The financial systems – an approach from the perspective of the financial crisis

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Abstract: *The paper presents a synthesis of a theoretical study realized within the research contract having as theme "The model for the forecast of the real economy evolution and for the financial market system from Romania using elements from the open systems thermodynamics", a project that proposes to create an ecometric model which allows to forecast Romania's real economy as well as the financial system evolution from Romania. The first part brings forward the relation between the financial system and the financial crisis and develops the idea according to which an economy can exploit its potential of growth only in the conditions of a well functioning of the financial system which have to assure the necessary investments financing at minimum costs, but also the adequate application and transmission of the monetary policy with effects on the financial stability. The second part of the paper approaches the problematic of the financial crisis effects on the financial systems stability. The financial system instability can lead to losses in the real economy, to financial markets perturbation, to prices changes, to investments blocking and, in the end, to economical growth decline and even to economical growth stopping. In the third part the financial systems stability from the emerging economies in the light of the contagion and movement effects of the cross-border capital waves as a result of globalization is analyzed and, in the end, some conclusions are presented.*

Keywords*: financial system, financial crisis, financial stability, emerging economies, credit, financial globalization*

1. THE FINANCIAL SYSTEM – FINANCIAL CRISIS RELATION. GENERAL CONSIDERATIONS

In the literature of specialty it is appreciated that the better the financial systems accomplish the main functions, the better they succeed in the exceeding of the frictions from the capital allocation process.

Continuing this idea, we can state that a good functioning of the financial system leads to economical growth and we exemplify here the favorable evolutions of the emerging economies from Central and East Europe before the global financial crisis outbreak.

A financial system which functions well allows to an economy to exploit to a maximum its potential of growth because it assures the necessary financing of the investment opportunities, at minimum costs. Moreover the financial system has a special role in the application and the transmission of the monetary policy with direct effects on the financial stability.

The pressure exercised by the crisis on the financial system is different, the activity and the results of a financial system varying considerably according to the frame of regulation and the economic environment in which it lies itself. We state that, at over two years from the outbreak of the subprime credits crisis, the financial systems behave differently, fact which leads us to the idea that not only the emerging countries needed structural reforms, but also all the countries, especially those with financial systems considered to be consolidated and stable.

A financial system structure can be traditionally emphasized by the types of financial markets which compound it, identifying the financial systems based on banks and the financial systems based on capital market.

The American and the British financial system, considered to be part of the second category, was one of the most affected systems by crisis as a result of the risk contagion effect.
As a result of the cross-border links less solid in the European financial systems based on banks, the spreading risk was more reduced and the financial crisis effects were felt at another level.

The previous hypotheses must however be shaded. The financial systems in some powerful countries of Europe such as France, Germany and Italy, due to the high level of banking integration were more exposed and affected by the crisis than the financial systems in the smaller European countries such as Greece, Finland or Portugal. Therefore the smaller countries, less integrated in the global financial market seem to have been more isolated and less affected by the effects of the international financial crisis spreading.

Another important aspect, in our opinion, resulted from the empirical analysis of the shocks suffered by the financial systems the most implicated and affected by the crisis (an analysis based on the study of the exchange indices and of the deviations of the superior bond yield) is linked by the fact that the financial systems effects are similarly in the United States and in some countries from the euro zone and proves the relevance of the aggregate risks for the financial system especially the banking one.

The financial integration and the risks at the cross-border level generated by this process seem to be the main causes of the financial crisis spreading at the global level. After two years from the beginning of the actual financial crisis the decision factors, after long debates, stress the necessity of a better macro-prudential supervision, taking some new measures concerning the assurance of the financial stability, the identification of the best institutional structures, in order to assure the financial supervision and stability in a global financial system that overtook the barriers imposed by the national and economical borders.

2. THE FINANCIAL SYSTEM, THE PRUDENTIAL POLICY AND THE FINANCIAL STABILITY

In the great majority of the banking systems the main components of the prudential policies are the assurance of the deposits, of the regulations concerning the solvability and the management of the liquidity in the crisis conditions.

Despite of the existence of such policies and of some sophisticated systems of regulation and supervision the financial systems pasted during the last 30 years through sizeable banking crises that climaxed with the actual crisis, considered to be the biggest one.

In the study of the previous crises some economists, such as Demirgüc-Kunt and Detragiache (1997) sustain that the financial security systems (especially the deposits insurance funds) are in fact responsable for these crises because they generate the moral hazard at the banker's bahaviour level. The subject was largely debated in the literature of specialty (Bhattacharya and Thakor – 1993, Freixas and Rochet – 1995, Santos – 2000) and the majority of the economists concluded that the reasons which are the basis of the public intervention in the functionment of the banking sector, through regulation and supervision are, mainly, two:

❶ the small depositors protection by limiting the frequency and the costs of the individual banks bankruptcies -the micro-prudential policy

❷ the protection of the banking system as a whole, by limiting the frequency of the systematic banking crises – the macro-prudential policy.

Concerning the micro-prudential policy, the great majority of the countries regulated and organized the (insurance) guarantee funds of the deposits, which guarantee the small deposits if there is the risk that the bank goes bankrupt. The role of the supervision in this case is to represent the depositors' interests in the relation with the bankers.

The macro-prudential policy is justified by a possible failure of the (financial) banking market to get through the aggregated and insurance risks of the financial stability.

In the conditions in which traditionally the governments control both dimensions of the prudential policy, we state that a lack of consistence and coherence in the application of these policies was reached, lack which led to a critical financial crisis about which we can say that it was deficiently administrated. Furthermore the engagement of the policy authorities in exercising some pressures concerning the support or the liquidation of some banks with problems can lead to the crisis deepening or to a lateness coming out from crisis.

In the conditions in which the essential role of the financial system is that of an efficient allocation of the economies for investments, a financial crisis affects the functioning of the allocation mechanism or it can make it temporally nonfunctional. The financial crisis leads to losses in the real economy, to the slowness of the rhythm of growth or to its decreasing, to major prices changes or even to a temporal paralysis of the capital markets. Furthermore the excessive fluctuations of the exchange quotations generated by the financial crisis, lead to an inefficiently big risk premium which stop the allocation function and block the investments, contributing on long term to the economic growth decline.

The financial systems instability is also attributed to the problems about the passing from a regulated financial system to a liberalized one (Allen and Gale, 1999). In the conditions in which the financial liberalization phenomenon manifested strongly in all the financial system in the last 20 years, we state that the financial markets volatility grew and the proclitic forces on this markets are less restricted (Brio et.al., 2001).

The combination of the interest reduced rates and the high levels of the economic growth, especially in the emerging countries, led to the assets prices growth, especially of those of real estates and automatically to the volume growth of the banking credit against the background of the optimism multiplication concerning the future evaluation.

The economic agents and the population overestimated the favorable evolution of the economy and the probability that the economy grows farther on in the same rhythm, exaggerating the degree of debts, an exaggeration sustained by the assets prices growth in comparison with the basic economic factors. The debt's high level became unsustainable in the conditions of the financial crisis outbreak, crisis which led to the economical stagnation and decrease and to a sudden manifestation of some lacks of balance with different effects on the financial system and on the real economy.

The absence of such lacks of balance on the financial markets can define, generally, the state of financial stability (Foot, 2003). In the conditions in which the evolution of the financial stability can't be evidenced through only one quantitative parameter we consider that it is uncommonly important to understand how the financial stability is influenced by the internal and external factors of the financial systems and which are the conditions in which the financial stability deteriorates and the lacks of balance start to appear.

The central banks' reaction to the lacks of balance generated by the actual financial crisis was orientated towards the interests' reduction. After more than 2 years of interest rates reduced levels up to zero, nowadays the central banks are orientated to another type of monetary policy. It would have been normally to identify firstly the causes that led to the growth of the assets prices and of the debts degree, but it was established that it was a difficult task. Now there is an orientation towards the monetary policy hardening.

From the monetary policies evaluation applied in the last 2 years clearly results that the monetary policy must be used as a reaction instrument for the attenuation of the financial crisis effects and not as a protection instrument in order to prevent the financial lacks of balance, point of view sustained in the literature of specialty a long time before the outbreak of the actual financial crisis (Greenspan, 2002). The financial lacks of balance were accumulated in time, differently, in function of the development degree of the financial system as well as the effects manifested relatively different and with a different intensity.

In the last years the central banks gave a special importance to the financial stability coming to the conclusion that if the financial system is subdued to some pressures, the monetary policy must be used in order to sustain the financial stability. In this sense it is analyzed the situation of the financial institutions and of the capital markets for an early identification of some evolutions which can weak the financial system.

In the conditions in which the activity of the financial institutions and of the stock market are analyzed, the enterprises and the population's capacity of refunding the debt, the assets prices, the risks that affect the financial stability, etc and the adequate measures for the correction of some possible lacks of balance are taken, then the financial systems shouldn't confront with a financial instability.

The bankruptcy tendency of the economic agents, as an evaluation indicator of the credits refunding capacity is, also, an important study element in the context of the financial stability evaluation state. Jacobson and Kloster (2005) introduced in an equation for the bankruptcy tendencies the explicative factors such as the real interest rate, the real exchange rate, the economic activity rate on national and international plane, the real costs of production and the prices of the commercial spaces. From the empirical analysis results the fact that the exchange rate evolutions of the national currency and the production internal costs in comparison with those on the international level can considerably influence the number of bankruptcy and, consequently, the financial stability.

The banks losses on the credits given to population present, as well as the enterprises bankruptcy, a special importance explained firstly by the fact that in the emerging economies, especially, the population has an allocation in the volume of bank credit, increasing the possible impact over the financial system. Secondly, the negative evolutions in the population credit sectors lead to the diminution of the consumption demand, decrease that generates indirect effects and serious consequences over the banks credit activities and, especially over the credits risks. The risks evaluation becomes, thus, another important objective in order to insure the financial systems' stability.

The price suddenly changes on the exchange market affect the listed enterprises' income but also those of the small investors increasing the banks' credit risk. Such shocks can put in danger the financial stability, being known the fact that the financial markets are particularly volatile and difficult to shape. Using the information provided by the financial market from Romania we will appeal to a series of indicators which can be useful in the forces evaluation that act on the financial market, we will measure the variations on the financial market generated by the underestimation of the investors of the future risks that can lead to market perturbations, and by means of the volatility indicators we will try to quantify the uncertainty degree about the prices future evolutions.

The evaluations results combination of the financial institutions, of the enterprises, of the population, as well as of the financial markets allows the creation of a new general image on the perspective of the financial stability.

To conclude, the assurance of the financial system stability imposes that the main components, respectively the markets and the financial institutions must be able to absorb together the perturbations and to correct the lacks of balance facilitating a flexible and efficient reallocation of the financial resources resulted from the saving process to the investors and creating the conditions for efficiently analyzing, quantifying and administrating the financial risk.

3. DO THE EMERGING ECONOMIES HAVE MORE STABLE FINANCIAL SYSTEMS?

The emerging economies passed through very serious financial crises in the last 30-40 years. Many of these crises took place in periods of systematic sudden stop of capital waves (systematic sudden stop-3S) and of very ample aggregated bonds margins of emerging markets, affecting approximately in the same time a large number of countries with an emerging market economy, fact that conferred to this evolution a component with a systematic character.

In many situations, the financial crises coincided with important productions losses and with serious social consequences.

The perturbations of the emerging countries on the capital markets, combined with the vulnerabilities specific to each country, such as the dollarization level of the internal liabilities (for example the contracts on the internal capital market credited to the debt denominated in currency and the offer volume of transactional goods) seem to be the main factors in the explication of the recent financial crises in the emergent markets, implying the sudden interruption of the capital waves. The shocks that abundantly affected the capital markets constituted the releaser factor of these crises.

The contagion, for example, (determined either by the fact that the countries were treated as a part of a certain class of assets, borrowed from the same group of banks, is a member of the same set of investments portfolios, or because of the fact that the liquidation shocks affecting the international investors spread in different countries as they sell their assets from the portfolio in order to reestablish the liquidities) can constitute a test for the emerging markets. As Calvo and Tavi(2005) underline, these attempts can be followed by painful adjustments and by drastic reduction of the economical growth and it can be transformed in minor recessions, in function of the countries' internal vulnerabilities.

For Calvo, Izquira and Tavi (2006), who try firstly to decelerate the relevant factors which characterize the production collapse in the 3S periods and especially to revival the phase after the collapse, the 3S periods offer a unique natural experiment: the shock is significant and easy to identify, it is launched in the international capital markets and affects many countries almost in the same time.

Two dominant characteristics are pointed out. The first one is the production collapse associated with the dramatically decrease of the credit volume, but without a drastic reduction of the physical capital or of the labour power. The second one, the return to the production level before the crisis is slow and "without credit" (the production returns to the level before the crisis without a significant revival of the internal or external credit). This remarkable phenomenon resembles to the Phoenix bird miracle.

An economy confronted with a credit restriction tries to find new sources of financing outside the official credit market. The development of these new sources, such as postponing such investment projects in order to generate liquidity is expensive. In fact some costs can be maintained long after the cessation of crisis which is in agreement with the results of Cerra and Chaman Saxena's studies (2005) that sustain the crises' negative effect on the economical growth on long term.

From the analysis of specialized literature which was concerned with the study of the ample crises such as Tequila (Argentina 1995, Mexic 1995, Turkey 1995), the crisis from Asia (Indonesia 1998, Malaysia 1998, Thailand 1998), the one from Russia at the end of 1990s (Ecuador 1999, Turkey 1999, Argentina 2002), as well as the debt crisis in Latin America in 1980 (Argentina 1982, Brasilia 1983, Chile 1983, Mexico 1983, Peru 1983, Venezuela 1983, Uruguay 1984) results the fact that the production collapse presents the following characteristics:

- ✓ The relaunching after the collapse tends to be sudden, respectively the economical activity reach relatively fast the level before crisis, on an average in less than 3 years.
- ✓ The total production factor (calculated according to the standard bookkeeping norms for the economical growth, using the capital and the labour power as production factors) renders the production behavior which emphatically decrease in the collapse phase and it raise then gradually. Furthermore the total production factor represents the biggest part of production variation during the collapse- revival process;
- ✓ The capital stock remains relatively constant during the collapse- revival process, while the investments decrease together with the production, and their revival is weak when the production reach again the level before the crisis;
- ✓ The internal and external crisis volume drastically decreases at the same time as the production and doesn't practically increase when this revivals.

Aghion et.al. (2004) analyze the financial factors role as source of instability in the open economies, of small sizes. These authors elaborated a dynamic model, with a Balassa-Samuelson type model, in which the companies confront with credit restrictions that depend on the level of the financial system development. One of the basic results of this model is that the economies situated in an intermediary development stage of the financial system are the most unstable, in the sense that the temporary shocks have ample and durative effects.

In this context the effects on the economy depend on:
a) the inversion of the capital waves direction, respectively that of the volatility, and
b) the ampleness of the capital waves.

These features are closely bound by the empirical data, taking into account that the majority of the countries affected by the recent global financial crisis have a common characteristic: massive capital entrances on short term, generating debts on short term and portfolio waves and their direction changes. The changing of the evolutions tendency at the capital account level in East Asia led to the collapse of the assets prices and of the exchange rate.

While the economical advantages of the commercial exchanges and of the migration are largely accepted by the specialists, the advantages of the cross-border capital movement represents a discussion theme for the decision factors and for the professorial staff. The controversy is either the cross-border capital movement increases the economic growth.

A decade early the common opinion was that the capital movement contributes to the economic growth. This theoretical signifies that the developing countries with big investments opportunities would benefit of massive capital entries on the part of rich countries with high volume of savings. The free movement of capital would be benefic either for the economical growth or for the development.

From the studies effectuated by the professorial staff it resulted that the cross-border capital waves had only a modest contribution to the economic growth. Some countries which didn't open completely the markets for foreign capital, such as China, recorded a rapid economic growth, while others, such as Bolivia and Venezuela, which opened their markets recorded only modest economic growth rates.

The complex financial instruments that amplified the credits crisis with a high risk degree in the United States were differently used by the financial markets in the emerging countries from Central and East Europe. While in Russia, for example there was a explosive development in the last years in others states such as Romania, Poland or Czech Republic the resorting to such instruments were reduced as a result of a reduced degree of sophistication of the financial markets from the Central and

East European area, zone which until now remained relatively isolated by the effects generated by the mortgage credits crisis from the United States.

In Romania, as well as in other countries from the area, the credit development was realized only after 2000, more exactly in 2004, and the most borrowings were given to clients that presented a reduced degree of risk.

The phenomenon amplification of financial globalization especially by the active implication of the foreign banks in Romania and in other emerging markets from the area, simultaneous with the development and the consolidation of the capital markets, could lead to the use of such financial instruments leading to the systems diversification of the risks administration.

The cross-border financial waves and the titles started to grow as a result of the financial globalization in the beginning of 80s of the previous century and they recorded a powerful acceleration in the beginning of 90s. The external assets and liabilities held by the industrialized countries almost tripled as share in GDP within the period 1990-2003[1], reaching the level of approximately 200% at the end of the period.

The emerging markets recorded a similar evolution but the assets and liabilities level was much more reduced. In the same time in the investors' portfolios the external assets started to hold bigger and bigger quotas proving the investors' interest for the external market.

Some authors believe that if other forms of globalization are benefic, the financial one raises doubts. The free movement of capital brings advantages, and the risks can be administrated. Despite the fact that the direct effects of the free movement of capital over the economical growth are difficult to identify, the literature of specialty underlines the indirect advantages of the financial globalization. The free movement of capital facilitates the transfer of the financial know-how.

On an emerging market the foreign capital creates a pressure for a better reflection in the bookkeeping, more correct rules concerning the investments and a superior governing at the enterprises and at the financial system level.

As Rogoff mentions (2004), the indirect effect on the development of the financial system, of the institutions, of the governing and of the macro economical stability is possible to be more important than the direct effects. The most vulnerable to the financial crises are the countries that record big capital waves, whose direction can be reversed; those with financial markets with a low degree of market deepening that amplify the effects on the exchange rate and those with financial crises historic.

All these can determine the countries with such characteristics to avoid the risks of creating a crisis by renouncing to the financial globalization.

The capitals high mobility allowed the emerging countries situated in a rapid development to exploit the global economies in order to satisfy its own considerable necessities of capitals. But, it was proved that these funds can be withdrawn by a country in any moment for reasons which cannot be related to the economical results. The sudden funds withdrawals lead to loss of trust and to contagion effects, which can be catastrophic for the involved countries.

4. CONCLUSION

In the beginning of 2010, when the first signs of revival and of economical growth appear in some countries, we can say that the financial systems were affected by the crisis differently according to the degree of integration on the global financial market.

[1] According to the data supplied by the European Commission

It is unanimous admitted the fact that a more rigorous financial discipline but also more efficient instruments in order to combat the risks that affect the financial systems are needed. Although various regulation proposal and new tasks for the authorities in the field with the object of a better financial system monitoring existed, various uncertainties concerning the way in which these regulations are applied still persist.

The situation determines us to ask ourselves if, in the end, after this serious global financial crisis we will have adequate prevention policies or, in the context of the OCDE member countries' economic revival, we will have an approach similar to the one from the 90s of the previous century.

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