The significance of the safety network in the financial system of an open economy

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Abstract
In the article solving of a research problem presented in the introduction of the article is described. The aim of the article is to explore and verify the hypothesis that the complete structure of the Safety Network is the tool towards greater stability of the financial system. The research was based on a methodology that included descriptive and comparative analysis. The bibliography of the article consist of scientific works, as well as reports and expertise knowledge. The results of the research present the new structure of the safety network institutions that can be applied to the business practice and the theory of the financial markets. This arrangement broadens the structure and functions of the Safety Network and should result in better stability of the financial system, especially in relation to crisis.

Keywords
safety network, financial markets, global economy, crisis

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Introduction
The financial system that covers economic relations should also be seen in the context of the public duties of the state, in which its construction and smooth operation is the subject of public trust.

Meeting the high safety standards of financial transactions requires, firstly, to ensure the safety of financial processes determining the security of business transactions in the functioning of the economy and, secondly, to take into account the fact that the financial sector entities almost exclusively invest the money entrusted to them, which requires proper public oversight (Żukowski, Żukowska, 2009). Therefore, the role of the Safety Network institution is to provide stability to the financial system. In the conditions of an open, global economy this task is becoming more and more complex. Especially in the post-crisis era this function is very challenging, therefore a new, holistic approach to the matter of a Safety Network is need. The aim of the article is to propose an optimal structure of a Safety Network for the financial markets, that would meet the needs of the post-crisis economic reality.

1. Financial system as mechanism of the flow of liquidity and capital in an open economy

The concept of the financial system is very comprehensive and multidimensional. Colloquially the financial system fulfils a similar function in the economy as the human bloodstream. This illustrative comparison is very appropriate because it has many analogies. The most important is that this system supplies all entities operating in the economy in streams necessary for the economic existence that is flows of cash and capital (Fedorowicz, 1991). These flows are multidirectional, as shown in the Fig. 1.

Generally, within each financial system, the transfer of cash and equity takes place between the parties with a surplus of cash and capital and the ones that need funding (Sullivan, Sheffrin, 2003). This surplus is directed to those who have a deficiency through financial markets (Mishkin, 1995), financial intermediaries, or a combination thereof. Thus, the financial system is the broadest term for the mechanism of the cash flow in the economy.
The core features of this system are essentially the same in all economies, but due to differences in size, complexity, technology, culture, politics and institutional mechanisms, can vary greatly (Merton, 1990). Therefore, especially under conditions of dynamic changes in technology and processes that integrate global interdependence through the financial markets, various analytical approaches regarding the financial system can provide useful complementary information in order to reliably reproduce the real processes taking place in the financial system in the created analytical perspective. The diversity of approaches to the concept of financial system in the economic literature is presented in the Tab. 1.

Knowledge of the financial system, which affects the economy, determines its smooth functioning and leads to reflection over its effectiveness and evaluation of its efficiency. It is known that the proper functioning of the financial system plays a fundamental role in the economic development of the state. Regardless of the approach, the financial system has a crucial impact on the allocation of resources and the construction of a modern economy (Berthelemy, Varudakis, 1996).

2. THE ROLE OF THE SAFETY NETWORK IN AN OPEN ECONOMY

The risk level of transactions in the financial services market depends on many market and non-market related factors. The level of risk is greatly affected by the level of confidence in the financial system. Trust is a derivative of the positive experiences of various market participants, as well as the derivative of institutional, regulatory and supervisory framework. A high level of trust plays a key role not only in terms of the strategy of raising capital through a single financial institution, but also affects the assessment of the efficiency of the financial services market and the entire financial system (Dobosiewicz, 2003).

The lack or loss of trust by groups of investors caused even by a single, negative information may cause a snowball effect, and consequently, a sharp decline in investor confidence in the whole system. Low levels of trust causes the disappearance of demand for financial services, and potentially can trigger run on banks, which in turn will lead to financial crisis. It is therefore in the public interest to preserve the stability of the financial system and in particular the efficiency of the markets (Zaleska, 2001). The social cost of the collapse of even one bank

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Fig. 1. The flow of cash and capital in an economy
Source: author’s concept based on (Ritter et al., 2004, p. 34).
Tab. 1. Overview of different approaches to the concept of the financial system

<table>
<thead>
<tr>
<th><strong>Analytical approach</strong></th>
<th><strong>Characteristics</strong></th>
<th><strong>View on the financial system</strong></th>
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<tr>
<td><strong>Institutional</strong></td>
<td>It recognizes the financial system from the point of view of financial institutions, focusing on their description and classification; the selected feature of institutions (for example the level of competition, protection of investors, the quality of financial regulation) can be the subject of analysis</td>
<td>Financial system as a set of financial institutions defined and classified into distinct groups</td>
</tr>
<tr>
<td><strong>Functional narrow</strong></td>
<td>Monetary</td>
<td>The financial system as a mechanism for supplying the real economy with money</td>
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<td></td>
<td>Analyses the financial system primarily in the context of the supply of money in the real economy through the system of the central bank and commercial banks</td>
<td>The financial system as a mechanism of mediation of parties with surplus and deficit of funds</td>
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<td></td>
<td>Based on intermediation</td>
<td>It analyzes the financial system from the point of view of the two most important functions, that is redistribution and transformation</td>
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<td><strong>Functional broad</strong></td>
<td>The analyzes of the financial system focus on the functions of the system. Advocates of this approach argue about the relative stability and comparability of the functions of national financial systems</td>
<td>The concept of the financial system consists of a network financial markets, financial intermediaries and other institutions through which financial plans of households, businesses and government are realized</td>
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<tr>
<td><strong>Systemic</strong></td>
<td>It analyzes the financial system in terms of relationships between individual elements of the system and the impact of these compounds on the functioning of the entire financial system (using concepts of complementarity and coherence)</td>
<td>The financial system as a structured set of complementary and coherent components or subsystems</td>
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can be very diverse and difficult to estimate (Jaworski, 2001), but also very dangerous economically. For this reason, in most developed economies in the world, despite being free-market economies, the financial system is subjected to public supervision via the so-called. safety nets (Iwanicz-Drozdowska, 2008; Szczepańska et al., 2008).

The safety network can be understood as the set of regulations that ensure financial stability and protect the interests of market participants that use the services of financial intermediaries, as well as the institutions responsible for monitoring compliance with these regulations.

Nowadays it is common to speak about the economy as a unified global system. It’s cells – the open economies of individual countries, have in most cases abandoned the administrative control of the flows of goods and services, and thereby have lost the opportunity to influence the processes of global nature. This means that in times of prosperity there are no limitations to the expansive processes of trade, but in difficult times, it is not possible to isolate the impact of negative external processes. Under these conditions, growth is becoming increasingly dependent on the interaction between economies (Brodzicki, 2006). Consequently, the phenomena of recovery and crisis are put in the international context (Kindleberger, 1999).

In an open economy the international market and the external determinants by the nature of things are primary to the internal factors, and interact more strongly on the internal situation. In terms of global interdependence the interaction between domestic supply and demand and the impact of regulatory tools can be seriously distorted. Conducting operations across national borders creates difficulties in their control and adequate risk assessment of these processes (Komorowski, 2010). Thus globalisation
as an inevitable and irreversible phenomenon poses both opportunities and risks (Robertson, 2000). However, it appears that the balance of these phenomena is more on the side of its positive features (Kołodko, 2001).

3. AN OPTIMAL STRUCTURE OF THE SAFETY NETWORK INSTITUTIONS IN AN OPEN ECONOMY

It is impossible to completely immunise the banking sector to risk, but the review of several key aspects of the functioning of the sector will have a positive impact on improving its stability. This revision requires actions leading towards:

- an increase of safety of banks (Iwanicz-Drozdowska et al., 2010), achieved by:
  - establishment of an optimal system of guarantees for bank deposits (Demiruguc-Kunt, Detagiacche, 2000);
  - maintenance of safe levels of liquidity of the banking system (Global Financial ..., 2010);
  - minimisation of the effect of moral hazard for banks, referring to the too big to fail concept (Burton, et al., 2010);
  - smooth and continuous banking supervision and effective macro prudential regulation;
- an increase of transparency of the functioning of the financial system, by:
  - increasing the transparency of the fiscal policy of the government;
  - the cooperation of financial sector institutions in building stability;
  - international coordination of actions towards the improvement of transparency.

Given that today’s conditions are the embryo of the potential future crisis, it is important to focus on the functioning of the safety network of the financial system. These are institutions that fulfill the extraordinary functions in the conditions of high systemic risk, as shown in Fig. 2.

The traditional safety network institutions consist of:

- Minister of Finance,
- Central Bank,
- Financial Supervision Authority.

The functions of the above institutions is widely discussed in the international literature.
However the complete safety network should also include:
- Deposit Guarantee Fund,
- Resolution Authority,
- Macroprudential Supervision Authority.

The Deposit Guarantee Fund should be responsible for:
- reimbursement of funds held in bank accounts, to the degree specified by the legal act that regulated the functioning the Guarantee Fund, for banks that are participating in the deposit insurance system;
- providing financial assistance to banks in case of danger of insolvency;
- support of the process of merging threatened banks with stronger banking units;
- collection and analysis of information regarding the entities covered by the guarantee, including the analysis and forecasts for the banking sector (http://www.bfg.pl, 12.10.2015).

The aims and functionality of the Resolution Authority are pictured in the Fig. 3. This institution would be responsible for carrying out a non-judicial procedure involving the restructuring and liquidation

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**Fig. 3. The Aims and Tools of Resolution function during a crisis**
Source: author’s concept based on (Pruski, 2012).

**Fig. 4. Structure of institutions in the Security Network**
of the bank at risk of insolvency (bankruptcy), in particular critically undercapitalised, that most likely is not able to raise sufficient capital, or a bank with liquidity problems and running a risky or illegal business.

Due to the limited possibilities of influence the exogenous destabilising factors, the way to increase the stability of the domestic economy is to limit systemic risk. For this purpose the Macroprudential Supervision Authority should be established, which would act as an independent institution performing the function of macro-prudential (systemic risk) supervision and coordinate the activities of all other bodies of the safety net. An structure of a complete safety network is presented in the Fig. 4.

The change of the architecture of the safety network should be done as the first step in the aftermath of a crisis, so the new regulations should consider the new safety infrastructure. The institutions if the Safety network should cooperate and function towards building a stable financial system. A clear set of duties and responsibilities for each institution is necessary for the effective collaboration (Alińska, 2011/2012).

CONCLUSIONS

Financial stability is a state of dynamic and enduring equilibrium within interconnected financial markets. Its maintenance is especially difficult in the conditions of opened economies, where shocks are transmitted globally. It is impossible to completely immunise the banking sector to risk, but the review of the structure and responsibilities of the Safety Institutions are key in terms of internal stability. Despite the fact, that the Safety Network may have slightly various structure in different economies, the chosen structure should be constructed to perform its functions presented in the article in most effective way.

The new structure should result in better stability, especially in relation to a crisis. Firstly, it should support better predicting and preventing of the crisis thanks to the macroprudential authority. Secondly, the mitigation of the negative effects of a crisis should be more efficient during and after the crisis, thanks to the deposit guarantee fund. At this moment this proposed structure seems to be complete in terms of fulfilment of all the functions of the Safety Network.

LITERATURE

Alińska A. (2011/2012), Sieć bezpieczeństwa finansowego jako element stabilności funkcjonowania sektora bankowego, Kwartalnik Kolegium Ekonomiczno-Społecznego Studia i Prace 4, pp. 87-99

Banco Central do Brasil (2009), Banking Resolution Failure Seminar, Rio de Janeiro


Brodzicki T. (2006), Otwartość a wzrost gospodarczy – wyniki dotychczasowych badań i wnioski na przyszłość, Analizy i Opracowania Katedry Ekonomiki Integracji Europejskiej Uniwersytetu Gdańskiego 2


Dobosiewicz Z. (2003), Bankowość, Polskie Wydawnictwo Ekonomiczne, Warszawa

Fedorowicz Z. (1991), Podstawy teorii finansów, Poltext, Warszawa

International Monetary Fund (2010), Global Financial Stability Report, World Economic and Financial Surveys


Jaworski W.L. (1999), Bankowość – podstawowe założenia, Poltext, Warszawa

Kindleberger Ch.P. (1999), Szaleństwo, panika, krach. Historia kryzysów finansowych, WIG-Press, Warszawa

Kołodko G. (2001), Globalizacja a perspektywy rozwoju krajów posocjalistycznych, Dom Organizatora, Toruń


Pruski J. (2012), Znaczenie resolution w działaniach antykryzysowych, BFG, speech during VII Kongres Ryzyka Bankowego, Warsaw


