

## NATIONAL PAYMENT SYSTEMS DEVELOPMENT IN BALKAN COUNTRIES

**Abstract:** 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 natural persons), 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. In this paper we argue about the characteristics of the payment systems and opportunities in the Balkan region.

---

### Author information:

#### Tatjana Boshkov

PhD Professor at Faculty of Tourism and Business  
Logistics, University "Goce Delcev", Stip  
✉ [tatjana.boskov@ugd.edu.mk](mailto:tatjana.boskov@ugd.edu.mk)  
🌐 Macedonia

#### Keywords:

payment infrastructure, payment system, banks,  
services, Balkan.

#### Zarko Radjenovic

PhD Reserch Associate, Innovation Center,  
University of Nis  
✉ [zarkoradjenovic@hotmail.com](mailto:zarkoradjenovic@hotmail.com)  
🌐 Serbia

#### Ljupco Davcev

PhD Professor at Faculty of Economics, University  
"Goce Delcev", Stip  
✉ [ljupco.davcev@ugd.edu.mk](mailto:ljupco.davcev@ugd.edu.mk)  
🌐 Macedonia

## 1. Introduction

Financial infrastructure can help in reducing the risks and increase the efficiency of financial markets, but can sometimes contribute to situations where excessive risks are being taken. Financial infrastructure could be considered as a system of roads under which financial intermediation takes place. Better roads reduce travel time and costs, but also increase the potential speed, which has inherent risks.

Financial markets play a key role in economic development and stability, as they provide an effective mechanism for risk assessment and return on investment, and then managing and allocating risks and resources in the economy. Credit bureaus provide information needed for accurate and timely risk analysis, especially for consumer credit. Collateral systems provide information to warn creditors of the potential existence of past advocacy interests and to lend to creditors who register, securing their pledge, thereby reducing the risk to creditors and facilitating access to credit. Payments, remittances and securities settlement systems facilitate the execution of financial obligations and the safe transfer of funds over distances and institutions.

## **2. The power of financial infrastructure**

Financial infrastructure is an essential part of all financial systems. The quality of the financial infrastructure determines: the efficiency of the intermediation, the ability of lenders to assess the risk, and the borrowers to obtain credit, insurance and other financial products under competitive conditions. In order to strengthen the financial infrastructure, it takes time, resources, political will, because there are important differences in each country. According this, financial infrastructure could be seen as the basis of the financial system, including institutions, information, technology and the rules and standards that allow financial intermediation.<sup>1</sup>

Access to finance is a result of the intricate interaction of various financial intermediaries, true types of financial infrastructure, and a sound legal and regulatory framework. Expanding access to finance and financial services for those at the bottom of the pyramid implies a two sided strategy - first, creating and improving the various elements of financial infrastructure, such as credit bureaus, payment systems and securities settlement systems, remittances and collateral registers, as well as creating a favorable legal and regulatory framework to enable the proper functioning of these various elements of financial infrastructure and, second, work with various financial institutions (retail, small and medium-sized banks, microfinance, working with homes, leasing) and developing institutional capacity. Today's financial market economy abounds in innovation in both products and delivery channels that move across traditional boundaries in which financial markets operate.<sup>2</sup>

## **3. Payment infrastructure services**

Transactional infrastructure provides services to create, validate and transmit instructions by:<sup>3</sup>

- Authentication of the identity of the parties involved in the transaction, sometimes using encryption technology;
- Validation of the payment instrument in relation to the system standards;
- Verification of the ability of the payer to pay;
- Authorization of the transfer of funds between the payee and the financial institution of the payer;
- Record and process payment information;
- Transferring information between institutions.

Clearing infrastructure provides services for the transfer, acquisition and in some cases confirmation of payment instructions between financial institutions and calculation of positions on interbank settlement through:

- Sorting and linking payment instructions between institutions;
- Collect, process and aggregate payment data for each institution individually;
- Preservation of reports with payment data and their transmission to each institution;
- Calculation of gross or net positions for each institution

Settlement infrastructure provides the services of interbank transfer of funds through:

- Collecting and checking the integrity of settlement requests;
- Verification of the availability of settlement tools in the accounts of the participating institutions with the settlement bank;
- Settlement of claims through the transfer of funds to these settlement accounts of the settlement bank;
- A record of the settlement and communication with the participating institutions.

---

1 Assessment of euro large-value payment systems against the Core Principles, ECB, Frankfurt am Main, May 2004.

2 Central bank oversight of payment and settlement systems, Committee on Payment and Settlement Systems, BIS, Basel, May 2005.

3 General guidance for national payment system development, Committee on Payment and Settlement Systems, BIS, Basel, January 2006.

In payment systems, interoperability can exist at different levels. In some cases, payment schemes of an associated infrastructure deployed to support the processing of a given payment instrument (such as a payment card) can only be used by consumers of certain payment service providers by issuing the same payment instrument.<sup>4</sup> This can be perceived as a lack of cross-border interoperability scheme, a situation that hinders competition and efficiency through an interference to reduce processing costs and by encouraging an infrastructure duplicate. Despite the lack of a pass-through scheme, interoperability is usually associated with some payment card systems, which can be noted for other payment products.<sup>5</sup> For example, two or more ACHs for electronic credit transfers provide the same or many similar services that can be offered only to their respective participants.

There is also a case of interoperability at the infrastructure level, where the same basic payment infrastructure can be used to support multiple payment mechanisms. This is particularly relevant to innovative payment products because without some basic interoperability with more traditional payment instruments and systems, their acceptance and / or usefulness for consumers can be very limited. Limited or zero interoperability is likely to result in every payment service provider to create his own payment processing mechanism, and in many cases to enter certain business links, which, in addition to hampering overall efficiency, generally limit the benefits of the use of such instruments. In order to be able to make the use of domestic payment infrastructure at reasonable prices and with an appropriate level of service, an important element is a competitive payment market. Access to this infrastructure can be direct (ability to send payment orders directly to the system) or indirect (access through a direct participant).<sup>6</sup> Both forms of access have the capacity to provide appropriate payment services.

It should be noted that non-bank payment service providers may face obstacles to appropriate indirect access to payment infrastructure. Banks with direct access to the system may try to block their competitors in the market for payments by charging them with too high fees, or by imposing excessive restrictive conditions on the service. In other cases, the concept of "knowing your consumer" and similar to this, may cause bank concerns about the potential legal or reputational risk as a result of providing payment services for certain types of entities, and thus can make a decision that better would be denial of those services.<sup>7</sup>

#### **4. The characteristics of the Payment Infrastructure in the Balkan region**

The payment system and the payment infrastructure are of exceptional importance for a national economy. Every economy has transactions both inside and outside, i.e. internationally. Every economy and society encounters various types of transactions in different amounts and different currencies on daily basis. For this purpose, is needed great coordination and stability. In its payment infrastructure, the Republic of Macedonia contains numerous institutions, instruments and the three most important systems.

The countries of the Western Balkans are also dependent economies as well as the economy of the Republic of Macedonia. Although different as a market and economy have quite common characteristics. Central banks are the driving engines in the economy and the top of the pyramid. These countries have the same system or a very similar system, that is, a division for good coordination and efficiency from large, small-fee and electronic card systems.

Due to the fact and the common characteristic of all these countries like convergence to the euro is another important determinant that is necessary to mention in the field of payment infrastructure, considered from a common point of view. Namely, the euro definitely plays a significant role in the global payment system. When the euro appeared on the global financial scene, many economic analysts

---

4 Carbó-Valverde, Santiago and Liñares-Zegarra, José M., "How effective are rewards programs in promoting payment card usage? Empirical evidence", Working Paper Series, No 1141, ECB, Frankfurt am Main, December 2009.

5 Core Principles for Systemically Important Payment Systems, CPSS Publications Committee on Payment and Settlement Systems, BIS, Basel, January 2001.

6 Memorandum of understanding on cooperation between payment systems overseers and banking supervisors in Stage Three of Economic and Monetary Union, ECB, Frankfurt am Main, April 2001.

7 Harmonised oversight approach and oversight standards for payment instruments, ECB, Frankfurt am Main, February 2009.

sought to impose this currency, perhaps too optimistic as the next world currency. Much of the predictions in the beginning seemed reasonably reasonable, based on the idea that almost the entire territory of Western Europe could be a powerful enough economic power to overthrow the US dollar from its position as a world reserve currency. But what is significant is that the euro quickly became the second most important currency in the world.<sup>8</sup>

The euro's share in the issuance of global foreign currency denominated bonds has diminished since the onset of the global financial crisis in 2008. However, the fall was mainly due to the lower emission of euros by non-eurozone financial corporations and the strong increase in the issuance of bonds denominated in dollars. Thus, the issuance of the euro by non-financial corporations from non-eurozone was not severely affected by the crisis in absolute terms.<sup>9</sup> The strong increase in the issuance of the US dollar, especially by non-financial corporations, as well as the relatively low yield of US dollar-denominated securities indicate quantitative easing that may have an impact on the currency composition of the bonds and the making of important decisions.

Many studies have argued that the role of the dollar as a global currency today is a partial inheritance when the pound was removed from the throne as the leading international currency. Today the euro has not succeeded in becoming a world reserve currency, and this is due, among other things, to the debt crisis in the EU countries, which has been active for quite a long period of time.

Deflation in the euro area and the low economic growth rates have contributed to the continual deterioration of the GDP indicators of many EU countries. The problem started from the worst moment - Greece, to the best point in Germany, which remains the strongest economy in the EU, but the rate of economic growth is still noticeable. The European banking system remains under relentless pressure and a huge number of banks are still capitalized.

Central and Southeast Europe faced a number of problems with the debt crisis, yet these countries managed to stand on their feet and preserve the value of the euro. All developments had a strong impact on the value of the euro and its ups and downs in the global payment system. But despite all the shake-ups, the euro has managed to keep it stable and keep the second important place in the global payment system. Although the euro has a major significance in the global payment system as well as in Central and Southeast Europe, however, America remains stronger and thus the dollar as the first major currency in the global payment system.

## **5. Conclusion**

Financial infrastructure could be seen as the basis of the financial system, including institutions, information, technology and the rules and standards that allow financial intermediation.

Access to finance is a result of the intricate interaction of various financial intermediaries, true types of financial infrastructure, and a sound legal and regulatory framework. Expanding access to finance and financial services for those at the bottom of the pyramid implies a two sided strategy - first, creating and improving the various elements of financial infrastructure, such as credit bureaus, payment systems and securities settlement systems, remittances and collateral registers, as well as creating a favorable legal and regulatory framework to enable the proper functioning of these various elements of financial infrastructure and, second, work with various financial institutions (retail, small and medium-sized banks, microfinance, working with homes, leasing) and developing institutional capacity. Today's financial market economy abounds in innovation in both products and delivery channels that move across traditional boundaries in which financial markets operate.

The payment system and the payment infrastructure are of exceptional importance for a national economy. Every economy has transactions both inside and outside, i.e. internationally. Every economy and society encounters various types of transactions in different amounts and different currencies on daily basis. For this purpose, is needed great coordination and stability. In its payment infrastructure,

---

<sup>8</sup> New developments in large-value payment systems, Committee on Payment and Settlement Systems, BIS, Basel, May 2005.

<sup>9</sup> Improving cross-border retail payment services – progress report, ECB, Frankfurt am Main, September 2000.

the Republic of Macedonia contains numerous institutions, instruments and the three most important systems.

The adoption of electronic payment facilities can have significant benefits in terms of efficiency and security for government, government payers, taxpayers and other similar parties. However, the extent to which such benefits are likely to materialize in practice will depend on the availability of sufficient number of payment instruments and their handling of specific needs, as well as the existence of a clear payment system in order to process the associated payments - safely and efficiently.

#### **Reference:**

1. Assessment of euro large-value payment systems against the Core Principles, ECB, Frankfurt am Main, May 2004.
2. Carbó-Valverde, Santiago and Liñares-Zegarra, José M., “How effective are rewards programs in promoting payment card usage? Empirical evidence”, Working Paper Series, No 1141, ECB, Frankfurt am Main, December 2009.
3. Central bank oversight of payment and settlement systems, Committee on Payment and Settlement Systems, BIS, Basel, May 2005.
4. Core Principles for Systemically Important Payment Systems, CPSS Publications Committee on Payment and Settlement Systems, BIS, Basel, January 2001.
5. General guidance for national payment system development, Committee on Payment and Settlement Systems, BIS, Basel, January 2006.
6. Harmonised oversight approach and oversight standards for payment instruments, ECB, Frankfurt am Main, February 2009.
7. Improving cross-border retail payment services – progress report, ECB, Frankfurt am Main, September 2000.
8. Memorandum of understanding on cooperation between payment systems overseers and banking supervisors in Stage Three of Economic and Monetary Union, ECB, Frankfurt am Main, April 2001.
9. New developments in large-value payment systems, Committee on Payment and Settlement Systems, BIS, Basel, May 2005.