

FINANCIAL MECHANISMS OF FINANCIAL CRISES

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The actuality of this article is determined by the need to demonstrate that financial crisis is not just an issue of economic disaster caused by contagion effect of financial cataclysm, expressed in national currency depreciation, depletion of foreign exchange reserves, mass bankruptcy of financial institutions, non-market entities insolvency and impossibility of sovereign debt servicing, but a special investment opportunity with associated characteristics of profitability. Central aims of article is research of financial crisis essence, investment mechanisms linked to existing fundamental laws of its conduct and determination of investment opportunities manifested in various segments of financial market and related sectors. Main research methods were: systemic analysis, statistical analysis, monographic and logic synthesis, etc. Main scientific results obtained in the article, due to research are to identify, analyze and demonstrate investment opportunities of international financial crisis and financial crises in Moldova.

Keywords: *financial crisis, financial contagion, investment opportunity.*

Actualitatea prezentului articol este determinată de necesitatea de a demonstra, că perioada crizei financiare nu este doar una legată de dezastrul economic cauzat de efectul de contagiune al cataclismului financiar, exprimat prin deprecierea monedei naționale, epuizarea rezervelor valutare, falimentul în masă a instituțiilor financiare, insolvența entităților pieței nefinanciare și imposibilitatea deservirii datoriei suverane, ci și o oportunitate investițională specială cu caracteristicile aferente de profitabilitate. Articolul are ca scop central cercetarea esenței crizei financiare, a mecanismelor investiționale existente legate de legitățile de bază ale derulării ei și determinarea oportunităților investiționale manifestate pe diferite segmente ale pieței financiare, precum și în domeniile conexe. Metodele principale de cercetare au fost: analiza sistemică, analiza statistică, sinteza monografică, logică etc. Principalele rezultate științifice obținute în articol, urmare a cercetării, sunt identificarea, analiza și demonstrarea oportunităților investiționale ale crizelor financiare desfășurate atât la nivel internațional, cât și în Republica Moldova.

Cuvinte-cheie: *criză financiară, contagiune financiară, oportunitate investițională.*

Актуальность этой статьи определена необходимостью продемонстрировать, что финансовый кризис не только связан с экономической катастрофой, вызванной поражающим эффектом финансового катаклизма, выраженным в обесценении национальной валюты, истощении валютных резервов, массовом банкротстве финансовых институтов, несостоятельности нерыночных структур и невозможностью обслуживания государственного долга, но и специальной инвестиционной возможностью с связанными с ней характеристиками доходности. Главной целью статьи заключается в исследовании сущности финансового кризиса, его инвестиционных механизмов, связанных с существующими фундаментальными законами его протекания и определении инвестиционных возможностей проявленных в различных сегментах финансового рынка и смежных отраслей. Основные методы исследования: системный анализ, статистический анализ, монографический и логический синтез, и т.д. Основные научные результаты, полученные в статье, вследствие исследования должны выявить, проанализировать и продемонстрировать инвестиционные возможности финансовых кризисов на международном уровне и в Республике Молдова.

Ключевые слова: *финансовый кризис, финансовая инфекция, инвестиционная возможность.*

JEL Classification: *G01, G17, G21.*

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Introduction. *Financial crisis* is a dysfunction of financial market mechanisms, a situation in which financial institutions or asset value falls quickly [4].

In essence, this is a profound disturbance of financial mechanisms, monetary system, which is manifested by revenues and expenditures inconsistency, exchange rate instability and fall, mutual non-payment of economic agents, monetary circulation nonconformance to fundamental laws [18].

As characteristics of financial crisis are speculative financial activity dominating on investment, massive fall of securities prices, retention of settlements with collapse amplification of payment system, obtaining losses in mass on derivatives market, liquidity reducing of financial market and institutions amplified by domino effect, banking panic and bankruptcy of banks [8].

Financial crises are associated with a drastic investor confidence diminishing in financial system. Amid these capitals are withdrawn declining credibility in financial markets and repatriated to their country of origin. This effect generates a liquidity decrease of transactions on stock market, pressure on exchange rate (due to higher demand for currency required for conversion of amounts disinvestment of capital market) and a pressure on interest rate (easing of demand for securities) [8].

One result of financial crisis is financial contagion – local and / or internationally process related to spread of oscillations of economic variables, which can be expressed by editing exchange rates, quotations of securities, interest rates (profitability) of loan instruments and capital flows [17].

Romanian researcher Cristian Paun indicated several forms of financial crisis contagion [8]:

- *Contagion effect of "monsoon" type*: is given by existence of global imbalance that affects a large number of countries (even can be affected all countries) connected to global economy.

- *Contagion effect of „spillover” type*: is given by existence of crisis in a particular country then propagated to a large number of countries. Kaminsky and Reinhart called this contagion effect based on *fundamentals based contagion*.

- *Contagion effect of „residual” type*: refers to changes in economic situation of different countries exceeding expectations of operators on market that are visible in residual value ("white noise") of models tested correlations between various savings (between one country and more countries or between a country and world economy).

- *Contagion effect of volatility*: it is a type of contagion recorded mainly on capital markets and is considering increasing volatility spread (associated with rising investment risk) of capital market on other capital markets. This type of contagion is among the most studied forms in literature.

Financial contagion can occur both at national (domestic) and international level and it is necessary to trigger the existence of causal connections of different nature.

The first is related to so-called real shocks, which refers to real sector of economy and *intermediate specific shocks* – a shock hits a bank or a financial non-banking institution and is specific by its origin for bank or financial institution. One of the most frequently studied real channels of contagion are *trade links*, which is manifested by failure of payment by contractual partners [1].

In the era of globalization *causal financial links* can be considered as important channels of contagion diffusion caused by high levels of financial market integration between affected economies [1].

Conceptual approaches of investment operations related financial crises. Investing activities during financial crisis is to acquire prudently suitable assets to a minimum values or, in the language of stock market operators, „at the bottom of the trend". The basic principle of this activity is to find those assets whose intrinsic value is significantly higher than their market value.

Intrinsic value is the amount considered on evaluation of available facts, to be the "true" of an item [11].

This is a factual value of asset or company based on actual value perception by taking into consideration all aspects of business, as well as tangible and intangible factors [20].

Some bibliographical sources instead prefers that term to use *fundamental (fair) value* of assets underlying company value based on determining of its financial condition. This notion is particularly present during fair value compression of companies in times of crisis. It has forecasting character and is based on analyst assumptions on possible increase in company value far exceeded manifestations of the crisis [19].

Investment activity in post-crisis period is based on consequences of contagion effect of financial crisis, evidenced by substantial increase in interest rates on bank deposits, loan instruments profitability, lower prices for real estate and other assets.

Basic directions of investment activity related financial crises. Investment opportunities related to financial crisis may be expressed in complex form through the following model:

$$y = \{v, b, c, d, i, r, a\} \quad (1)$$

where:

y – profitability of investments during financial crisis;

b – profitability increase of investments due to banking crisis;

c – profitability increase of investments due to capital market crisis;

d – profitability increase of investments due to public debt crisis;

i – profitability increase of investments due to real estate crisis;

r – profitability increase of investments due to manifestations of financial crisis in real economy;

a – profitability increase of investments from other manifestations of financial crisis.

Banking crisis is a form of financial crisis and is defined as a situation where in a country enters more banks become unable to meet its payment obligations in short term (liquidity crisis) or bank liabilities are lower than bank's assets which result in bank insolvency [8].

In early 2015 in Moldova was triggered banking crisis. The drawback of liquidity in domestic banks has caused increased interest rates on time deposits (Figure 1).

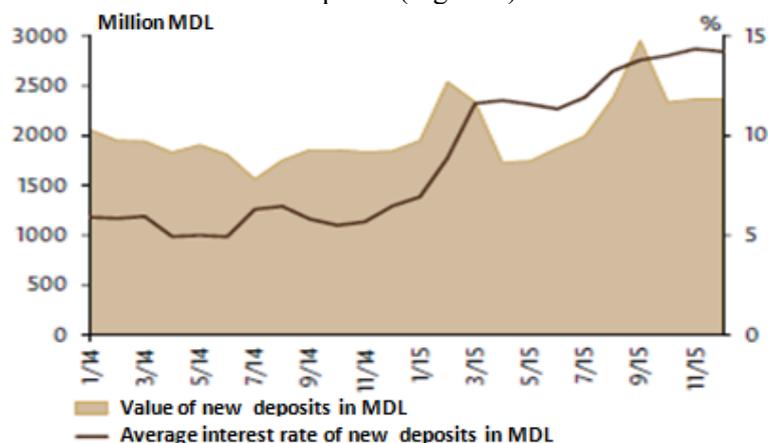


Fig. 1. Dynamics of volume and average rates on term deposits in MDL

Source: [9].

Thus, average interest rate on deposits in national currency rose to peak of 14.6 percent (November 2015), higher than in December 2014 by 2.2 times. The weighted average rate of deposits in national currency in 2015 accounted for 12.1 percent, higher than in 2014 by 2.1 times.

Currency crisis occurs on currency exchange markets, in critical situations, which is characterized by significant fluctuations of the exchange rate and leads to depletion of foreign exchange reserves of countries [12].

In the case of financial crisis caused by Brexit (referendum on Britain's membership of European Union) could serve as refuge currency US Dollar, while Euro and Pound were vulnerable currencies. For example, we can examine the evolution of exchange rate of Euro against USD (Figure 2).



Fig. 2. EURO evolution towards USD during 01.06.2016-30.06.2016

Source: [3].

Analysis demonstrates the feasibility of a speculative operation based on conversion of US Dollars per Euro on 06/23/2016 at the rate of 1 EUR = 1.1389 USD and carrying out inverse operation to 06/27/2016 at the rate of 1 EUR = 1.0998 USD [3].

Such ahead, being used an amount of 1 million EUR could bring a profit of 39100 EUR, equivalent to 356.8% of annual profitability. *Debt crisis* was defined as situation (or serious suspicion of occurrence thereof), when large debtors or even a country is unable to meet its debt service and repay payments relating thereto [14].

In the field of *public finance* it manifests itself by sudden reducing of international reserves volume and stabilization public funds, emergence and deepening of budget deficit problem, tax collection reducing, state budget funding and spending reducing, rapid growth of debt [13].

In Moldova in 1998 during financial crisis yields of state securities (SS) increased compared to 1997 by 5.7 p.p., constituting 29.0% and in 1999 – 28.5% [5].

A similar situation occurred on SS market in 2015 (Figure 3).

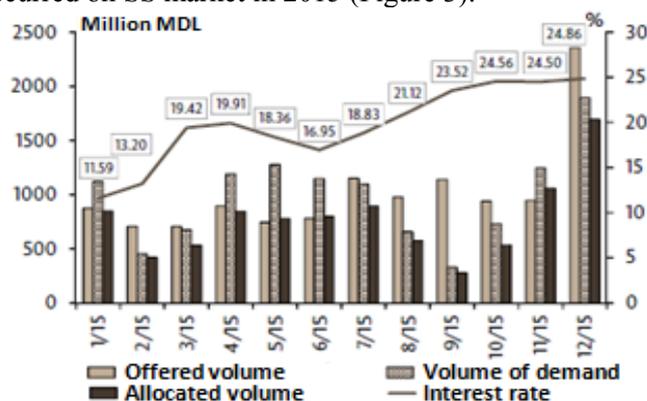


Fig. 3. Monthly dynamics of SS primary market indicators

Source: [9].

In December was reached the maximum yields of SS 24.86%, an increase compared to January by 13.27 p.p.

In 2002 *foreign debt crisis* occurred in Moldova. It is a situation where a country is unable to meet its debt service and repay the associated rates [8].

Non-payment of sovereign debt (collapse) occurs when a country can no longer pay its debts. Although devaluation and the collapse of voluntary decisions can be taken by the Government, they are often perceived as involuntary result of changes in investors leading to a sudden stop of capital entering in country or surge of capital leaving the country [2].

In 1997, Moldova issued bonds on international market worth \$75 million. with 9.87% interest rate, maturity term of these bonds was June 2002, date on which they were to be repurchased by Moldova international financial markets.

At the same time, reducing expenses on servicing external debt in 2002, the Ministry of Finance during 2001 carried out several transactions to repurchase Eurobonds with a discount on the secondary market, thereby reducing basic amount to \$ 39.87 million.

Because of difficult financial situation of Moldova and given that in 2002 expenditures on servicing external debt had to reach its climax, ie 24.5% of the revenue base of state budget and 3.6% of GDP, Moldova has initiated a process of negotiations reconsidering bond buyback [6], [7].

Thus, following negotiations between Moldovan authorities and holders of Eurobonds was obtained consent of latter to restructure Eurobonds remaining until 2009. Ie those investors were given an investment opportunity for a period of seven years at interest rate of LIBOR + 4.625 basis points, which at that time was imposed constituted approximately 6.8%, which is lower than initial interest rate but relatively high for the international capital market [6], [7].

Stock market crisis is a sudden and stable drop of exchange quotations in a relatively short time [16].

Such a phenomenon was observed in 2009, when Moldova was affected by the international financial crisis through stock market, which was expressed through uneven dynamics of volume and number of transactions on secondary market of corporate securities (shares) (Figure 4).

Thus, a significant decline in both measures was held in 2009, continued in 2010, respectively from 219,8 thousands to 5,7 thousands transactions, in volume from 621.9 million MDL to 559.1 million MDL. And in 2011 volume of transactions amounted to 1940.0 million MDL, which represents an increase of 1380.9 million MDL or 2.5 times. In our opinion, this was an opportune time to invest in shares of domestic companies that were heavily undervalued compared to their real value.

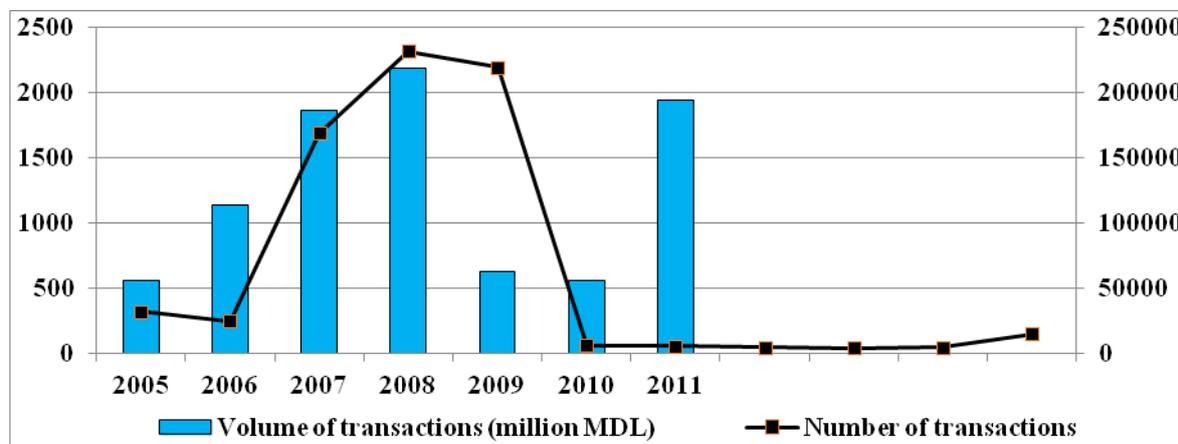


Fig. 4. Dynamics of transactions in secondary stock market during years 2007-2011

Source: [10].

Subprime mortgage crisis is a form of financial crisis, characterized by sharp rise in defaults on mortgage loans with a high level of risk, increased alienation of bank's pledged assets and reducing prices of securities secured by subprime mortgages caused by these processes.

This kind of crisis was unleashed in the US in 2007 [15].

Research conducted in January 2011 US showed that from June 2006 (when real estate prices have reached maximum) until November 2010 prices decreased by 26%, ie a degree higher than the Great Depression of the years 1928-1933 (25.9%). This can be seen as an investment opportunity on a long term.

Also, due to financial crisis of 1998 from Moldova real estate prices plummeted and in 1999-2000 were recorded the minimum of time to present.

Conclusions. Mentioned facts demonstrate the existence of great opportunities for investment activities ongoing of financial crises, which can provide a profitability essential increase of financial investment to periods of stability. However, it should be noted that such investments submit increased exigencies to skills and competence of investor and compliance with prudential norms.

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