

## FINANCIAL MARKETS

**THE AMERICAN REAL ESTATE BUBBLE -  
TRIGGER FOR THE BIGGEST FINANCIAL  
CRISIS IN THE LAST CENTURY**

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**ABSTRACT:** In the last years the world was faced with the worst economic crisis since the 1929-33 period which led to a significant decline in the global economy, tumultuous aftershocks of the financial and the real sector, significant shaking of confidence in financial institutions and the stability of the global financial system. This paper focuses on the crisis that began in the summer 2007 in U.S. when increased delinquency on the secondary market for mortgages created turbulence in the secondary market of securities covered by residential credits. The turbulence was then expanded to other markets securities, money market, financial institutions, with knock-on effects that are transmitted to all market segments, by involving the real sector. Under its global effect, this crisis was characterized as comprehensive, complex and global. This paper intends to detect the origin of this crisis and to analyze the potential government mistakes that led to the current world economic state.

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### Introduction

According to the Committee of the National Bureau of Economic Research (NBER) for determining the U.S. dates of business cycles, the top of the economic activity in the U.S. was reached in December 2007. The peak signifies a turning point, when the expansion (in the United States that lasted from November 2001 to December 2007, i.e. 73 months) goes into recession. The official date for the start of the recession in the U.S. is set to be December 2007. When the United States face a recession, almost no country can remain immune to the economic turmoil in the world's most powerful force, so folk said: "When America sneezes, the whole world gets the flu".

The reasons for the occurrence of the worst crisis of 21st century are numerous, among which the most important are: imbalances in the global economy; non-monetary financial institutions and their "innovative" financial instruments; credit expansion and balloons economies; non-transparency and corruption scandals;

weaknesses in the regulation and deregulation; investors impossibility to make the optimal choice in continuity.

The crisis of the 21st century or “Great Recession” arose as a consequence of the collapse of the housing market in the U.S. (real estate bubble) followed by a long period of rapid growth in construction and real estate prices. The financial markets participants were too long surrounded with macroeconomic environment followed by high growth of global production, low inflation and very low interest rates (Jurgen Stark, 2008). Expansionary U.S. monetary policy (Alan Greenspan move to reduce the interest rates in order to help surpass the recession and provide prosperity), Japan and a small degree of countries in the Eurozone led to the emergence of global excess liquidity. In the context of research into the causes of the global economic crisis, one should bear in mind the fact that recent years have seen changes in the relative power between different regions and countries. Some Asian countries (China and India) realized exceptionally high rates of economic growth in the last decade. National savings rate in China exceeded 50 % of GDP and result in real investment boom. The growth of export power increase its foreign reserves 2000 billion USD (China is declared for a country with the largest export in 2009 who was in excess of 1.2 trillion, before Germany 1.12 trillion U.S. dollars). Balance of payment surpluses among highly developed countries were present in Germany and Japan. Contrary to this, U.S. and UK have created deficits and low savings rates nationwide for years. Moreover, in the last 20 years, many countries modernized their financial systems and created new channels that linked savings and investment (Petkovski, 2009).

Accordingly, the normal assumption is excess liquidity spillover from countries with great wealth, in the form of various types of investments in the U.S., UK and other highly developed countries. That happened. The huge influx of capital into the U.S., kept interest rates at a low level (Fiti, 2009: 257). Seductive and attractive financial instruments, available through securitization, increased appetite of investors and opened the possibility for heating the financial markets and real estate markets. Nobel laureate Stieglitz says: “ ... due to the fact that many people in Europe believed that U.S. banks are good, and the regulation strong, managed even half of the repacked bad “toxic” loans to be re-exported to other countries (Stieglitz, 2008).

### **The origin of the financial crisis**

Financial innovation were mainly manifested by extremely high expansion of instruments for the transfer of credit risk which enabled transfer, hedging and active trading with the credit risk as a special type of funds. Emergence, development and diversification of the various types of non-monetary financial instruments (mainly formed by the banks themselves) are considered the primary generators of the current global financial and economic crisis. The versatility of these instruments is mainly due to the formation of many non-monetary financial institutions - despite pension funds and investment trusts - the so-called private equity funds (who invest in risky capital in entrepreneurial firms in their higher developmental stages), then the so-called sovereign wealth funds (funds through which countries with high surpluses in the balance of payments, that in a significant proportion of revenues derived from oil - Russia , Norway , China - invest in the securities of the largest world companies), hedge funds (highly speculative funds), banks in shadow and others.

The structure of the U.S. financial system had drastic changes in the last 10-15 years in terms of reducing the traditional banking activities in account for the increased

aggressive activities of investment banks, shadow banks and others. The combined balance of the biggest investment banks in the U.S. is 4 trillion (these are not subject to supervision by the central bank), which approaches the value of the balance of the five biggest traditional banks which is 6 trillion (Krugman, 2009).

What is interesting in this situation is how these shadow banks or so-called shadow banking system and how they form their innovative financial products? Banks today, as a consequence of the imposed restrictions on the maturity of deposits, are forced to think of other ways to increase their liquidity, which began to securitize their loans or turning them into securities - for example, to issue long-term securities based on subprime mortgages. In the U.S. the securitization of these loans is registered as off-balance transactions, which mean records outside of regular bank accounts. How is this achieved? Banks create special financial institutions (entities) or shadow banks (eg, Special Purpose Vehicles - SPVs, further Structured Investment Vehicles-SIVs, etc.) and transmit their own portfolio loans or securities issued based on their loans. In this way, by removing their own loans from balance sheets, banks have tried to transfer the risk of these loans to the shadow banks that have been established by themselves and which are not subject to the supervision of the regulatory authorities. The financial crisis has shown that such bank activities present most damage to themselves. Newly established shadow banks created their assets through the issuance of short-term securities, which, however, were generally bought by banks founders of these institutions (Fiti, 2009: 260).

The bank that approved the residential mortgage loan (originator) transfers the loan to the shadow bank (issuer) which issues securities so-called MBS (mortgage-backed securities) based on that loan broadcast, and then sold them to interested investors. The interest rate that shadow bank gets by the debtor is used to pay off the mortgage investor - one who bought the MBS security. The same applies to the principal debt. Furthermore, based on the MBS paper is issued a new security so-called CMO (Collateralized Mortgage Obligations). In this type of security the issue is about "another additional layer between the final and ultimate debtor and creditor or depositor". Namely, the classification is as following: class A (worns lowest interest), class Z (which carries the greatest interest) until to the class R (paper holder who gets what's left - a lot or nothing). The subordination of classes is not by the level of credit risk, but the degree of priority in repayment. The securitization of these securities was conducted in accordance with the standards of public agencies Fannie Mae and Freddie Mac, which were supposed to stimulate the housing market in the U.S. and were subject to state bailout. However, in the U.S. there were also mortgage loans that were not under the "state cap" (guarantee). These were securities with poor solvency and high risk, known as the so-called subprime mortgages, such as subprime loans who were approved for the purchase of cars, student loans, holders of credit cards (so-called ABS-assets-backed securities). In the entire portfolio of financial derivatives can be inserted and many other types of securities - the so-called structured, such as collateralized debt obligations (CDOs), which are issued on the basis of ABS securities.

Through this whole process, we can understand the complexity of the relationship mortgage debtor and final savers, awareness of the existence of numerous other financial institutions among them, not just the bank, which allows for the formation of a huge increase in debt and requirements, but also an enormous risk to the participants in these transactions. Soaring real estate prices over fair value, shooting bubbles and the dramatic collapse of important financial institutions, is just a

consequence of the complex causal relationship. However, with the collapse of a major financial corporation or bank, such as Lehman brother and Bear Sterns who wore “honest” epithet TITF (Too-important-to-fail), the first culprit to whom all attention is focused is the regulation.

TABLE 1. STAGES OF FINANCIAL CRISIS

FIRST STAGE	SECOND STAGE	THIRD STAGE	FOURTH STAGE
<i>The crisis of “Subprime” mortgage markets has grown in the Credit Crunch</i>	<i>Investment banks have felt the impact</i>	<i>Governments are Involved</i>	<i>Volatility returns</i>
<i>August 2007</i>	<i>30 August 2007</i>	<i>7 September 2008</i>	<i>4 January 2009</i>
BNP Paribas writes off receivables from three investment funds blaming the lack of liquidity in certain segments of markets for securitized securities in the United States; initiating a mass withdrawal of liquidity from the markets “asset backed securities”	UBS announces USD 690 million loss for Q3	FED buys debt from Fannie and Freddie worth USD 12,000 billion after its shares collapsed	The German government with the injection of EUR 10 billion in Commerzbank receives a quarter of Bank
	<i>24 October 2007</i>	<i>14 September 2008</i>	<i>14 January 2009</i>
	Merrill Lynch announces losses of USD 8.4 billion as a result of the crisis of the “Subprime” mortgage markets	Bank of America buys Merrill Lynch	Deutsche Bank announces EUR 3.9 billion loss
<i>10 August 2007</i>	<i>14 March 2008</i>	<i>15 September 2008</i>	<i>15 January 2009</i>
Fed injected 42 billion USD, ECB 156 billion EUR, the Bank of Japan 1000 billion JPY	US Fed and JPMorgan Chase announced an agreement for financing of Bear Stearns	Lehman Bros bankruptcy	Anglo-Irish Bank was nationalized
<i>14 September 2007</i>	<i>16 March 2008</i>	<i>17 September 2008</i>	<i>16 January 2009</i>
Bank of England saved Northern Rock with a short-term loan, initiating bank panic	JPMorgan Chase buys Bear Stearns	FED saves AIG with 85 billion USD	Bank of America announces USD 2.4 billion losses while the government U.S. agrees to USD 20 billion capital injections and guarantees USD 118 billion in losses.
<i>17 February 2008</i>		<i>25 September 2008</i>	Citygroup announces USD 8.3 billion loss and announces that the company will be split into two
Northern Rock is nationalized		Hank Paulson proposes rescue plan worth USD 700 billion	
		<i>6 October 2008</i>	
		FED announces plan of USD 900 billion available to banks in the form of short-term loans	
		<i>8 October 2008</i>	
		UK Government announces that it will save the banks and makes GBP 200 billion available to banks through special liquidity schemes GBP 50 billion to clean the balance sheets of banks and GBP 250 billion guarantee for refinancing	

Source: Financial Times, January 17/18, pp.2-3

There are two reasons for the severity of the current recession:

First, according to the IMF, the recession created by the spray in financial bubbles is sharper and last longer than recessions caused by other reasons (for example, the shocks on the supply side). The likely reason is that the pre-crisis growth is based on the illusion of growth and income is more artificial.

Second, synchronized crises (in which several major economies are also affected) are harder to solve. No country can rely on others to get out of the recession by increasing demand for its exports. The current crisis was caused by financial factors, and in the same time synchronized (Rodrik, 2009). Chronological time of crisis and corporate scandals can be seen in Table 1.

### **Monetary policy measures**

The first defensive line in terms of the financial crisis and weak economy is the interest rate policy of the independent Fed. By increasing or decreasing the quantum of reserves offered by the banking system, the Fed will be able to reduce or increase the federal interest rate, which in fact is the interest rate at which banks lend to each other. With the launch of 2007 crisis, major central banks aggressively relax monetary policies, which led to a decline in the reference interest rates. Key Fed interest rate was cut off at 5.25 % in September 2007, December 2008 it was 0 % and maintained the trend of 0-1/4 % in 2009.

However, lending was still frozen and the conditions for taking loans soured considerably, which meant a drastic increase in the cost of lending to households and firms or well known condition of "liquidity trap". The null interest rates do not mean that central banks do not have extra "ammunition" to fight deflation and recession. They are almost engaged in so-called "quantitative easing" monetary policy, meaning an increase of reserve money to purchase financial instruments or increasing their assets by increasing their monetary assets.

The profitability of the banking sector, measured by the ratio of return on capital in the U.S. continued to be low during the second half of 2009. Increased credit losses continue to be the biggest factor limiting the gains of banks. In 2009, bank holding companies broadcast a significant amount of equity. A big issue appeared during the decision results of the program to supervise capital outlook (Supervisory Capital Assessment Program-SCAP), which indicated that some companies have a need to increase or improve the quality of their capital. According to this program, in the near future Fed must perform supervision of firms with 5000 companies with capital less than 50 billion \$ in assets in order to realize the need to increase their capital as a result of losses in residential and commercial loans in that period.

In fact, some of the measures of central banks to stabilize the financial system, taking place on a global level were: expansion of deposit insurance, injecting public capital into banks, guaranteeing debt emissions by the banks and increased access to funding from central banks. This strong and amazing response - which is a sharp contrast to the failure of international coordination that made a terrible depression of 1930 - proved very effective. The major central banks globally coordinated interest rate cut of 50 basis points in October 2008 in an effort to increase liquidity and restore confidence through demounting that are determined to act aggressively in order to increase the liquidity of the financial sector. The interest rates remained constant until December 2008 in the U.S. and Japan, and until spring 2009 in the eurozone and UK. Some large manufacturers and small advanced countries with strong growth began to conduct monetary adjustment. Australia, Israel and Norway have raised interest rates. Also, authorities in China and India has raised key interest rates by the end of 2009, but it made administrative changes to tighten lending in order to reduce the expansion of loans, because of signs of rapid growth of economies.

In efforts to stabilize the financial system and their traditional role of creditor in the last resort, the Fed has developed innovative programs to ensure the well-collateralised short-term credit to the financial system. In the absence of these loans, many healthy financial institutions would have been forced to sell their assets, exerting downward pressure on prices, or driven to failure, which greatly would stimulate the crisis.

## **Conclusion**

This article is intended to detect the reasons for the appearance of the financial crises and the responses that were taken by the monetary government to facilitate the economic situation. One question pops up here. How could regulators have such flaws in the regulatory system and allowed giants such high connectivity in the financial system and leading position in the financial markets to fail? The answer lies in the inadequate and poor regulation or similar to the so-called regulatory forbearance<sup>1</sup>. The regulation does not do anything to stop the growth of multiple bubbles and to suppress excessive influx of investor optimism and spirit, that although short term wore nice profit, however on the long-term danger of wearing a big disaster.

In many cases the authorities were actually happy about the rise in prices of real estate and financial instruments and have done nothing to slow these trends, interpreting them as a sign of strength and dynamism of their economies. For example, U.S. economist Alan Blinder suggests that in the U.S., all previous initiatives for stricter regulation of financial derivatives were rejected or a significant portion of the mortgage loans were created out of the banking system, i.e. they were not subject to any regulation (Blinder, 2009).

But failure can not be attributed only to state regulators. The entire system of corporate governance and oversight collapsed. It includes, despite regulators, shareholders, creditors, accounting systems, credit rating agencies, etc. Most people, including informed insiders simply “forgot” the systemic risk that financial institutions have embraced.

However, what is most important is that the world economy still seen rapid recovery from the global crisis and immediately return to positive growth rates with positive projections for the coming years. What moved the economy in a positive direction? The answer lies in coordination and implementation of aggressive measures taken by governments in the U.S. and other countries.

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<sup>1</sup> Regulatory forbearance it is not about supervisory incompetence but, rather, the potential for a fully briefed regulator to decide not to intervene

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