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COMPARATIVE ANALYSIS OF THE CAUSES AND CONSEQUENCES OF REPRESENTATIVE BANKING CRISES[a]

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Abstract

Current developments in the global financial flows significantly affect the behaviour and performance of banks. Dynamic, unpredictable, and turbulent environment factors relativize the specific position of the banks and demand their active attitude towards the environment. From the moment the banking operations assumed a global character, banking crises became a global phenomenon. Therefore, the identification and analysis of the causes of banking crises is the initial step in solving them. The paper deals with the causes of banking crises, both traditional and the ones resulting from the development of financial innovations. The aim is to identify the identical causes, determine the essential differences, and measure the depth and length of the adverse effects of banking crises. By analysing the selected representative crises, the authors conclude that they can cause problems of varying impact on the financial and the economic system, depending on the speed of the measures taken to stop them. Accordingly, the basis has been created for a rational and relevant verification of the effects arising from the timely actions taken to remedy individual banking problems and resolve systemic banking crises.

Key words: banking crises, causes of banking crises, financial liberalisation, non-performing loans, regulatory measures.

КОМПАРАТИВНА АНАЛИЗА УЗРОКА И ПОСЛЕДИЦА РЕПРЕЗЕНТАТИВНИХ БАНКАРСКИХ КРИЗА

Апстракт

Актуелна кретања у глобалним финансијским токовима значајно утичу на понашање и резултате пословања банака. Динамични, непредвидиви и тур-булентни фактори окружења релативизирају специфичну позицију банака и

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захтевају њихов активнији однос према окружењу. Од тренутка када је пословање банака попримило глобални карактер и банкарске кризе су постале глобална појава. Стога, идентификација и анализа узрока банкарских криза представља почетни корак у решавању истих. Предмет истраживања у раду су узроци банкарских криза, како традиционални, тако и они који су условљени развојем финансијских иновација. Циљ рада је да се идентификују идентични узроци, утврде суштинске разлике и измере дубина и дужина негативних ефеката банкарских криза. Анализом изабраних, репрезентативних криза, аутори закључују да оне могу изазвати проблеме различитог интензитета на финансијски и привредни систем, у зависности од брзине предузетих мера за њихово заустављање. На бази тога је створена основа за рационалну и релевантну верификацију ефеката, насталих по основу правовремено предузетих акција за санирање индивидуалних банкарских проблема и решавање системских банкарских криза.

Кључне речи: банкарске кризе, узроци банкарских криза, финансијска либерализација, неперформансност кредита, регулаторне мере

INTRODUCTION

Realisation of the indisputably primary role of banks in an efficient and rational allocation of resources with the purpose of achieving faster economic development of countries assumes, quite understandably, their successful operations. However, due to the nature of their activities (non-liquid assets and current liabilities), banks are more prone to problems than other non-financial institutions. Furthermore, because of the interconnectedness of banks, the failure of one institution can directly affect the failure of another. Although the problems that suggest the crisis may occur much earlier, crises often occur suddenly, caused by unrelated events or a change in the perception of the private sector about the stability of the financial system and macroeconomic policy. The crisis may be deepened by the slowness of government and regulatory institutions in identifying problems, delaying intervention in respect of the worsened situation in the banking operations, and ignoring the problem of the sensitivity of the banking sector structure to disturbances.

Given the above, the research subject in this paper will focus on the analysis of traditional causes of banking crises and examine the effects of current trends in the financial environment on banks' ability to operate effectively. More specifically, the research will centre on the analysis of selected systemic banking crises, as well as the current *Subprime* crisis, which has taken on a global character. According to the defined subject, the main objective of this paper consists in determining the identical causes and substantial differences among the analysed crises, and examining the measures to solve them, which actually determine the length and depth of the problem.

As regards the subject and the defined objective, the paper is based on the following key hypothesis: regardless of the causes that lead to the occurrence of specific crises, the consequences to the financial and economic system can be of varying intensity, which primarily depends on the speed of the measures taken to stop them. The paper will rely on qualitative methodology, based on a descriptive analysis of the research problem. The research will consult the relevant literature on banking crises, based on theoretical generalisations and practical experiences of the authors who have studied the subject matter.

Starting from the relevant literature, the paper will first analyse the conceptual framework of banking crises and the specifics of the causes that lead to problems in the banking operations. After identifying the key specifics of banking crises, attention will be focused on the analysis of specific crises that had systemic features, after which their similarities and differences will be highlighted. Financial innovations of the modern business environment indisputably lead to new problems in banking operations, which will be demonstrated through the analysis of the large global *Subprime* crisis. Practically, the comparison of selected banking crises will allow us to draw conclusions about the efficiency in their resolution and, consequently, regulatory changes and changes in the behaviour of the banks themselves.

THE CONCEPT OF BANKING CRISES

Banking crises have a long history, with more and less intense negative consequences for the stability of the financial and real sectors. In addition, the costs of exit from the crisis and bank rehabilitation vary from case to case. For example, the crisis of American banks and savings banks during the 1980s cost taxpayers about 350 billion dollars, while the rescue of banks in Japan in the 1990s cost about 560 billion dollars. On average, the costs of acquisition and rescue of banks amount to 10% of gross domestic product (Caprio & Klingebiel, 1996, p. 1).

Until the current global *Subprime* crisis, the largest number of bank bankruptcies occurred in the United States, in the period from 1929 to 1933, as a result of the stock market crash and the Great Depression. For fear of occurrence of similar crises, the period after World War II was characterised by strong regulations and control of banks and other financial institutions. A large number of banking regulations, primarily in the United States, were adopted in response to the crisis in the early 1930s. Financial repression, which was reflected in the strict control of the competition and risk in banking operations, prevented the efficient allocation of resources by the financial system. By the end of the 1970s, it became apparent that a strict set of restrictions imposed on commercial banks in the 1930s was inconsistent with the innovations that took place in the financial world. This was a clear signal for the gradual abolition of strong regulatory restrictions on banking operations and the introduction of financial liberalisation.

Deregulation, financial liberalisation, the abolition of capital control, and the development of securitisation markets with unregulated products in developed countries caused a large number of banking crises in the 1980s and 1990s, both in developing and in developed countries. Financial liberalisation is a key factor in the increase in real interest rates and the risk of crisis in a given period of time (Demirguc-Kunt & Detragiache, 1998, p. 104). For example, the liberalisation of credit markets and real interest rates preceded the financial crisis in Latin America in the early 1980s, which was followed by severe banking disturbances and strong economic recession in these countries (Demirguc-Kunt & Detragiache, 2005, p. 3).

Banking crises increase in the presence of a poorly designed deposit insurance system, especially in countries with deregulated interest rates and weak institutional environment that lacks transparency (Todorović, 2013a, p. 392). It was the generous deposit insurance scheme, financial liberalisation, and the inability of regulators to quickly intervene in problem institutions that were defined as key causes of American savings and loan crisis of the 1980s (Beck, 2003, p. 7). In addition, slowness in taking action in respect of problem banks usually results in high fiscal costs and an even larger crisis, which spills over to the real sector (Beck & Laeven, 2006, p. 3).

The problems of bank bankruptcies are seriously approached for fear that they could spread like dominoes over the entire banking system and lead to the failure of both solvent and insolvent banks. In essence, bankruptcies of banks rapidly spill over to the real sector of a country, stimulate the balance of payments crisis, and increase the costs of gross domestic product (Leckow, 2006, p. 184).

In the event of interconnectedness of banks, reflected in borrowing and lending, holding deposit accounts, and clearing systems, the likelihood of rapid spillover of bankruptcy of any bank to all others in the system increases. In addition to the domino effect, there is a great fear because of the possibility that the closure of a major bank for a few months, in order to assess its illiquid assets, could cause the freezing of deposits and savings, with a negative effect on national consumption (Kaufman & Seelig, 2006, p. 164). Therefore, the banking system is considered vulnerable to systemic risk.

The most important cause of systemic risk and systemic banking crisis is the contagion effect, which conditions the transmission of financial disturbances from one bank to another. Due to the existence of controversial evidence about whether and how serious the contagion in the banking sector is in relation to other sectors, many authors have attempted to reach the answer to this question through various analyses. One of them is *Kaufman* (Kaufman, 1996, p. 21), who in 1994 analysed a number of theories of contagion and identified several reasons that highlight the seriousness of the problem of contagion in the banking sector. First, it occurs faster in the banking sector than in other sectors. Second, it spreads more rapidly within the sector. Third, it results in a larger number of bankruptcies, i.e. when compared to other sectors, contagion actually causes a higher percentage of bank failures. Fourth, it leads to heavy losses for depositors and creditors in the banks that went bankrupt. Fifth, it spreads faster outside the banking sector to the other sectors, the macroeconomy, and other countries.

In addition to the previously analysed factors and determinants of banking crises, it is necessary to emphasise the effect of the banking structure on disruptions in the financial system. Despite the importance of this topic for policy makers and various theoretical predictions concerning the impact of banking structure on the stability (or instability), empirical analyses among countries are quite limited. At the same time, in economic theory, there are conflicting views about the relationship between the structure of banks and their stability (instability).

On one side, there are the views and arguments of the advocates of "concentration-stability", who point out that the less concentrated banking sector with a large number of small banks is more prone to crises than the concentrated sector with a small number of large banks. First, large banks can better diversify their activities, as manifested in lower sensitivity to disruptions in operations. Second, concentrated banking systems can increase their profits, which represents an absorber in relation to adverse shocks. At the same time, the market value of the bank increases, which may demotivate banks' owners to take disproportionate risks. Third, it is easier and simpler to control and monitor the concentrated banking system, which makes the corporate control more effective and the risks of contagion smaller.

Contrary to the above, advocates of "concentration-instability" argue that the concentrated banking structure is more prone to disturbances and crises. First, large banks often receive higher subsidies through implicit "too big to fail" policies, which increases the motives for taking disproportionate risks. Higher risk results in higher instability and sensitivity to disturbances in concentrated banking systems. Second, if the size of the bank is in positive correlation with complexity, then it is difficult to control and monitor the operations of large banks, which indicates a positive relationship between concentration and instability. Third, if the banks with larger market share have a monopoly in determining the level of interest rates (by increasing them), their debtors will have to take higher risks in their operations. The extent to which the concentration is associated with banks that have greater market power implies a positive relationship between concentration and instability.

Detailed analysis of the impact of the banking structure on the disruptions in the financial system and the development of systemic banking crisis was performed in 2003 by *Beck*, *Demirguc-Kunt*, and *Levine* (Beck, Demirguc-Kunt & Levine, 2003, pp. 22-23). Using qualitative and quantitative methodology, they examined the effect of concentration and ownership in banking, banking regulations, and general competitive and institutional environment on the instability of the banking system. After an extensive analysis of all relevant facts, they concluded that concentration increases stability. At the same time, their conclusion was that low competition increases instability.

However, starting from the controversial opinions on the impact of bank concentration on stability (instability), one cannot with precision and certainty draw a general conclusion about the positive or negative impact of concentrated banking system on stability. Arguments in favour of the positive impact (simpler monitoring, greater possibility of making profit, and better diversification of business activities) are neutralised by the arguments of opponents (the implementation of the implicit "too big to fail" policy, problems in the control of complex institutions, and monopoly in setting interest rates). This conclusion requires a more detailed approach to the simplified debate "concentration-stability" versus "concentration-instability" and in-depth research and analysis in the future.

In the end, it can be concluded that although numerous studies have been conducted, economists still have not reached a consensus on the causes of the banking crises. The main reasons are reflected in the partial testing of individual crisis events, the testing of various factors, starting from different samples (some analyse developed countries, others analyse developing countries, and some start from the combined sample), using different techniques and methods for measuring the impact of certain factors. The consequence of such research is the lack of a unified theoretical concept of banking crises and crisis classification by type and time of occurrence. However, based on previous theoretical and practical experience, it is clear that each new crisis expands the list of the causes of the disorder. An obvious example is the *Subprime* crisis, which was initiated by previously unknown factors – uncontrolled trade in derivatives and securitisation of loans.

BANKING CRISES AROUND THE WORLD

The 1990s were the period of frequent financial crises in which the banking sector played a central role and whose macroeconomic consequences were severe and long lasting. Banking crises of this period stimulated the systematic analysis of the instability of the banking systems around the world. In addition, the scope and nature of the problems varied (from the insolvency of one or two large banks to the need for chronic recapitalisation of the banking system). At the same time, the problems spread to all regions of the world and to all levels of development.

Accordingly, the following segments will focus on the causes, consequences, and ways of resolving the most famous systemic banking crises in the world that occurred during the 1990s.

Banking crisis in Japan

In the late 1980s, Japanese banks adopted an approach of aggressive lending, with a high concentration of lending to the real estate and construction sectors. Fall in the prices of shares and changes in economic performance in the early 1990s reduced the ability of highly indebted companies to meet their loan obligations. This resulted in a large pool of non-performing loans in the banking system. Despite these problems, banks continued to increase their lending activity in specific sectors. This resulted in an even greater increase in non-performing loans and brought about a systemic banking crisis in the period from 1997 to 1998.

Credit growth was accompanied by the doubling of the price of shares and rise in the prices of commercial real estate, especially in big cities. Sharp increase in interest rates and the introduction of various credit ceilings (such as limits on the amounts that banks were able to lend) for the real estate business led to the bursting of the bubble of asset prices. This brought huge losses to most of the credited companies, which resulted in the conversion of a substantial portion of bank loans to non-performing assets.

A number of analysts who analysed the problems of Japanese banks came to the conclusion that the Bank of Japan and the Ministry of Finance were too slow in their reaction to the increase in non-performing loans in the banking system. With the advent of systemic banking crisis, the government's initial approach was focused on the stimulation of demand in the economy by using fiscal policy. However, fiscal stimulus had a marginal impact on the economy. At the same time, there was no international pressure on the government of Japan to solve its banking problem, which was generally viewed as a domestic issue.

The gradual culmination of all of the above problems led to the collapse of the so-called *convoy system*, where the Ministry of Finance encouraged healthy banks to acquire those with problems (Casu, Girardone & Molyneux, 2006, p. 424). Although the *Bank of Japan* provided liquidity assistance to the banking system, it was not enough to stop the crisis that arose.

Systemic banking crisis in Japan initiated a wide range of reforms, which were aimed at stabilising the banking system and facilitating the restructuring of banks. Various actions were taken to stabilise the banking system, typical of most countries going through a bank or a financial crisis, such as: introducing a hundred percent deposit insurance schemes, extending emergency liquidity for problem banks, providing financial assistance to encourage mergers among problem financial institutions, inserting additional capital into weak but viable banks, and accelerating temporary nationalisation of non-viable banks.

The above-mentioned activities were not, however, sufficient to stop and solve the banking crisis in Japan. The main cause of prolonged instability was reflected in the problem of "stock and flow" in the banking sector.

The stock problem in banks was caused by a high percentage of non-performing loans, inadequate capitalisation, and large exposure of Japanese banks to the real estate market. At the same time, Japanese regulators did not stimulate banks to write off bad loans, or to set aside reserves to cover losses from bad loans.

Increase in non-performing loans and prolonged weakness of Japanese banks may be associated with high loyalty to the so-called *keiretsu* groups. Close banking and corporate relations, praised as a model of good governance contributing to the rapid economic growth, created serious financial problems in Japan and discouraged healthy competition, which was confirmed by a number of analyses.

A detailed analysis of the connection between the increase in non-performing loans and operations of banks within the *keiretsu* groups was conducted in the form of an econometric study conducted in 2003 by *Peek and Rosengren* (Peek & Rosengren, 2003, p. 24), based on three hypotheses that they tested and confirmed. The first hypothesis was related to the existence of the so-called *evergreening* lending (unsolicited granting of new loans to problem companies). The second hypothesis confirmed the fact that the banks had a motive to enter into this type of lending in a situation where the value of the assets in their balance sheets began to decline, i.e. when the capital indicator approached the required minimum of adequate amount of capital. Finally, the third hypothesis confirmed that the existence of *keiretsu* groups increased the likelihood of obtaining bank loans. In addition, it was concluded that the probability of obtaining the loan was greater if the applicant was a weaker company within the group.

At the same time, regulatory restraint encouraged this behaviour of banks (Peek et al., 2003, p. 24). The Japanese government, faced with a growing budget deficit and negative public attitudes about the frequent rescue of banks, put pressure on banks to behave in this way. In this way, it was possible to avoid the alternative scenarios of mass bankruptcies of companies and banks, while eliminating the associated costs, both financial and political. In addition, the lack of transparency and loose accounting procedures enabled the banking regulators to implement the policy of restraint.

The flow problem was caused by insufficient profitability of Japanese banks, with a negative impact on the write-off of non-performing loans and emission of additional capital on the market. Unlike other countries in the G-7 group, during the period from 1998 to 2003, the Japanese banks were largely non-performing. During the observed period, their ROA and ROE were, on average, negative for four years. At the same time, the share of costs in the total revenues was higher compared to the leading banks in other countries. In order to achieve positive change in terms of more profitable business, the conditions for the recovery of the corporate sector and the increase in interest margins in the banking system had to be created. However, private banks are even today pushed out of the profitable areas of banking, due to favouring of the Japan Post and government financial institutions.

Scandinavian banking crisis

In the late 1980s and early 1990s, the Scandinavian countries (Finland, Norway, and Sweden) faced banking crises, which had a systemic character. History of problems in these three countries is very similar to banking problems of Japanese banks. Practically, the Scandinavian banking crisis passed through all stages of the "theory of asset price bubble". First, financial liberalisation abolished all quantitative barriers in banking operations. Second, the increase in banks' lending caused an increase in real estate prices. Finally, the volume of risky loans increased, and they soon became non-performing.

With the advent of financial liberalisation, which occurred in the mid-1980s, quantitative restrictions were abolished, followed by a boom in lending, especially in the real estate sector. Banks voluntarily increased the volume of lending in order to compete for a place in a competitive environment. Since there were no sophisticated internal models for measuring and managing risk, the prevention of risk was not taken into account, which resulted in the rise in risky loans. The increase in borrowing led to a rapid increase in real estate prices and stock market prices in general. Despite the obvious credit boom, fiscal policy was loose, while the monetary policy was based on maintaining the stability of exchange rates (Sandal, 2004, p. 82).

In the late 1980s, due to economic shocks, real estate prices collapsed, which led to massive credit losses. Norway was the first to feel the crisis, after a sharp reduction in oil prices in the period from 1985 to 1986. Finland and, to some extent, Sweden were seriously hit by the decrease in exports, which followed the disintegration of the Soviet Union in 1990. This caused a recession in the two countries, which was evident in their negative gross domestic product rates in the period from 1991 to 1993 (Heffernan, 2005, p. 450).

Practically, external macroeconomic shocks caused economic recession, which hit Finland the most, causing the largest decline in gross domestic product, amounting to 10.4%. Among other things, Finland experienced the largest percentage of credit losses at the peak of the crisis and the cumulative decline in banks' loans. Furthermore, compared to the other two countries, the recovery of the banking sector in Finland lasted much longer (four years had to pass from the peak of the crisis in order to increase the profitability of banks). However, a number of analyses often point out that the recovery of the Finnish banking sector was not so slow, but that

Norwegian and Swedish banks, due to the emergency interventions of their governments, quickly came out of the problem (Sandal, 2004, pp. 83-84).

In general, all three analysed countries resolved their banking crises by introducing a hundred percent deposit insurance, providing guarantees for bank loans, and providing emergency financial assistance to ensure liquidity. At the same time, the acquisition of problem banks and the sale of non-performing and bad assets from banks' balance sheets were arranged (Stutts & Watts, 2009, p. 590).

In the period between 1984 and 1993, several Danish banks also had significant losses in the loan portfolio. However, the crisis of individual banks in Denmark did not acquire a systemic character. In the analysis of the Scandinavian banking crisis, *Pesola* pointed out several reasons Denmark avoided a systemic banking crisis. First, the changed circumstances in the macroeconomic environment initiated rapid financial and regulatory reforms. For example, the Danish banks had to set aside larger reserves for loan losses and introduce a system of daily adjustment (*mark to market*) of off-balance sheet items in the course of disclosure of their profits. Second, the debt burden of companies was considerably lower, and, unlike the other three countries, credit losses were allocated for the period of nine years. Third, negative shocks from the macroeconomic environment were also significantly lower (Pesola, 2001, p. 15).

Once the problems in the banking sector started, currency crises in Finland and Sweden emerged. However, this could not be regarded as a clear transmission of problems from the foreign exchange market to the banking sector, although the currency problems increased the problems in the Finnish and Swedish banking systems. Shortly after the outbreak of the currency crises, Finland and Sweden changed their exchange rate regimes, i.e. switched from fixed to flexible exchange rates.

CAUSES AND CONSEQUENCES OF SUBPRIME CRISIS

The existence of global interconnectedness caused far-reaching consequences of the current financial crisis, which includes "sensitive instruments, careless authorities, and restless investors" (Reinhart & Rogoff, 2009, p. 291), on the world economy and finance. Negative trends, manifested primarily in the banking sector and the real estate market, quickly spilled over to the economies of other continents. This caused a recession accompanied by a decline in living standards, increasing unemployment, rising inflation, and growing budget and foreign trade deficits.

Undoubtedly, this is the biggest crisis after 1929, which will cause profound consequences for the global economic system. When the causes of the crisis are taken into consideration, it is necessary to point out that market participants, seeking to maximise yield, did not pay significant attention to risk. At the same time, inadequate risk management practices, uncontrolled use of complex and non-transparent derivative instruments, the transfer of risk through securitisation of loans, and excessive leverage led to the collapse of the financial system. In addition, inconsistent and insufficiently coordinated macroeconomic policies, as well as inadequate structural reforms, contributed to serious market disturbances. During a crisis, it is very difficult, almost impossible, to maintain global financial stability, strengthen cross-border financial integration, and preserve national integrity (Schoenmaker, 2012, p. 5). In other words, the development of the global financial system in the absence of adequate structure, which would create high-quality standards, caused the spread of the crisis (Jakšić & Todorović, 2009, p. 80).

In the years immediately preceding the crisis, bank managers tended only to quickly and easily make a profit, without respecting ethical standards in the business. In particular, the investment banks experienced explosive growth of revenues, generated from trading in securities. The fear of a possible cyclical decline of their activities had already emerged at that point.

Investment banks did not deny that their trading activity was immune to crises. However, they argued that the development of information technology allowed opening up new markets and more efficient management of growing risks. What is more, the rise in the number of sophisticated clients, such as hedge funds, enabled fast and easy acceptance of new products and finding of their proper use. Current developments in financial markets deny the attitudes and behaviour of investment banks and their managers. It is obvious that the grey area that exists between hedging and speculative transactions made derivative transactions so opaque that at one point they had to explode (Bloom, 2013, p. 10).

Subprime crisis was initiated by the credit boom, combined with the housing bubble. Loans of declining quality were generally available on the corporate, consumer, and mortgage markets. Although financial institutions transferred credit risk through securitisation of mortgage debt, problems became larger. All participants in the securitisation process achieved high income from collected fees, and thereby transferred the credit risk to the lower structures. Credit risk was eventually transferred to the structure that was so opaque that even the most sophisticated investor had no clear picture of their holding. At the same time, banks maintained high exposure to mortgage loans, without adequate capital increase, which would be in line with the risks taken. Of course, the lack of transparency of the participants in the securitisation and reduced credit quality contributed to the growing instability of the market (Goldberg & Giedeman, 2009, pp. 18-19).

Subprime crisis has shown that a regulatory framework established in the past has many flaws (Torre & Ize, 2009, pp. 21-22), because only depository institutions are prudentially regulated and supervised based on that. Accordingly, they benefit from the safety net. Other intermediaries do not enjoy safety protection, but they are also not burdened with prudential norms. Instead, unregulated intermediaries are subject to market discipline and specific regulations on the securities market, which are focused on transparency, governance, investor protection, and market integrity.

It is obvious that this established regulatory architecture has many shortcomings and that it is quite unbalanced. Exceptionally high growth of the so-called “shadow banking”, which is based on the securitisation of credit risk, off-balance sheet transactions and assets, and the rapid expansion of high-leverage mediation by investment banks, insurance companies, and hedge funds, justifies the previously stated position. This has especially become apparent with the emergence and expansion of the *Subprime* crisis, when, finally, the safety net had to be expanded from regulated to unregulated institutions. In other words, unregulated intermediaries became systemically relevant and, therefore, involved without question in the *ex-post* safety net.

It is clear that in a world where regulations are not applied uniformly, financial flows sooner or later find the line of least resistance, which provides unregulated intermediaries with comparative advantage and the possibility of sudden climb to the point where they can become dangerous to the system. This problem can be solved by separation of commercial banks and non-deposit institutions. In addition, non-deposit institutions can choose between being prudentially regulated and remaining unregulated. All regulated intermediaries, as well as commercial banks, must satisfy the appropriate prudential requirements in terms of capital adequacy and minimum capital threshold to enter the market. Unregulated intermediaries would not have to meet these requirements, but they would be forbidden to borrow directly on the market. In other words, they would be allowed to borrow only from banks or other regulated intermediaries. This would ensure regulatory neutrality and favour innovation and competition.

In order for the regulatory reform to be successful, it is necessary to combine specific rules (which maintain the system within reasonable limits) with institutional reform that is proportional to higher powers and responsibilities of supervisors and strong enough to overcome a large number of difficulties associated with the use of discretion (Todorović, 2013b, p. 224). The system of banking regulation must move from the approach that involves complex and confusing rules towards an approach based on transparency and simplicity (Page & Hooper, 2013, p. 52). Request for transparency implies an obligation of banks to disclose all, including specific information, related to their operations (Mulbert & Wilhelm, 2011, p. 23).

Finally, it should be noted that extreme solutions (a system resistant to the crisis that does not perform its intermediary role adequately, or a system that develops quickly, but often experiences crisis) should be avoided.

CONCLUSION

The established research framework, based on the analysis of the selected banking crises in order to determine their identical causes and substantive differences and examine measures for addressing the crises, which actually determine the length and depth of the problems, opened many theoretical and practical issues and dilemmas. The study of key aspects of banking crises, in line with modern trends on the financial market, confirms the complexity, importance, and relevance of the subject matter.

This paper has pointed out that the banking crises are an integral part of the development of banking systems in the modern environment, which can be characterised as complex, dynamic, heterogeneous, uncertain, and unpredictable. Comparison of the selected systemic banking crises has pointed to the following conclusions:

- The largest number of analysed crises has taken on a systemic character. Only the crisis of individual banks in Denmark did not grow into systemic, because financial and regulatory reforms ensued at the first indications of changes in the macroeconomic environment. Essentially, quick regulatory action stopped the spread of the crisis to the banking and real sector.
- Along with the banking crisis, currency crisis emerged in the Scandinavian countries. Unlike these countries, Japan did not face currency crisis, due to huge foreign exchange reserves, which prevented the currency run.
- History of banking problems in the Scandinavian countries is very similar to the problems of Japanese banks. However, compared to Japanese banks, these crises were resolved quickly, because state intervention followed as soon as the first bank entered into a problem. This made the costs of restructuring problem banks in these countries significantly lower, compared to the Asian economies and Japan. During the Scandinavian crisis, the credibility of government carte blanche guarantees prevented the run on domestic bank deposits in a timely manner. On the other hand, in Japan, a hundred percent deposit guarantee was introduced late, practically at the height of the crisis, which led to frequent runs on bank deposits.
- In addition to currency crises, Finland and Sweden faced significant macroeconomic decline, despite rapid intervention and effective resolution of problems in the banking sector. Compared with the Scandinavian countries, the growing number of non-performing loans and slowness in resolving the issues in problem banks are the most important reasons for prolonged recessive trend of the Japanese economy.
- Finally, a global conclusion is that there are identical causes of the emergence of analysed banking crises. These are: financial

liberalisation, unaccompanied by adequate regulations; aggressive lending, caused by the abolition of quantitative restrictions on bank operations and increase of competition on global markets; and inadequate management of growing business risks, which caused an increase in the share of non-performing loans in total bank loans.

Based on these conclusions, it can be stated that, despite the identical causes, the analysed crises differed in the length and depth of the negative effects on the financial and economic system. This was primarily caused by the speed of the measures taken to solve them, which confirms the initial hypothesis.

By analysing the causes of the current *Subprime* crisis and comparing it with past crises, it can be said that there is certain qualitative and quantitative matching between the standard causes of banking crises, such as growth in stock market indices and real estate prices. The consequences of the previously analysed crises have shown that disorders can be very serious, depending on the severity of the initial shock to the financial system and the response of regulatory institutions. If standard causes of banking crises are ignored, the current crisis is different from the previous ones in respect of causes (financial innovation, securitisation), and in terms of the speed of transmission of the negative effects of real and monetary developments on the world economy.

Summarising the conclusions outlined above, it can be said that the current situation requires a revision and reform of the regulatory environment and better coordination of regulatory frameworks in specific countries in order to ensure systemic stability of the banking and financial sector in the uncertain future period. At the same time, banks need to improve the practice of measuring and managing growing risks, operate in compliance with ethical standards, ensure greater liquidity, and increase the amount of capital.

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КОМПАРАТИВНА АНАЛИЗА УЗРОКА И ПОСЛЕДИЦА РЕПРЕЗЕНТАТИВНИХ БАНКАРСКИХ КРИЗА

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Сажетак

Кризе банака представљају саставни део развоја банкарских система у савременом пословном окружењу, које се знатно разликује од оног у прошлости. Савремено пословно окружење се може окарактерисати као динамично, турбулентно и неизвесно и као такво довело је до релативизирања специфичне позиције банака и афирмисало је знатно активнији однос банака према окружењу.

Банкарске кризе имају дугу историју, са већим или мањим последицама на финансијски и реални сектор. Током 1990-их година XX века, финансијске кризе у којима је банкарски сектор имао кључну улогу, а макроекономске последице биле оштре и дуготрајне, постале су честа појава. Настанком актуелне Subprime кризе, актуелизована је проблематика управљања банкарским кризама и стимулисана систематичнија анализа нестабилности банкарских система широм света. Практично, оног тренутка када је пословање банака поприлило глобални карактер и банкарске кризе су постале глобална појава.

Имајући у виду неспорно значајну улогу банака за функционисање укупних економских токова, веома је важно обезбедити њихово успешно пословање и тиме очувати системску стабилност. Иако су се током времена издвојили одређени кључни узроци настанка банкарских криза, попут финансијске либерализације, агресивног кредитирања и пораста неперформансних кредита, евидентно је да свака нова криза проширује листу узрока насталих поремећаја. У том смислу, секјуритизација кредита и неконтролисана трговина дериватним инструментима, као раније непознати узроци, иницирали су актуелну Subprime кризу.

Решавање банкарских криза може бити мање или више успешно, што првенствено зависи од брзине предузетих мера за њихово заустављање. Стога, постоје и разлике у дужини и дубини њихових негативних ефеката. Другим речима, последице криза могу бити веома озбиљне, што зависи од јачине иницијалног шока за финансијски систем и реакција регулаторних институција.

Имајући у виду наведено, у раду се, анализом изабраних репрезентативних криза, испитују традиционални узроци банкарских криза и ефекти актуелних кретања у финансијском окружењу на способност банака да ефикасно послују. Стога је кључни циљ рада да се утврде идентични узроци и суштинске разлике између анализираних криза и преиспитају мере за њихово решавање, јер од брзине предузетих мера зависи и интензитет трајања негативних последица на финансијски и привредни систем.