

## THE INFRASTRUCTURE OF THE ROMANIAN FINANCIAL SYSTEM IN THE CURRENT CRISIS

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### **Abstract**

*International macroeconomic an financial environment is subjected to tension but remains relatively strong, even if is a visible slowdown in economic growth in some countries, it materializes the asset price correlation due perceptions adjustment regarding risk, and financial market characteristics changes significantly.*

*Systemically important components in the financial system architecture are represented by the payment and settlement system for financial instruments. These systems, from their implementation until now, did not faced particular problems because of high standards observance in terms of safety and operational efficiency and the measures taken by the central bank.*

**Keywords:** *ReGIS payment system, European System of Financial Supervision (ESFS), European Systemic Risk Board (ESRB)*

**JEL Classification:** G<sub>01</sub>, G<sub>21</sub>, G<sub>32</sub>

### **Introduction**

The new European architecture of the financial system includes the modifications of the European financial settlements which sights out the transitions to a more resistant financial system in front of the future possible crises, as well as the achievement of an equilibrium between the economic development and assuring the stability of the financial system.

Along with the apparition of the global economic crisis, significant shortcomings in the settlement and supervision of the international financial system were highlighted.

The main causes that led to a growing vulnerability of the international financial system were the development of the financial institutions with an intense cross-border activity, the recession of the financial market by using complex tools and the growth of the financial institutions' interconnectivity degree.

## **Literature review**

The economical crisis can be seen in all fields of activity, but most of all in the banking one. It is maybe one of the most affected fields of activity, if we take into consideration the annual banking indicators published by the National Bank of Romania and other trading banks [Moroşan Gheorghe, 2011].

The main indicator that keeps a bank unit on the market is profitability. To line up the Romanian banking system to the European banking system, the National Bank of Romania must adopt a series of decisive measures in order to demonstrate the fact that the banking system under its supervision is built on a solid ground, being a healthy banking system, with a fit stock [Bratu Silviu Marius, Bratu Alina Ramon, 2010]. One of the main measures to be taken is monitoring the good functioning of the payment systems on the Romanian territory. The banks are still facing serious difficulties, as the crisis is far from being over, and day by day the clients lose their trust in the banking system.

The electronic payments system has been introduced in 2005 to realize some in-line payment systems at international level. During 2010 and the first semester of 2011, the ReGIS payments system has not faced major risks, being capable to absorb the liquidity shock due to the sufficient financial resources of the participants, the state bonds available in the portfolio of the credit institutions, but also due to crediting facilities offered by the NBR [Eduard Ionescu, Cristian Oprea, 2010].

### **1. The reform of the European institutional framework**

The recent financial crisis justified the idea of creating a new supervision architecture for the financial system. The financial crisis highlighted the imperfections of the old supervision system, as well as the impossibility of identifying precisely *ex ante* the systemic risks and the interconnection between the institutions and the markets that threatens its stability. The necessity of approaching the financial supervision from the two perspectives – micro-prudential and macro-prudential – has also determined the reconsideration of the institutional framework of supervising the financial system.

At the beginning of 2011 a new European System of Financial Supervision (ESFS) came into operation and was formed of the following two pillars:

- Micro-prudential pillar – The European Supervisory Authorities (ESA);
- Macro-prudential pillar – The European Systemic Risk Board (ESRB).

Those pillars are represented by the three European Supervisory Authorities – the European Banking Authority (EBA), European Securities and Markets Authority (ESMA), the European Insurance and Occupational Pensions Authority (EIOPA) – and the Joint Committee of the European Supervisory Authorities.

The European Systemic Risk Board is responsible for the macro-prudential oversight of the financial system, while the European Supervisory Authority is responsible for the micro-prudential oversight of the financial system. By

exchanging information between the two structures (ESRB and ESA), a more efficient supervision of the financial services at the level of the European Union will be possible.

In the Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board (ESRB Regulation), becoming effective on 16 December 2010, the mission of the ESRB is stated: *The ESRB shall be responsible for the macro-prudential oversight of the financial system within the Union in order to contribute to the prevention or mitigation of systemic risks to financial stability in the Union that arise from developments within the financial system and taking into account macroeconomic developments, so as to avoid periods of widespread financial distress. It shall contribute to the smooth functioning of the internal market and thereby ensure a sustainable contribution of the financial sector to economic growth.*

The mission of the European Systemic Risk Board, according to the Regulation No 1092/2010 of the European Union, sights out also the prevention and reduction of the systemic risk, and the ESRB's field of activity covers the Union financial market, but it must not exclude both the risks from non-EU countries and the vulnerabilities specific to certain countries or region, vulnerabilities that can spread all over Europe.

Amongst the most important tasks of the European Systemic Risk Board, one can cite determining and/or collecting and analysing all the relevant and necessary information, but also identifying and prioritising systemic risks depending on priority. As important tools, the European Systemic Risk Board holds the possibility of issuing warnings where such systemic risks are deemed to be significant and issuing recommendations for remedial action in response to the identified risks.

The European Systemic Risk Board has the obligation of coordinating its actions in the field of the macro-prudential supervision with those of international financial organisations, particularly the International Monetary Fund and the Financial Stability Board as well as the relevant bodies in third countries.

## **2. Measures taken by the Central Bank in order to limit the risks associated to the functioning of the payment and settlement systems**

One of the fundamental conditions for maintaining the financial stability in a modern economy is the optimal functioning of the financial institutions and markets, together with a secure and efficient functioning of the payment and settlement systems.

One of the statutory responsibilities of the National Bank of Romania is promoting and supervising the good functioning of the payment and settlement systems, in order to evaluate, identify and implement the right measures that lead to reducing the associated risks, on the account of the most relevant standards and recommendations at international level.

The authorised financial systems on the territory of our country are:

- ReGIS – the national real-time gross settlement system of payments in domestic currency;
- SENT – payment system that insures the compensation of low value payment funds;
- SaFIR – ensures the depositing of government securities and certificates of deposit issued by the NBR, as well as the settlement of operations in such financial instruments;
- RoClear – clearing-settlement, custody, depository and registration system within the Bucharest Stock Exchange;
- DSClear – clearing-settlement, custody, depository and registration system within the Sibiu Stock Exchange.

One of the most important components of the Romanian financial infrastructure is the ReGIS payment system, which fulfils the necessary criteria in order to be considered of systemic importance, being the only large-value payment system from our country. It is used for settling closed transactions within other payment and settlement systems, mostly processing large-value payments, and being, at the same time, a transmission channel for the monetary policy.

The value of the ReGIS processed payments per gross domestic income in 2010 was 11 times higher. By comparison, SENT payments represented only 44% of the gross domestic income for the same years.

ReGIS system settlement degree calculated in 2010 as a proportion of the volume, respectively the value of the settled transfer instructions and those accepted in the system was 99.96%, and, respectively, 99.97%, while for the settlement systems was 100%.

The most important measures adopted in order to reduce the specific risks of the payment and settlement systems are:

- the settlement system of payments, within the ReGIS system, is realized on a gross basis, in real-time, with a intraday finality, thus reducing the credit risk;
- the settlement of the payments initiated in the ReGIS system is made using money from the central bank, thus eliminating the risk of not being able to finalize the settlement, the participants in ReGIs, obligatorily, have a current account at the central bank;
- the NBR grants the intraday credit facility (intraday repo), as well as the existence of same liquidity management instruments in ReGIS, such as: the prioritisation of payments, the active management of the payment queue, the active (on-line) control of information on its own liquidity, and the set up of reserves on its own account;
- all these payment and settlement systems are authorized on the Romanian territory and fall under the provisions of the Law no. 253/2004 on settlement finality in payment and securities settlement systems, which means that, in case the insolvency procedure for a certain client starts, the securities established in connection with participation in such systems may not be the subject of the claims

raised by creditors, and the settlement, once processed, is final. The rules of those systems have defined the moments these processed instructions become irrevocable.

All the payment and settlement systems authorised on the territory of Romania must have a high level of operational safety and must implement specific procedures in order to ensure its own business continuity in contingency cases.

As the operational security is concerned, during 2010, for example, the ReGIS system registered an overall availability of 99.99%, calculated as a ratio of the real operating duration of the system to the scheduled operating duration, a superior level in comparison with the one stipulated in the contract signed by the NBR and the technical operator of the system.

A first set of measures adopted by the central bank during 2010 within the framework of supervision policy of the system in order to reduce the risks associated to the payment and settlement systems functioning regarded the adequacy of the legal framework so that would correspondently answer the international financial context. For that purpose, the flexibility of the regulations specific to the payment and settlement systems, on the one hand, and the updating of the existent legal framework, considering the current international developments, on the other hand, have been followed.

The National Bank of Romania improved the regulations regarding the settlement risk assessment procedure and the facilities granted by the central bank to liquefy the settlements in this system, in order to reduce the liquidity risk in the ReGIS payment system, as well as to increase the efficiency of using the eligible assets for guarantee. The bank pursued, through those measures, the adjustment of the conditions in which a credit institution, participant in ReGIS, can beneficiate of the intraday credit facility in case that credit institution does not meet the eligibility criteria for the monetary policy operations or the access of that institution to this kind of operations is limited or suspended. Also, those measures helped create the general framework in order for these credit institutions to request The National Bank of Romania the conversion of the repo intraday facility into the lending facility (credit lombard), a measure that allows the prolongation of reimbursing the funds received by intraday credit facilities, as well as using the same eligible assets for guaranteeing both financial operations.

Up to the present, none of the participants in ReGIS have not requested the central bank to convert their repo intraday facility into the lending facility, and also the request for intraday credit facilities (intraday repo) was relatively low in 2010, representing only 0.18% of the total value of the settled transactions in ReGIS, a think that indicates a sufficient level of liquidity in the system.

Another measure the central bank has promoted was eliminating the obligation imposed on payment system participants to establish a technical unilateral guarantee ceiling. This measure was initially meant to minimise the settlement risk of net positions calculated by the paper-based clearing house and currently represents an inefficient blocking of funds in ReGIS or of large-value securities in SaFIR without ensuring mitigation of the settlement risk.

The National Bank of Romania has initiated the steps for the implementation of some direct connections between the SaFIR system and the central depositories

where there are recorded the Euro denominated stat bonds issued by the Ministry of Public Finances and the Lei denominated bonds issued by the international financial institutions on the intern market in order to facilitate the access of credit institutions to liquidity through expanding the range of eligible assets for guarantee in monetary policy operations and, at the same time, in guarantee and credit operations from the payment systems.

Another category of measures adopted by the central bank regarded increasing safety and efficiency of the adjustment-settlement systems of financial instrument operations carried out on the autochthon capital market, whose development is a necessary condition for strengthening its role of viable alternative for financing and capitalizing the Romanian companies.

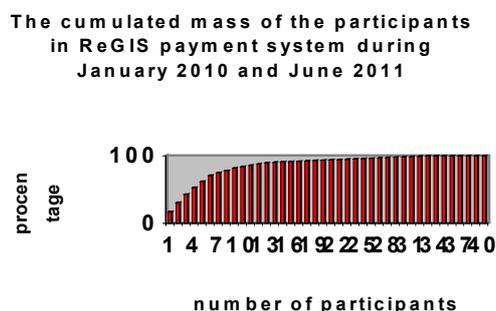
At the request of the those administrating the RoClear and DSClear adjustment-settlement system, in order to increase the liquidity and reduce the settlement risk, the National Bank of Romania has analyzed and approved some modifications in the functioning of those systems, thus creating the premises for expanding the range of services offered to the participants in the above-mentioned systems, meaning the use of the global account system, of the financial instruments loan and the selling in their absence.

### 3. Stability of the ReGIS payment system

During 2010 and the first semester of 2011, ReGIS payment system has not faced significant risks, being able to absorb the liquidity shock because of the sufficient financial resources held by the participants and of the stat bonds available in the portfolio of the credit institutions, but also because of the credit facilities offered by the National Bank of Romania.

The analysis of the participants in ReGIS payment system has not indicated a significant concentration risk in 2010 and in the first semester of 2011, knowing that the first four participants (ranked in order of the interbank transfers they have initiated) totalized approximately 55% of the interbank transfers' value (graphic no. 1).

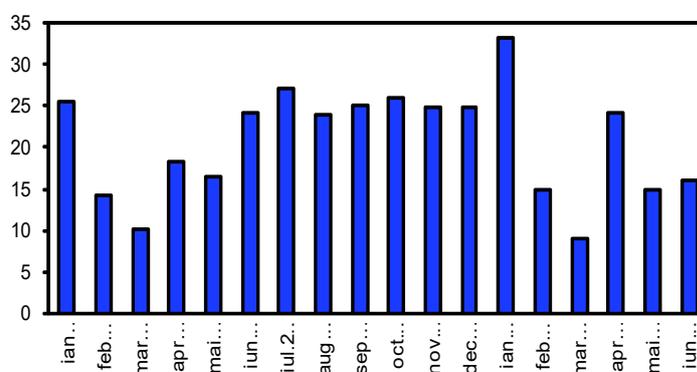
**Graphic no. 1**



The credit institutions have used in a small measure the available liquidities in order to carry out both interbank transfers and payment in their relations with the State Treasury and the National Bank of Romania, within the ReGIS payment system existing sufficient resources to compensate an eventual liquidity deficit of some participants. In the first part of 2010, the liquidity usage degree followed an increasing tendency reaching almost 25%, and the volatility coefficient grew in the first semester of 2011, as we can notice in graphic no. 2.

**Graphic no. 2**

**The usage degree of the liquidities available degree in ReGIS system payments during January 2010 and June 2011**



*Source: BNR*

The excess liquidity of credit institutions creates the favourable premises to strengthen the stability of the ReGIS payment system, but maintaining some increased liquidity reserves could generate additional costs for them.

ReGIS payment system presents a high resistance to liquidity shocks. Using a methodology which involves running scenarios under stress (plausible scenarios, but with a low probability of occurrence) it was noted that resources available at participants' level are sufficient, so that an event with severe impact on liquidity does not generate the occurrence of the contagion risk in ReGIS payment system.

The available resources are both liquidities in lei and stat bonds held by the credit institutions, bonds that may be used as collateral when asking for intraday credit facilities, offered by the National Bank of Romania.

The stability of the world financial system depends on the good functioning of the payment and settlement systems, this, in its turn, depending on the liquidity of the financial market. Nowadays, the international financial system goes through

a period of major structural changes<sup>1</sup>, partly due to the increment of the credit risk, a fact that influences both the payment systems and the financial stability<sup>2</sup>.

The impact of globalization upon the financial infrastructure in restless times manifests itself through the rapid extension of the negative phenomena as a natural consequence of the multiple interconnections established between the participants, the markets and the infrastructures.

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<sup>1</sup> Gertrude Tumpel-Gugerell, *Payments and Monetary and Financial Stability*.

<sup>2</sup> Banca Națională a României, *Raport asupra stabilității financiare*, p. 92.