

## TYPES OF FINANCIAL CRISES

**MERI BOSHKOSKA**

FULL PROFESSOR, PH.D., FACULTY OF ECONOMICS – PRILEP  
UNIVERSITY “ST.KLIMENT OHRIDSKI” – BITOLA, REPUBLIC OF NORTH MACEDONIA  
meri.boskoska@uklo.edu.mk

### **Abstract**

*In the context of globalization and internationalization of the financial markets, issues resulting from financial crises are becoming increasingly serious and substantial, creating a lot of discussion among experts, worldwide. Many studies have attempted to investigate what measures can be taken to detect and prevent crises before they devastate the economies. This paper examines some of the most significant types of financial crises according to their origin, including banking, currency, and debt crises in order to draw lessons from their occurrence. The analysis is done by systematic and comparative analysis of relevant scientific literature which refers to the different types of financial crises and their consequences.*

**Keywords:** twin crisis, debt crisis, banking crisis, currency crisis, securitization, financial innovation.

**Clasificare JEL:** F440, E320

### **1. Introduction and context of the study**

The financial crises are old economic phenomenon, but they continue to surprise the politicians, fiscal and monetary authorities, economic researchers and financial market players. The recent global financial crisis had far-reaching consequences for the entire real economy because of its depth and interconnection with economic and social players. Today's scientific attention is focused on the origins and types of the crises, probable indicators of the problems, and recovery options (Ilic, 2013).

A common feature of the modern financial crises in developing countries is emergence of massive inflows of foreign capital and expansion of domestic banking sectors. But the consequences of these crises are also common, which have consisted of a sharp decline in the economic growth of developing countries, losses in output, high fiscal costs, and in some cases a slow recovery of their economies. These crises also caused major international changes in the movement of capital, which in some cases required the assistance of international financial institutions to limit the sharpness, cost and transmission of financial problems.

Economists who deal with the analysis of financial crises believe that they have two basic dimensions: the first is the financial dimension, and the second is the psychological dimension of the existence of panic, which is usually a driving factor for their escalation. When these two dimensions collide, then financial problems begin to arise in the country and ideal preconditions are created for the occurrence and transmission of the crisis from one country to another.

Despite the fact that financial crises shared certain characteristics, they come in a variety of types and this is the main reason why most researchers of financial crises focus on explaining the different types of financial crises. Analysis of different types of financial crises will help to identify and properly implement appropriate techniques and measures for effective management of financial issues. Therefore, the main idea of this research paper is to analyze the most common types of financial crises, which still remain a challenge for many researchers. Having in mind the severity of the crises, this analysis is essential in order to be able to recognize and prevent the future financial crisis.

The rest of the paper is organized as follows: in the first section, a short literature review on different types of financial crisis is presented. The second section focuses on explaining the different types of financial crises according to their origin. The last section offers concluding remarks and suggestions for further research. The scope of the research will cover the explanation of the mentioned objective and will be based on the existing knowledge that occurs on different types of financial crises and their consequences.

## 2. Literature review

Financial crises are not a new phenomenon, but what is remarkable is that the same elements appear across all types of crises. Financial innovation and worldwide financial market integration have resulted in the introduction of some new factors that, despite their similarities, distinguish the modern crises from the crises in the distant past. Money transfer and the transmission of crises from one country to another are elements that are much more significant than other factors whose effects were previously expressed.

Many practitioners and academics indicated that understanding and classification of the financial crisis is crucial in determining the best strategies for detecting, managing, and perhaps preventing the future financial difficulties. Different techniques of classifying financial crises have emerged from scientific researchers. Some studies categorize financial crises into types based on their origin and extent, while others divide them into categories based on the causes of crises. Although financial crises can take many different forms, Racickas, E. and Vasiliauskaite, A. (2012, p.32-33) point out in their study that it is extremely difficult to assign a crisis to a specific type because various types of financial crises frequently interrelate and escalate from one to another.

A series of recent studies has indicated that, the word "financial crises" refers to a banking crisis, a debt crisis, and/or a foreign currency market crisis. In this context, we would like to bring up a quote from Claessens, S and Kose, M according to which: "Crises are, at a certain level, extreme manifestation of the interaction between the financial sector and the real economy" (Boshkoska, Lazaroski, 2018, p.1-2).

In their research study, Gaber, S. and others (2015) focused on four types of financial crises: banking, currency, debt, bubbles and stock markets downturns and they examine the primary subject of every crisis, from its origin through its influence on the economy.

Further, the research conducted by Shuhao, W. (2021) is focused on explaining five different types of financial crises, including banking, currency, public debt, inflation and balance of payment crisis. The author concluded that appropriate monetary and macroeconomic policies provide the foundation for detecting and managing future financial instability.

Based on the analyses of Claessens, S. and Kose, M.A (2013, p.11), there are generally two types of crises: the first group includes currency and sudden stop crises, which are defined using strictly quantitative definitions, while the second group includes debt and banking crises, which are characterized using qualitative and judgmental analyses. According to these authors, speculative attacks on the domestic currency can lead to devaluation or severe depreciation, resulting in currency crises. When faced with a currency crisis, monetary authorities are required to act with large-scale spending on foreign exchange reserves, major interest rate increases, or capital controls.

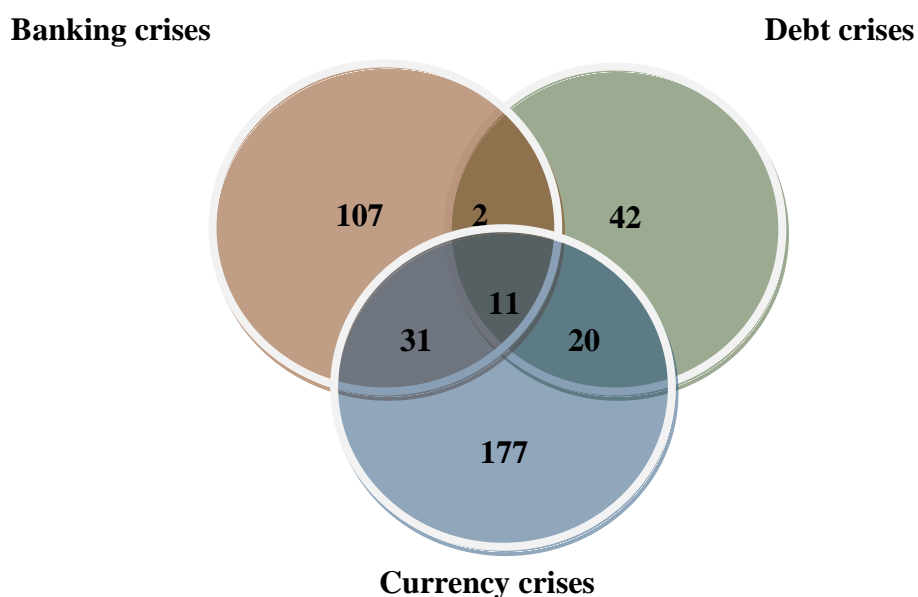
In their later research, authors Claessens, S. and Kose, M. (2013) concluded that despite the fact that financial crises can take many different forms, the literature has focused on four basic types: currency crises, sudden stop (or capital account or balance of payments) crises, debt crises, and banking crises.

Researchers Laeven, L and Valencia, F (2018, p. 9-11) define the currency crisis as a nominal depreciation of the currency compared to the American dollar. They use two criteria to determine whether depreciation meets this definition:

- A year-on-year depreciation of at least 30%; and
- A rate of depreciation that is at least 10% higher than the previous year's rate.

The different types of financial crises identified by these authors in the period between 1970 and 2017 are presented below (Figure No.1).

Figure No.1. Financial crises: types and numbers (1970-2017)



Source: Laeven, L and Valencia, F (2018): “Systematic Banking Crises Revisited”, IMF Working Paper, WP/18/206, p.11.

Figure No.1 presents the number of different types of financial crises, within the period of time that is being considered. The authors findings indicated that there were 53 twin crises (when debt and currency, banking and debt or banking and currency crises exist at same time in a certain country) and 11 triple crises (when the countries are at the same time affected by bank, currency and debt crisis). The currency/banking and currency/debt crisis pairs are more common than the banking/debt crisis pair among twin crises. (Laeven, L. and Valencia, F. (2012, 2018).

Driven by the theoretical and empirical findings, our research focuses on explaining the most common types of financial crises in the last fifteen years. The next section will explain the basic characteristic of the banking, currency and debt crises.

### 3. Identification of financial crises according to their origin

#### 3.1. Banking crises

Financial crises have been an unavoidable aspect of the banking industry. Bankers and financiers generally acknowledge that it is foolish to believe that such catastrophes can ever be avoided in the global banking industry. Excessive euphoria, weak regulatory monitoring, poor

accounting, and, in many cases, liquidity and solvency problems of large financial institutions may all be seen in a number of financial disasters over the last 40 years.<sup>1</sup>

In times of banking crisis, the financial sector faces a sudden withdrawal of bank deposits, a sharp rise in interest rates for those customers who are late or do not meet their credit obligations, large capital losses resulting in public intervention, bankruptcy or forced mergers of major financial institutions (Boissay, F., Collad, F. and Smets, F, 2013, p.8). In the economic literature, banking and currency crises are often referred as "twin crises". The temporary link between these two types of crises, as well as the similar causes that give rise to them, suggest that it is important to know the vulnerability of the banking sector in order to assess the risk of a possible currency collapse.

Starting in the mid '80s of the last century, due to the frequent presence, banking crises broke out in the forefront of international experts. The unfavorable conditions from the banking issues for a very short period of time multiplied and became one of the main obstacles for the stability of the exchange rates, causing an increase in the sharpness of the currency falls.

When explaining banking crises, it is good to emphasize the order of occurrence of events in order to single out those factors that contribute to the occurrence of these crises. If the beginning of the banking crisis is marked by problems in the operation of banks and unnaturally large withdrawals of deposits, then changes in bank deposits are events that can be used to mark crises periods. In case the banks are not able to satisfy the clients' claims, or if there is a suspicion of such a scenario, the situation worsens because the clients try to withdraw as much money as possible. In such mass withdrawals of deposits, banks are not able to deliver the funds to their customers. To solve this problem, banks can decide to sell their investments. But selling in times of crisis is an inappropriate timing for banks to reach cash, which increases the likelihood of bankruptcy in the banking sector. In this context we can mention the case of Greek banks. Namely, the fear that Greece will not be able to pay its obligations increased the panic among the citizens who in the period from November 2014 to 2015 withdrew a record 45 billion euros. Then, at the beginning of 2017, in just 45 days, 2.5 billion euros were withdrawn (Durden, T, 2017).

It is much more difficult to identify banking crises, primarily due to the nature of the problems, but also due to the lack of relevant information. Although data on bank deposits are available in most countries, most banking problems are not the result of liabilities on the balance sheet side. Banking problems often result from long-term deteriorations on the assets side, for example, a collapse in real estate prices or an increase in bankruptcies in the non-financial sector. In this case, changes in asset prices, large increases in the number of bankruptcies or fluctuations in the real estate market can be taken as factors that mark the beginning of the banking crisis.

The so-called systemic banking crisis is mentioned by a number of economic theorists who analyze financial crises. In their extensive research, Sufi, A. and Taylor, A. (2021, p.7) point out that a country's corporate and financial sectors face with significant events of default during a systemic banking crisis, and financial institutions and corporations have great difficulty fulfilling contracts on time. Mass withdrawals of deposits by group of depositors have initiated certain crises, but the majority of them are the result of the issues that systemically important financial institutions are experiencing because their failure could seriously threaten the stability of the financial system.

According to Leaven and Valencia (2008, p.5), in the event of a systemic banking crisis, the country's corporate and financial sectors are unable to meet their obligations on time. As a result of this circumstance, all or most of the total banking capital has been depleted. An increase in real interest rates, a slowdown or outflow of capital, and a drop in asset prices, particularly capital and real estate, can all contribute to this scenario. In their next survey, in addition to financial shocks they will include substantial political intervention in the banking system as an additional requirement that must be met for crises to be classified as systematic banking crises (Table 1). The

---

<sup>1</sup> <https://knoema.com/infographics/xflgvk/40-years-in-financial-crises>

year in which these conditions are met is considered by these authors to indicate the start of a systemic banking crisis. (Boshkoska, Lazaroski, 2018, p.4).

Table No.1 Systemic banking crises, 2007-2011

| Country     | The beginning of the crisis | A year when the crisis grew into a systemic one | Extensive liquid support | Significant guarantees for liabilities | Significant restructuring costs | Significant supply of funds | Nationalization |
|-------------|-----------------------------|---|--------------------------|--|---------------------------------|-----------------------------|-----------------|
| Austria     | 2008                        | 2008  | *                        | *                                      | *                               |                             | *               |
| Belgium     | 2008                        | 2008  | *                        | *                                      | *                               |                             | *               |
| Denmark     | 2008                        | 2009  | *                        | *                                      |                                 |                             | *               |
| Germany     | 2008                        | 2009  | *                        | *                                      |                                 |                             | *               |
| Greece      | 2008                        | 2009  | *                        | *                                      | *                               |                             |                 |
| Исланд      | 2008                        | 2008  | *                        | *                                      | *                               |                             | *               |
| Iceland     | 2008                        | 2009  | *                        | *                                      | *                               | *                           | *               |
| Kazakhstan  | 2008                        | 2010  | *                        |  | *                               |                             | *               |
| Latvia      | 2008                        | 2008  | *                        | *                                      |                                 |                             | *               |
| Luxembourg  | 2008                        | 2008  | *                        | *                                      | *                               |                             | *               |
| Mongolia    | 2008                        | 2009  | *                        | *                                      | *                               |                             | *               |
| Netherlands | 2008                        | 2008  | *                        | *                                      | *                               |                             | *               |
| Nigeria     | 2008                        | 2011  | *                        | *                                      | *                               | *                           | *               |
| Spain       | 2008                        | 2011  | *                        | *                                      | *                               |                             |                 |
| Ukraine     | 2008                        | 2009  | *                        |  | *                               |                             | *               |
| UK          | 2007                        | 2008  | *                        | *                                      | *                               | *                           | *               |
| USA         | 2007                        | 2008  | *                        | *                                      | *                               | *                           | *               |

Source: Laeven, L and Valencia, F (2012): “Systemic Banking Crises: An Update”, IMF Working Paper, WP/12/163. p.6.

Table No.1 covers a total of 17 countries over a period of four years, from 2007 to 2011. It can be concluded that in Nigeria, Ireland, the United Kingdom and the United States all five conditions are met, and in most other countries four of the five banking policy measures have been taken, thus classifying these crises in the category of systemic banking crises. The following are the start dates for the elaborated crises: The crisis in the United States and the United Kingdom started in 2007, the crisis in Nigeria started in 2009, and the rest of the crises began in 2008. During the first year of the crisis, banking systems in each of these cases displayed substantial signals of difficulty, prompting government involvement. According to the definition provided by Leavan and Valencia the crises reached systemic proportions in 2009 in Greece, Germany, Ireland, Denmark. Mongolia, and Ukraine, in 2010 in Kazakhstan, and in 2011 in Spain and Nigeria (2012, p.7).

If a systemic banking crisis occurs, governments are implementing a number of schemes to assist troubled banks that are "too big to fail". The term "too large to fail" refers to a business that is so intertwined with the financial system or economy that its demise would be disastrous. The term "big" refers to a company's presence across many economies rather than its size. Otherwise, the negative consequences would have been far more damaging to individual economies, particularly in developed countries with well-established banking systems. In fact, rich countries have been hit more severely than developing and underdeveloped countries in the recent wave of banking crises.

These types of crises usually end with the closure, takeover, or integration of troubled banks or government interventions in financial institutions. The banking crises not only affects the banking system in one country, but can also jeopardize the macroeconomic stability of the country

in case one bank's problems extend to other banks if they are suspected of having loans with the bank facing such problems (Krugman, P. and Obstfeld, M. 2000, p.662).

### 3.2. Currency crises

Currency crises are a result of speculative attacks on the domestic currency resulting in a decline in its value. Monetary authorities, in the face of a currency crisis, are forced to intervene by spending large amounts of foreign exchange reserves or by significantly raising interest rates.

The speculative activities of the participants in the foreign exchange markets are related to the assessment that the value of the exchange rate will change in the near future. If the participants in the foreign exchange market estimate that there will be a decrease in the value of the domestic currency, then they increase the demand for foreign currency in order to make a profit by selling the foreign currency at a higher price after the change in the value of the exchange rate. For example, if 1 euro = 61.5 denars and if the speculators estimate that there will be a decrease in the value of the denar (1 euro = 71.5 denars), they will increase the demand for euros so that after the change of the exchange rate, they can make a profit by selling the euros from 10 denars for one euro. The opposite situation will arise when speculators assume that the value of the currency will increase (Miljkovic, D. 2007, p. 340).

Various authors began their analyses of the origins of currency crises by discussing the so-called trilemma, or the government's decision between three policy goals: independent monetary policy, a fixed exchange rate, and free capital flows at the same time. Setting fixed exchange rates helps to ensure the stability of the exchange rate regime and open capital markets. If this policy is implemented, the monetary policy becomes secondary to achieving the two objectives. On the other hand, if government is committed to pursue an independent monetary policy while allowing open capital markets, the exchange rate will have to move freely, implying that there will be no exchange rate stability. Finally, if the government chooses to pursue independent monetary policy and exchange rate stability, it forfeits the potential benefits of unrestricted capital flows and integration with international capital markets. (Boshkoska, Lazaroski, p.3)

Previous research showed that countries rarely confronted the harsh polarized binary options that the original trilemma anticipated. Countries follow the “Generalized Trilemma Configuration,” which includes partial financial integration, controlled exchange rate flexibility, and a degree of monetary independence. Understanding mixed regimes is difficult because there is no one way to describe and measure the degree to which the three Trilemma variables are present. However, the Trilemma remains a powerful paradigm because policymakers are constrained by a lack of independent policy instruments (Aizenman and Ito, 2012, p.2).

Theoretical literature on currency crises can be divided into three generations and they are elaborated in the following section.

#### 3.2.1. First-generation models

The first generation models for currency crises was first developed by economic theorist Paul Krugman and later simplified and expanded by Flood and Garber (Burnside, C. Eichenbaum, M. and Rebelo, S., 2007).

The emergence and development of crises in Mexico, Argentina, and Chile in the late 1970s and early 1980s motivated economic theorists to develop first-generation models for currency crises (Dabrowski, M, 2002, p.17). According to these theorists, currency crises occur as a result of the inconsistency between the expansionary monetary policy and the fixed exchange rate in small open economies. In this case, governments face the inevitable trilemma of macroeconomic policy.

According to Krugman, P. (1979, p.11) currency crises occur as a result of problems in the balance of payments of individual economies. Dabrowski, M (2002) emphasizes that the central

bank will be able to maintain a fixed exchange rate as long as it has foreign exchange reserves. When the government uses foreign exchange reserves to defend the expected or actual depreciation of the currency, then it is normal for foreign exchange reserves to decline. Before they are completely exhausted, speculators begin speculative attacks on the domestic currency because they know that the government will run out of reserves to defend the domestic currency exchange rate. In such a situation, the economy becomes a victim of speculative attacks on foreign exchange reserves, and when due to reduced foreign exchange reserves the central bank can no longer defend the exchange rate of the domestic currency, so then there is an unexpected devaluation.

Krugman, P. (1979) presents a model in which the fixed exchange rate regime is an inevitable target of speculative attacks. The government defends the exchange rate with foreign exchange reserves. As economic participants change the structure of their portfolios from domestic to foreign currency, so the central bank must reduce its reserves to prevent speculative attacks. The onset of these crises is possible when economic participants assume that the government has abandoned the fixed exchange rate and, in anticipation of devaluation, convert their portfolios from domestic to foreign currency by purchasing foreign currency from central bank reserves. Reserves decline until they reach a certain critical point, when the fixed exchange rate can no longer be maintained and it is abandoned.

### 3.2.2. Second-generation models

Characteristic of the second-generation models is that they explain how the crisis is transmitted from one country to another and emphasize the fact that the consumption of foreign exchange reserves is not the main cause of currency crises as actually claimed in the first generation of models.

A more comprehensive description of the second-generation model about the causes of occurrence of the currency crises can be found in the research conducted by Babic and Zigman (2001, p. 4). According to their analysis:

*“The second-generation model indicates that the currency crises occurred because of: coherent self-fulfilling expectations, rational herd behavior and contagion. Coherent self-fulfilling expectations depend on multiple equilibria in the equations of exchange rate and monetary policy (as well as other policies) and various triggers that can range from political scandals to negative official statistical reports on the economic activities. Speculative behavior on foreign exchange markets, involving approximately the same number of optimistic and pessimistic participants regarding the exchange rate movements, may lead to stabilization of the exchange rate movements. However, if the number of pessimistic participants expecting a devaluation of the national currency prevails for any reason, they will cause a devaluation by their actions in the market”.*

In finance, herding happens when investors make decisions as a result of imitation of the action of others rather than the behavior of the market. Even if it is rational herding, herding generates market instability.

Finally, the probability of contagion effects is emphasized in a second type of model. The transfer of the currency crisis from one country to another can be the result of several possible scenarios. For example, the existence of an economic event (war, oil price shock, etc.) that is common to a particular geographic region or group of trading partners may, at the same time, affect multiple economies by transmitting individual shocks through trade channels. Furthermore, in the event that countries have similar macroeconomic characteristics (high unemployment, etc.) or have established trade relations, devaluation in one country may cause devaluation in neighboring countries or in countries that are trading partners with the country where there is a crisis (Esquivel and Larrain, 1999).

### 3.2.3. Third-generation models

The core argument of the third model is that because they borrow in foreign currency and lend in local currency, banks and enterprises in emerging market economies have clear currency mismatches on their balance sheets. Since their income is tied to the production of non-traded items whose price, measured in foreign currency, declines after devaluations, banks and businesses are exposed to credit risk. Furthermore, banks and businesses finance long-term projects with short-term borrowing, are also vulnerable to liquidity shocks. (Burnside, Eichenbaum and Rebelo, 2007, p.5)

According to these models, when there is vulnerability in the banking and financial sector in the country, there is a reduction in the amount of available loans that companies can receive and the likelihood of a crisis increases. They suggest that the currency crisis is due to a combination of several factors: high debt, low foreign exchange reserves, declining government revenues, rising expectations for devaluation, and limiting domestic borrowing (Burnside, C., Eichenbaum, M and Rebelo, S (2007).

The third generation models advises monetary policy makers in individual countries to implement a policy of limiting lending in the context of the functioning of imperfect financial markets. When firms face limited revenue in the domestic market, they may be forced to accumulate large amounts of foreign-denominated debt. The central bank may deepen the crisis, by further restricting the investment of companies, in conditions when the amount of available loans on the domestic market depends on the nominal interest rate.

According to representatives of the third generation models, the increase in interest rates can, to a large extent, affect the amount of borrowing and further limit the access that companies have to financial capital. When lending is too sensitive to interest rates, then raising the nominal interest rate can be detrimental, as it will affect the economy's production capacity by suffocating investment. In this situation, however, there is an alternative strategy for the central bank, which refers to reducing interest rates to encourage investment and revive the economy in a particular country.

According to other theorists, if the central banks, by printing money, finance the troubled financial institutions, then there will be a currency collapse caused by this policy of the banks. Furthermore, McKinnon and Pill (1997) explore the role that capital inflows play in an economy with an unregulated banking sector and present problems of moral risk and deposit insurance. In this case, on the other hand, capital flows can lead to over-borrowing, consumer boom and excessive current account deficit. Such excessive borrowing leads to appreciation of the real exchange rate, loss of competitiveness and stagnation of economic growth. In this situation, as well as due to the weak banking sector, maintaining a fixed exchange rate becomes even more difficult and may lead to possible devaluation of the domestic currency.

Economic research on capital flows points to another potential source of volatility; and that is the sudden cessation of capital inflows. The problem of a sudden turnaround in capital flows is much greater when it comes to a developing country with high indebtedness and when the debt structure is for the most part short-term. In such a case, the sudden cessation of capital inflows leads to a massive depreciation of the domestic currency.

Namely, the thirdgeneration models studies the effects that the banking sector and the volume of capital inflows cause during the occurrence and aggravation of the currency crisis. Also, this generation models, through the use of moral hazard problems, asymmetric information and the sudden reversal of capital inflows are used to explain the 1997-98 Asian crisis.



### 3.2.4. Debt crises

External debt problems date back to the 1970s, when developing countries were unable to repay their debts, whether domestic or foreign (Racickas, E. & Vasiliauskaite, A., 2012). Developing countries, which lacked capital, began to use foreign capital in order to achieve higher rates of economic development. The result was an increase in indebtedness, problems with external liquidity, as well as a decline in the living standards of the population.

The causes and consequences of the debt crisis of third world countries have kept the attention of many economists around the world for more than a decade. Its origins lie, in part, in the international expansion of American banking organizations during the 1950s and 1960s of the last century, caused by the rapid growth of the world economy, including developing countries. This trend continued in the '70s when in the developing countries a growth rate of gross domestic product of about 6% per year was observed. This growth created new US corporate investments in these markets, which were monitored by international banks to support their activities. During this period, the primary motivation for the overseas expansion of American banks was the search for new markets and profits. Such movements were strongly influenced by the structural changes in the domestic American market. Namely, American commercial banks lost their share in domestic savings and capital markets, and were also afraid of reducing or disappearing loans.

In 1973, the price of oil began to rise sharply and this trend continued throughout the decade as it accelerated the borrowing process. This price change caused serious problems in the balance of payments in developing countries, which were especially manifested through the increase in the costs of oil and imported products. Developing countries faced a balance of payments deficit, which necessitated their financing from external sources. Borrowing from international banks was inevitable.

During the oil boom, government spending in developing countries increased, but only a small fraction of it could be described as productive investment. Under such conditions, governments borrowed from abroad to support their fiscal expansion. They also printed large amounts of money to increase emission profits. This government policy has caused higher inflation and increased external debt.

The biggest beneficiaries of this increase were the OPEC member countries, which made large profits from the sale of oil on the international market. In the '70s. For years, these countries were characterized by poorly developed financial systems, so the cash inflows from oil sales could not be rationally placed by their banks. Based on this fact, petrodollars were invested in large private commercial banks in developed countries, which increased the financial power of these banks. At the same time, banks were lending money to developing countries facing capital shortages. Third world countries, despite their increased indebtedness, entered into new loan agreements to settle existing debts. It is interesting that, in some cases, the new funds were used only to service the interest on previous loans. Thus, before the first oil shock, the external debt of developing countries was about 100 billion US dollars, and by the end of 1982 it exceeded the amount of over 600 billion US dollars.

The deals contained a variable interest rate clause that caused the so-called interest rate shock in 1978/79, which was conditioned by the large US budget deficit and the restrictive monetary policy of the US Federal Reserve. The result was higher interest rates on the international financial market, which (nominally) increased from 6% to 12%, and later even to 18%. In addition to rising interest rates, the value of the US dollar has also risen, forcing developing countries to repay their debt at much higher interest rates and in much more expensive dollars. This situation influenced the creation of the problem of over-indebtedness of third world countries (Fiti, T., 2003 p. 31).

Problems with over-indebtedness are not unique to the last century. Namely, the consequences of the American financial crisis from 2008/09 are felt by the countries of the old

continent, primarily because the European banks had placed their funds in the American troubled banks. Unpaid mortgages in the United States have caused a shortage of funds in banks, leading to deepening already high budget rates and increasing public debt in EU member states. Although, with the establishment of the monetary union, rules were adopted to limit the budget deficit and public debt, they were not respected. In the Eurozone, public debt increased from 85.3% at the end of 2010 to 87.2% at the end of 2011. Excessive budget deficits have put countries in a particularly vulnerable position facing recession.

## 5. Conclusions

The goal of this research was to analyze the different types of financial crises according to their origin. Three main types of crises can be identified based on the literature that we reviewed – banking, currency, and debt crises. Depending on the type of financial crises, one or more of the following factors are frequently associated with occurrence of the financial crises: mass withdraws of bank deposits, fluctuations in real estate market prices, increased number of bankruptcies in the banking sector, speculative attacks on the domestic currency, problems with external liquidity or rising country indebtedness.

Based on the analysis of the causes of the mentioned types of crises, we can conclude that every economy, regardless of its degree of development, needs to establish a flexible, reasonable, appropriate and disciplined monetary and fiscal policy in order to respond appropriately to future financial turbulence.

This research represents the basis for our future study which will focus on comparative analysis of the more significant types of financial crises in the period from the 1980s through the recent global financial crisis. Such an analysis will contribute to identifying the similar features, various effects of the crises, and will help in early identification of the financial instabilities before they cause severe disruptions in the international financial market's operation.

## 6. Bibliography

- [1] Aizenman, J. and Ito, H. (2012): “Trilemma Policy Convergence Patterns and Output Volatility”, NBER Working Papers Series, WP 17806. Available at: [https://web.pdx.edu/~ito/NBER\\_WP\\_w17806.pdf](https://web.pdx.edu/~ito/NBER_WP_w17806.pdf).
- [2] Amaded, K. (2021): “Banks that are too big to fail”, The Balance. Available at: <https://www.thebalance.com/too-big-to-fail-3305617>.
- [3] Babic, A. and Zigman, A. (2001): “Currency Crises: Theoretical and Empirical Overview of the 1990s”, Croatian National Bank, Zagreb. Available at: <https://www.hnb.hr/documents/20182/121879/s-005.pdf/be89a7e8-41eb-4af4-bd7d-d77af7dcb7bd>.
- [4] Boissay, F., Collard, F. and Smets, F. (2013): “Booms and banking crises” BIS Working Paper, No.545. Available at: <https://www.bis.org/publ/work545.pdf>.
- [5] Boshkoska, M. and Lazaroski, S. (2018). "Leading Factors Of The Global Financial Crisis – The Us Evidence," *Annals - Economy Series*, Constantin Brancusi University, Faculty of Economics, vol. 5, pages 4-13, October.
- [6] Burnside, C. Eichenbaum, M. and Rebelo, S. (2007): “Currency Crises Models”, The New Palgrave: A Dictionary of Economics, 2nd Edition. Available at: <https://www.kellogg.northwestern.edu/faculty/rebelo/htm/currency%20crisis%20models%20Ed.pdf>
- [7] Claessens, S. and Kose, M.A. (2013): “Financial Crises Explanations, Types, and Implications”, IMF Working Paper, Issue 028, ISBN: 9781475561005, Available at: <https://www.elibrary.imf.org/view/journals/001/2013/028/article-A001-en.xml>.
- [8] Claessens, S. and Kose, M.A. (2013): “Financial Crises: Review and Evidence”, Central Bank

Review, Vol.13, pp.1-23. ISSN 1303-0701 print 1305-8800 online.

[9] Dabrowski, M. (2002): “Currency Crises in Emerging-Market Economies: Causes, Consequences and Policy Lessons”, Case Reports, Center for Social and Economic Research, Warsaw. Available at: [https://www.case-research.eu/sites/default/files/publications/rc51\\_0.pdf](https://www.case-research.eu/sites/default/files/publications/rc51_0.pdf).

[10] DeRosa, F.David (2001): “*In Defense of Free Capital Markets*”, Bloomberg Press, 2001.

[11] Durden, T. (2017): “Greek Bank Run Re-Accelerates: Massive Deposit Withdrawals Despite Capital Controls”, Talk Markets. Available at: <https://talkmarkets.com/content/global-markets/greek-bank-run-re-accelerates-massive-deposit-withdrawals-despite-capital-controls?post=122588>.

[12] Esquivel and Larrain (1999) “Explaining currency crisis” Development discussion paper, No.666, Harvard University.

[13] Eurostat (2012): “Europe in figures: Eurostat yearbook 2012”, EU.

[14] Fiti, T. (2003): *Macroeconomics: Basic of Economics*, Faculty of Economics – Skopje, University St.Kiril and Metodij – Skopje.

[15] Gaber, S., Gaber-Naumoska, V., Naumoski, I. and Gruevski, I. (2015): “The Comprehension of the Financial Crises”, IJSBAR, Available online: <https://eprints.ugd.edu.mk/14659/1/5063-IJSBAR-Vol24%2CNo7%282%29.pdf>.

[16] <https://knoema.com/infographics/xflgvk/40-years-in-financial-crises>

[17] <https://www.zerohedge.com/news/2017-02-16/greek-bank-run-re-accelerates-massive-deposit-withdrawals-despite-capital-controls>

[18] Ilić, M. (2013). “Razvoj globalne finansijske krize i utjecaj na promjene u finansijskom sustavu i gospodarstvu”, *Oeconomica Jadertina*, 3 (1), 88-103. Available at: <https://hrcak.srce.hr/108669>.

[19] Justin, P. (2010): *Business Environment: Text and Cases*, 3ed, McGraw-Hill Education Private Limited, New Delhi.

[20] Kindleberger, Charles and Aliber, Robert (2006), “*Najveće svjetske finansijske krize*”, Poslovni dnevnik, Masmedia, Zagreb.

[21] Krugman, Paul (1979), “A Model of Balance-of-Payments Crises,” *Journal of Money, Credit and Banking*, Ohio State University Press.

[22] Laeven, L and Valencia, F (2008): “Systemic Banking Crises: A New Database”, IMF Working Paper.

[23] Laeven, L and Valencia, F (2012): “Systemic Banking Crises: An Update”, IMF Working Paper, WP/12/163. Available at: <https://www.imf.org/external/pubs/ft/wp/2012/wp12163.pdf>.

[24] Laeven, L and Valencia, F (2018): “Systemic Banking Crises Revisited”, IMF Working Paper, WP/18/206. Available at: <https://www.imf.org/en/Publications/WP/Issues/2018/09/14/Systemic-Banking-Crises-Revisited-46232>.

[25] McKinnon and Pill (1997), “International over borrowing: decomposition of credit and currency risk”, [www.econ.stanford.edu](http://www.econ.stanford.edu).

[26] Memisevic, S. (2010). “Monetarno okrupnjivanje na evropskom tlu – Ekonomska i monetarna unija”, Sektor za strategija i politika integracija, Vijeće Ministara, Direkcija za evropske integracije, Bosna i Hercegovina.

[27] Miljkovic, D. (2007): *International Finance*, Faculty of Economics, University of Belgrade.

[28] Miljkovic, Dejan (2007): “Megunarodne finansije”, Ekonomski fakultet – Beograd.

[29] Mishkin, Frederic (2004): “*The economics of Money, Banking and Financial Markets*”, 7<sup>th</sup> ed., The Addison-Eccles series in economics.

[30] P.Kalonga Stambuli, “Causes and Consequences of the 1982 World Debt Crisis”, University of Surrey, UK, October 1998.

[31] Paul Krugman and Obstfeld, M. (2000), “*International Economics: Theory and Policy*”, 5<sup>th</sup> Addison-Wesley Publishing Company.

- [32] Racickas, E. and Vasiliauskaite, A, (2012): Classification of Financial Crisis and their Occurrence Frequency in Global Financial Markets, *Social Research*, Nr.4(29), 32-44, ISSN 1392-3110.
- [33] Shuhao, W. (2021): “Exploring the Principles and Laws of Financial Crisis: from the Subprime Mortgage Crisis to New Crown Epidemic”, *Advances in Economics, Business and Management Research*, Volume 16, 136-139. Available at: <https://www.atlantispress.com/article/125954234.pdf>.
- [34] Sufi, A. and Taylor, M.A. (2021): “Financial Crisis: A Survey”, Working Paper No.2021-97, Becker Friedman Institute, Chicago, IL.