bank where it holds the funds to be transferred. The construction can be in paper form or electronic instruction using modern technological solutions (payment card, computer or smart mobile). In addition, the payment instruction is processed and settled normally without the participation of the orderer of the instruction. Hence, although the payment system is essential for providing end-user payment services, however, it is not a direct participant in the payment system and its payment is indirectly executed through a limited number of direct participants in the payment system. The steps are:

1. Submitting a payment order to a bank.
2. Submission of the order to the payment system for (a) small payments or (b) large or emergency payments.
3. Clearing the received instructions and submitting the net positions to the settlement system.
4. Settlement and submission of information for (a) approval and (b) borrowing to the bank of the payer and the orderer.
5. (a) Approval and (b) debiting the accounts of the payer and the orderer.

At the top of the payment system is the central bank, which runs the accounts of depository institutions - banks. The central bank in the payment system has an operational function, a development function and a function of overseeing other payment systems in the country. On the next level are the banks that keep accounts of other legal entities and individuals. Accounts are managed decentralized - each bank for its customers. The system of the central bank is used for execution and clearing of payments with large values and urgent payments among banks. For offsetting small-value payments, a specialized institution - a Clearing House for small payments is used, and the results of the netting are later settled in the central bank system.

### **6. The role of the NBRM in the payment operations**

Regarding the legal authorizations, the NBRM registers, supervises the reliability, stability and efficiency of the payment, settlement and clearing systems. Also, the bank is a beneficiary of the payment systems in the country for the implementation of the monetary policy, maintenance of the financial stability and realization of the other significant functions. In addition, the bank is a beneficiary

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<sup>10</sup> NBRM, 2015.

of payment systems abroad for the purpose of managing foreign reserves as well as conducting international payment operations for state bodies. Thus, three important roles of the NBRM are highlighted:<sup>11</sup>

1. Operational role - covers the following aspects:

- Large Payments System Operator MIPS - management of the single payment system for real-time gross settlement

- Backward operations - internal operations by settling the concluded transactions for the financial markets

- payment operations with abroad on behalf and for the account of the state - through NBRM foreign currency accounts

2. supervisory role - supervision of payment systems, in accordance with the Law on Payment Operations, with the aim of achieving the reliability and efficiency of the payment systems through the process of monitoring permanent balances, etc.

3. Development and catalyst role - by improving the regulation of payment systems, participating in the harmonization of national regulations with the European regulation, introducing new standards in the operation of payment systems,

A part of the payment operations is done inside each bank and it refers to payments between enterprises and people who have accounts in the same bank. The top of the payment operations is the central bank that runs the accounts of depository institutions-banks. On the next level are the banks that keep the accounts of the other legal entities and individuals. (each bank for its customers). For clearing and small values, the Clearing House is used, and for large payments the Central Bank system. Some payment instruments, such as a letter of credit, a credit letter, checks, a bill of exchange, a credit card, a bank guarantee, are used for the payment operations.

## **7. Public Policy, Central Bank and National Payment System**

Government payment programs in the most countries provide an opportunity to promote or facilitate economic or development goals, in addition to the safe and efficient transfer of funds to/from the Government. The application of a strategic approach to the development of effective government programs is an effective means of maximizing the use of potential positive externalities. A subsequent strategic plan should include all key stakeholders in the value chain of government payments.

As we mentioned above, the efficiency and transparency of government payment programs depend on the important level that relates to the existence of an adequate payment system infrastructure. In some cases, one or more relevant components of the modern billing infrastructure may not be implemented due to the number of transactions expected in the new system and insufficiently justify the investment as well as the current operating costs. Directing a large portion of government payments can be a key opportunity to overcome such a limitation, and this can allow a stable development of a robust payment infrastructure that in turn will support the safe and efficient processing of government payments.

A very important public policy goal for most of the governments at the moment is to increase and improve financial inclusion of segments of the population that remain without account or otherwise they are insufficiently involved to the modern financial products. Apart from the benefits of having access to modern services related to modern payment, building a high record with payment service providers can become an entry for other products referring to deposits, loans or insurance offered by financial institutions and other formal providers services. Experience in several countries shows that government payment programs can be an effective tool for improving financial inclusion. Even if financial inclusion in itself has recently included an explicit objective based on the modernization of government payment programs, the migration of many such programs to electronic payments over the past few years has already allowed a large number of people to have some form of access to modern payment instruments and services. In cases where an adequate access to electronic payments is made available, individuals and even some business organizations may show disinclination to use, that is, to prefer cash. This is

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<sup>11</sup> <http://www.nbrm.mk/?ItemID=79C9E56073CB6742BD861541094F2C2B>

associated with the costs of using the basic account, concerns about the security of electronic payments, lack of confidence in banking or other institutions, the financial sector, insufficient awareness of the advantages and convenience of using electronic payments or, due to the normal difficulties in adapting to technological changes. The inclusion of a trusted partner in initiating the use of electronic payments (such as the government) can be an effective way to overcome such situations. In fact, through financial literacy programs, incentive programs, the effective measures for consumer adoption have been adopted in the context of government pay programs.<sup>12</sup>

Central banks are making great efforts to implement modern payment instruments as much as possible in order to increase the overall efficiency of the national payments system. Therefore, there is an increasing number of central banks expanding their oversight functions over low-cost payment systems and systems in order to cover aspects that may constitute an obstacle to their proper functioning, including but not limited to cost-related issues and / or other restrictions that distract consumers from using such effective payment instruments for their different payment needs. It should be noted that while the policies described in the previous two paragraphs can focus on certain segments of the population, such as those without bank accounts and insufficient users of government payment system reform, there is a strong likelihood that the real impact of such policies will be very much broadly applicable. For example, current users of electronic payment instruments will certainly benefit from increased competition and innovation, from improving infrastructure or adopting appropriate consumer protection measures.

## **8. Conclusion**

The design of the payment system should basically meet the specifications of a particular country. In practice, any payment is a complex process of transferring money to the payer's account at one financial institution on the account of the recipient to another financial institution, usually banks, where payers and recipients of funds as bank customers can be other banks, non-bank financial institutions, non-financial companies and individuals. Banks providing services to their clients are direct participants in the payment system and form it, called international payment system.<sup>13</sup> The institution through which payments in most countries are settled is the Central Bank, where the accounts of the banks are maintained, whereby the settlement is actually carried out within the money supply with the Central Bank.

Government payment programs in the most countries provide an opportunity to promote or facilitate economic or development goals, in addition to the safe and efficient transfer of funds to/from the Government. The application of a strategic approach to the development of effective government programs is an effective means of maximizing the use of potential positive externalities.

Regarding the legal authorizations, the NBRM registers, supervises the reliability, stability and efficiency of the payment, settlement and clearing systems. Also, the bank is a beneficiary of the payment systems in the country for the implementation of the monetary policy, maintenance of the financial stability and realization of the other significant functions.

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<sup>12</sup> Iivarinen, Timo et al., "Regulation and control of payment system risks – a Finnish perspective", Bank of Finland Studies, A:106, Suomen Pankki – Finlands Bank, Helsinki, 2003.

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