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FINANCIAL STABILITY OF ECONOMIC AGENCIES IN CONDITIONS OF ECONOMIC CRISIS

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Abstract: *The purpose and objectives of the research reside in the theoretical-practical and methodological analysis of financial stability at micro and macroeconomic level under the conditions of cyclical economic fluctuations, elucidation of the factors contributing to financial stability and formulation of relevant proposals regarding the improvement and efficiency of policies and strategies for strengthening the financial stability of the agents. economic and national economies. The main purpose is to develop the theoretical and methodological foundations for evaluating (measuring) the financial stability at the macroeconomic level and the aggregate economic agents and analyzing the risks that result from the transmission of financial instability through the inter-systemic interconnections from the perspective of the financial flow model, its correlation with the cyclical fluctuations of national economies, researching the recovery practices of national economies and, as a result, formulating recommendations on inducing and strengthening financial stability.*

Keywords*: financial stability, financial instability, economic crisis, financial crisis, interconnections, indicators financial stability, econometric models of financial stability, consolidating factors of financial stability*
JEL Classification: *C23, C26, C38, C55, C81, C87*

The defining elements of economic agents and markets interconnected with financial stability

Professor Gregory Mankiw of Harvard University in his book "Principles of Economics" says that like any other science, economics perception and learning involve the use of models (Mankiw and Gregory, 2008).

Except that unlike the plastic models of the human body used by anatomy teachers, the economic models are composed of diagrams and equations. But all the models omit some details and normally no one would confuse a model with a real person or with the real economy. The economy is made up of millions of people involved in multiple activities of purchase, sale, work, production, consumption, innovation and so on (Mankiw and Gregory, 2008).

The term "economic agent" in its broadest sense is used in economic literature synonymous with the term "economic subject", having the meaning of participant in the economic life. Economic agents are economic subjects involved in the production, distribution, exchange and consumption of economic goods. In the most generalized way known, the market economy consists of economic agents and markets. The model of the economic circuit, or the model of the circular flow of income (the circular flow model or circular flow) presents the economy as a system composed of several elements and visualizes, in a simplified way, the value interdependencies between the main subsystems (economic agents and markets) (Albacete and Lindner, 2013).

The essence of the economic flow is based on the image of a closed circuit in which the inputs are equal to the outputs. The modification of the stocks is analyzed during the economic period analyzed. The idea of circular flow was first introduced in Richard Cantillon's work. François Quesnay developed the concept, presenting it in the "Economic Picture". Karl Marx and John Maynard Keynes have made important additions to this model (Bernanke, Boivin and Eliasz, 2005).

Richard Stone, Keynes's assistant, has further developed the concept for the United Nations (UN) and the Organization for Economic Cooperation and Development and has developed the system that is being used internationally to date. Unlike the entire spectrum of economic activities, starting from production, distribution, exchange and consumption, the circular model refers to bilateral transactions, which are marked by flows in the opposite direction. Two types of flows correspond to each bilateral transaction:

- real flows - of goods and services.
- cash flows - come in the opposite direction.

In economic science it is considered that the economic agent represents an actor and a decision maker within an analyzed model, which as a rule represents a simulation of the real economic activities. From the microeconomic point of view, the economic agents are analyzed first and foremost in their position as decision makers, in the full sense of this word as persons holding the power of decision. Respectively, each economic agent makes decisions to solve the problems of choice and optimization, defined well or insufficiently,

under conditions of full information, insufficient or even lack of necessary information. The essential distinguishing feature of economic agents is the adoption and implementation of their own decisions in the sphere of economic activity (Apostolik, Donohue and Went, 2009).

Economic agents can be regarded as elementary economic agents and aggregate economic agents. Economic agents with similar behavior, functions and motivations, originating from resources of the same type, form an institutional sector. The aggregation of the economic agents can be done according to the branch of activity, the form of organization, the economic functions fulfilled or the institutional criterion.

Theorizations on the concept of financial stability

Even though for the keywords "financial stability" Google proposes over 23 million sources in English, over 1.2 million sources in Russian, and over 250 thousand sources in Romanian, so far, we do not have a broad definition accepted financial stability.

The first uses of the concept of financial stability are attested in 1992 in the works of Hyman Minsky and in 1994 when the Bank of England added financial stability to its objectives. In the next decade the objective of financial stability was assumed by most of the central banks of the states of the world. Defining a concept, which is also the subject of a public policy, is a topic of great importance, as the correctness and precision of the definition of the "object" of any policy influences its success.

It is certain that the concept of financial stability is related to interaction and, as a rule, to subordination to the concept of economic stability, and economic stability is defined in relation to the trend of economic growth.

Subordination emerges from the primary role (functions) that the financial system plays in the economic systems:

- channeling surplus funds from creditors (companies or individuals who want to invest their money) to borrowers (respectively those who need capital), directly.
- financial intermediation, provided by financial intermediaries (such as banks and insurance companies), which indirectly bring together creditors and debtors (although borrowers can obtain funds and directly from financial markets by issuing securities, such as shares or bonds.
- offering the financial infrastructure, which allows the transfer of payments, as well as the trading, clearing and settlement of securities.

- risk allocation and management (Allen, Rosenberg, Keller, Setser, and Nouriel, 2002).

The financial system has a complex structure. In the generalized approach it is composed of the following elements: financial markets, financial institutions (intermediaries), financial infrastructure, which allows the transfer of payments, as well as trading, clearing and settlement of securities, but also includes the financial law system (Dell' Arriccia, Igan, Laeven and Tong, 2012). Therefore, financial stability encompasses and refers to all components of the financial system. And the disruption of any of these elements endangers financial stability in general.

As the recent financial crisis has shown, financial stability plays a vital role in terms of the financial system and the economy. In the 1980s, direct regulation of credit markets and capital flows was eliminated in many countries, which facilitated the expansion of the financial system at a more rapid pace than other sectors of the economy. Financial instruments have become more complex, the activities of financial institutions increasingly diversified, and the risks more variable. Also, due to the high degree of trans-industrial and cross-border integration, the interrelation of financial systems has increased both nationally and internationally (Dell' Arriccia, Igan, Laeven and Tong, 2012).

In addition, due to the increasing globalization phenomenon, in recent years fears of contamination of national financial systems as a result of the onset of crises in other systems are becoming more acute.The response of the international community to these problems has resulted in the creation of consultation forums, bringing together representatives of market actors and supervisory authorities, which aim on the one hand to create recommendations on regulatory improvement, which will include best practices for identification, measurement. and risk management, and on the other hand to ensure the transposition and implementation of these regulations in different jurisdictions. Financial stability has become an increasingly important objective of the economic decision-making process in recent decades. In the specialty literature and modern practice there are two approaches to defining the concept of financial stability:

I. Financial stability is defined as the absence of financial instability, thus representing the opposite phenomenon.

II. Financial stability is defined specifically, without resorting to the concept of "financial instability" (Bernanke, and Mihov, 1998; Burns and Mitchell, 1946).

Contributions to improving the methodology for assessing the financial stability of economic agents

Knowing the history of economic development and the continued existence of cyclical fluctuations, we believe that even in times of economic growth and macroeconomic stability, special attention should be directed to identifying and anticipating potential sources that could affect financial stability. Practitioner economists and researchers have made extensive efforts to find ways to measure financial stability, to predict the behavior of stability risk factors financial and finding ways to prevent crises, and the dissemination of the results of their research and actions helped to raise awareness of the importance of the problem.

Following the institutional support of the IMF and the World Bank in 1999, the "Financial System Assessment Program" (PESF) was launched, in English The Financial Sector Assessment Program (FSAP). The PESF assessments represent the joint responsibility of the IMF and the World Bank for developing and emerging countries and only the IMF in advanced economies and include two major components:

- assessment of the financial stability of the developed states, which is the responsibility of the IMF,
- evaluation of financial development in developing and emerging countries, which is the responsibility of the World Bank (Brave and Butters, 2011).

To date, more than three quarters of the member countries of these organizations have been subject to evaluation. The purpose of PESF evaluations is twofold:

- to evaluate the stability of the financial sector.
- to evaluate the possible contribution of the financial sector to the growth and development of the economy.

In order to evaluate the stability of the financial sector, the PESF teams:
examines the stability and resilience of the banking sector and other financial sectors:

- performs stress tests and analyzes the links between financial institutions, including at cross-border level.
- evaluates the correspondence of the activity of banks, insurance companies, and the supervision of the financial market with the accepted international standards.
- assesses supervisory capacity, policy makers, and financial security nets to respond effectively in case of systemic stress (Burgin, 2005).

We point out that the ESFS assesses "systemic stability", not the health status of individual financial institutions (Goodhart, Aspachs, Segoviano, Tsomocos and Zicchino, 2004) and cannot predict or prevent financial crises, but only identifies the main vulnerabilities that could trigger them. The objective of the ESFS is to identify the potential vulnerabilities of the financial sector, whether they are of internal or external origin, and to help national authorities to develop and apply those remedial measures that are required (Burgin, 2005).

The program focuses more on preventing and mitigating crises than on solving them, aiming at identifying the ways of development of the financial sector of the participating countries and strengthening the architecture of the international financial system.

Configuring the financial stability methodology through the anticipation of financial crises

In the analytical practice, a wide range of econometric instruments and models are used to evaluate the stability of the financial system (at the aggregate level). These include the analysis of quantitative indicators on the soundness and stability of the financial system, including stress tests. These models try to address the issue of financial stability as a systemic phenomenon and, therefore, refer not only to financial institutions and markets, but also to the real sector and government, as major debtors of financial institutions, as well as to infrastructure financial.

There are several criteria for classifying the econometric models for assessing the stability of the financial system, but they contain as a rule tests for anticipating financial instability situations, which can generate or can turn into financial or economic crises.In general, financial stability tests focus on the broad implications of macroeconomic shocks. Therefore, individual risks are rarely analyzed, the purpose of a systemic resistance test being to identify common vulnerabilities. In order to forecast all kinds of crises: banking, financial and currency, the Early Warning System (EWS) is used, which represents a set of processes, processes, models, indicators, etc., which synthesize the necessary information and data. to identify the risky financial institutions and the risks that the respective institutions face, their clients, other institutions and, in general, the financial system, allowing to predict the occurrence of a crisis in a certain time period in the future (Moinescu, 2007).

Most studies use EWS to analyze systemic vulnerabilities and, therefore, to verify the possibility of a crisis. An example of EWS used in practice is the one developed by NBR specialists, known as "CAAMPL Banking and Early

Warning System". It can be classified as T. Lutton early warning systems used by regulators and supervisors to identify banks at risk (Regulatory EWS) (Lutton, 2006).

Other quantitative methods are also known, which are used for financial stability analysis and evaluation, such as: discriminant analysis and multiple discriminant analysis. The conclusion that emerges from the presentation of the problems raised by the analysis and evaluation of financial stability is that there is not a single method that can be used for this purpose, but several complementary methods. Early warning systems (EWS) allow for predicting the likelihood of a financial crisis, but do not provide the possibility to include in the calculations all the risks to which the system is exposed nor provide information related to the ability to respond to shocks.

Stress testing techniques identify potential shocks and estimate the strength of the financial system, estimate potential losses that the financial sector would suffer in the event of a shock, but do not provide the opportunity to compare the level of stability over time or the level of stability of two or more many financial systems. However, periodic stress test results, especially in the banking sector, may also serve as an additional indicator of financial soundness.

Because the analysis and evaluation of financial stability involves the identification of a large number of risk factors, and they have a complex action, it is not possible to build a unique model that reflects all the factors. As the definition of financial stability has reached a consensus, at least relative, the fact that it allows the construction of aggregate indicators of stability, the majority being still in the research and experimental stage. The list of 39 individual indicators of financial stability, developed by the IMF in 2003, in order to monitor the level of financial stability of the economy, did not in fact allow the forecasting of the financial crisis of 2008 2009. Among the causes is the multidirectional movement of several indicators significantly complicate the possibility of a reliable assessment of the level and nature of changes in the financial stability of the economy. This fact was made aware even before the crisis of 2008, several central bank publications pointing out that they were trying to build a single indicator to show the level of stability of the financial system in the country concerned. This is a daunting task, given the complex nature of the financial system and the existence of numerous links between financial market participants, non-financial sectors and financial institutions.

Many of the tests focus on building an aggregate indicator for the banking sector, which is the most important component of the financial system in terms of financial stability. However, all the tests so far can be regarded as

preliminary tests of alternative approaches for building such an indicator, but to date, no international consensus has been reached regarding the model of a standard index of financial stability, such as this is the case for the IMF's PESF or ISF. A relatively simple aggregate indicator of the stability of the banking sector built as a weighted average of the partial indicators of banks' financial soundness has been used, for example, by the central bank in Turkey since 2006 (CBRT 2006). The financial stability index is made up of six sub-indices that cover asset quality, liquidity, currency risk, interest rate risk, profitability and capital adequacy.

In Dattels' study, the map of the dynamics of global financial stability, introduced by the IMF in April 2007 and published twice a year, is analyzed. The purpose of the paper was to estimate the conditions and risks with impact on financial stability. A graphical representation of the map represents an octahedron with segments joining the center with tips and covered with a mesh. Throughout each segment is placed the point value of an indicator (estimated based on historical dynamics), which is aggregated from factors related to it. In order to interpret the map obtained, it is necessary to analyze the changes of each indicator. The authors concluded that this map cannot be reduced to a single index (Dattels, McCaughrin, Miyajima and Puig, 2004).

A great contribution to the research of financial stability in Romania was made by Claudiu Albulescu (2010), who in two published works determines the financial stability indices at the level of Romania and for the euro area. Research has confirmed that cooperation mechanisms in the area of financial stability at EMU level have not been effective. During the period under analysis, it was proved that the most significant impact on financial stability had economic growth and interest rate.

In a study by Brave and Butters (2011), they proposed a method for building the "integrated index of financial conditions", in English Financial Condition Index, composed of 100 financial variables with different periodicity, which is based on the analysis of the main components of the financial sector. The conventionally used indicators are divided into 3 categories: 1) the money markets; 2) the capital and financial markets; 3) the banking system. The calculations covered the period 1973 to 2009 for the USA and the paper presents a comparative analysis between the variation of the index and the prominent historical events that could have influenced this evolution and the forecast for the coming year. The researchers have proposed to develop this index.

A major resonance was the work "Financial Stress, Downturns, and Recoveries" by Roberto Cardarelli, Selim Elekdag and Subir Lall, published

under the auspices of the IMF in 2009, which built an index of financial stress on the banking, capital and foreign exchange markets. have determined for 17 developed economies, in the last 30 years identifying 113 episodes of financial stress. With the help of the financial stress index (FSI), the paper proposes an analytical framework to evaluate the impact of financial stress, especially its consequences on the real economy.

It was concluded that financial turmoil characterized by bank threats is more likely to be associated with severe prolonged recessions than those caused of the capital and currency markets. Financial systems appear to be particularly vulnerable to spontaneous contractions in the banking sector, due to the greater leverage and pro-cyclical nature of banking systems. This research finds that financial stress is often, but not always, a precursor to an economic downturn. A rapid expansion of credit, a sharp fall in house prices, and the volume of lending to the corporate and household sectors all contribute to the increased likelihood that stress in the financial system will lead to severe economic downturns. Of all, the banking stress would be the most "dangerous", the recovery from the recessions associated with the financial stress of a banking nature lasts about five quarters.

Concluding the ones mentioned during the article, the construction of an aggregate index of financial stability is still a wish, and the demonstrated synchronization between the periods of financial instability and the economic recessions, emphasizes the importance of its permanent monitoring and the use of all the instruments to maintain the systemic financial stability.

Conclusion

Theoretical, methodological and applicative research regarding the conceptualization, evaluation and maintenance of the financial stability of the economic agents under the conditions of the economic cyclicity allows the following conclusions to be formulated:

1. The concept of financial stability is currently enjoying enormous attention, but it has not been possible to reach a consensus both in defining and measuring financial stability, as these have been the driving forces behind this research. At the same time, the importance of maintaining financial stability is realized and seems to be assumed by the rulers of the largest economies, once it has been declared as public good.
2. The actuality, the importance and in particular the need to research the issue of maintaining financial stability derive mainly from two

reasons: Finance and the financial system itself presents the element of the economic system characterized by the largest and most intense interconnections within it (of the economic system) and the fact that at the present stage of economic development there are no economic agents or areas of human activity, which have no connection with the finances or elements of the financial system, and the Cyclic evolution of the economic system, already recognized as an indisputable truth, and in this context the demonstration by the financial system of a pro-cyclical behavior, justifies the necessity of the sustained efforts in order to maintain the financial stability.

3. The literature and economic practice have not yet reached a common point of view regarding the content of the concept of "financial stability", and its relevance starts most often from the opposite notion: "financial instability". As well as most methodologies for measuring financial stability.
4. Financial stability is characterized by a dynamic character, which is explained by the fact that, like other sectors of the economy, the financial system is characterized by a permanent qualitative change. This historical evolution is what makes "stability" a relative feature, which results from a certain configuration of the constituent elements of the financial system, orders that change permanently, as generally happens in the living world.
5. The financial system is likely to impede the development of normal economic processes and achieve the desired performance in an endogenous manner, even in the absence of exogenous shocks. Thus, "financial stability" does not necessarily mean the absence of crises, as the prevention of imbalances and the accumulation of risks, which could affect the integrity of the financial system and, consequently, the blocking of the real economic processes.
6. The common feature of the economic crises of the last half century, shows that the financial component in the crises is more pronounced, and the imminence of the financial risks in the triggering of the crises is already demonstrated.

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