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Spill-over Effects of Mortgage Credit Crisis in USA on Europe

Abstract:

Globalization and innovation, a years before, both mentioned as a major reasons for global GDP increase, last year's showed us theirs bad sides. Negative impact made by hazard behavior of US financial experts flood all over the world and everyone feel repercussion of theirs greed. The main point of this paper is US subprime mortgage crisis and its impact on Europe. Roots of crisis are shortly represented to help reader understand why effects of crisis become world's phenomenon. Examples of two major European economies Great Britain's and Germany's are used as an empirical proof for negative spill-over effects from USA on Europe. Bail-out programs, as recovery of one old and forgotten policy, are also explained here. I conclude with first effects of this bail-out programs and importance of this crisis as a perfect turning point.

Keywords: Mortgage Credit Crisis, Financial Crisis, Spill-Over Effects, Subprime Credits, Financial Derivates, Toxic Asset

1 Introduction

Not even the most pessimistic economists could expect that European economy would be negatively affected by spill-over effects of mortgage credit crisis in USA. Reason for mostly positive expectation they found in "conservative" way of thinking between investors. No one could expect that new and very risky financial products would be attractive in the European financial markets.

Partly because the business of the companies themselves from the U.S., but also because of the activities of European financial institutions in securitization, crisis almost immediately engulfed the two continents. Losses that were registered in almost all companies in the financial industry has accumulated causing serious problems. Continuous increase in the loss of the world's financial sector has reached in June 2009. the 1 trillion. Lending activity was brought to a minimal while the level of trust in banks and other financial institutions was shaken. On such an inappropriate environment investors reacted by passing funds from financial markets and that lead to even complicated situation. The increase in unemployment and poverty in the whole world contributed to the decline in aggregate demand that is still, by the usual economic developments, resulted in a drop of GDP of almost all countries (USA 2.3%, UK 5.2%, Germany 3.5%, etc. ...)[1].

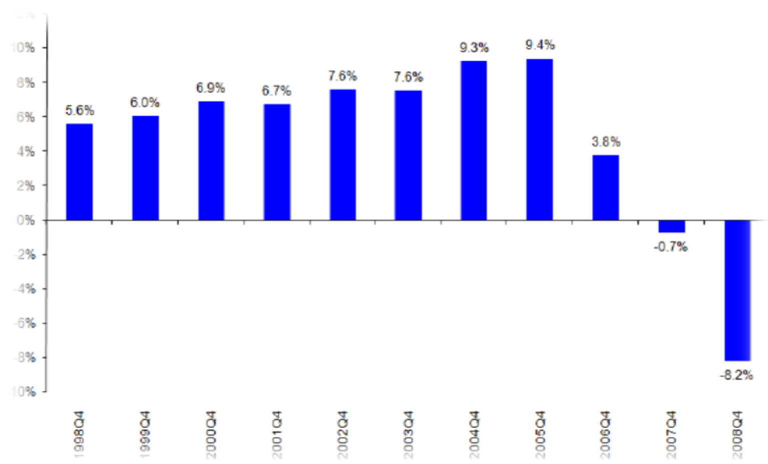
[1] Lucian A. Bebchuk, " *A Plan for addressing the financial crisis*" Harvard University, 9/ 2008, 1-13.

The whole situation seemed bad with great possibility to be even significant deterioration. The necessity of state intervention was obvious. Action plans, adopted by governments (TARP in USA, FMStG-Germany and etc…), consisted of injecting large amounts of liquid assets and enabling the banks to continue operations. Contrary to the laws of neoliberal theories active intervention of the states in market and their regulation has become a reality.

2 Roots of the Crisis

After almost nine years of continuous growth of share prices in financial markets in the United States, primarily due to innovations in the field of information technology, the value of shares started significantly to decrease and initiate slowing down of the economy. Shooting of the dot com bubble and the terrorist attacks on 11th September contributed to the increase of uncertainty and insecurity among investors who respond to this situation retreating funds from market. Such occasions indicated that the situation could be more dangerous if the confidence of major players in the financial market would disappeared. Bush's administration and above all the director of the Federal Reserve Alan Greenspan advocated for significant reduction in Central Bank interest rate as the invitation to companies and population to increase investment and consumption .The interest rate was lowered from the beginning 2001. in almost every month and for even 0.5 percentage points to make in January 2003.the historic level of 1%. Great offer of money was accompanied by significant liberalization in the requirements or credit terms. Namely, in the desire to make cheaper money productively placed on the market banks have slashed the criteria particularly in extending mortgage loans and credit history put into the background. All this, under the influence of high demand for real estate, initiated a spiral of house prices. The following graph follows quarterly increase in real estate prices for the period 1999-2005 and the decline after that which will later be explained.

Figure 1. Real Estate Prices in the USA[2].



Remarkable problem from the beginning was the fact that the biggest share in total issued credit mass were subprime loans. Neglecting this indicator ignores the fact that these debtors are less likely and that chances for foreclosure are bigger. Of such unfavorable indicators of their debtors, banks rhave

[2]Global Property Guide, available at: www.globalpropertyguide.com.

responded giving them bad conditions for loans. First of all was a hybrid interest rate which was fixed the first few years and after that period, banks were free to set it higher. To accept such a negative conditions both sides need very strong reasons. From the point of the debtor that was the only possibility for achieving "an American Dream" because of bad credit history or current credit ability. On the other hand, banks encouraged by the growth of house prices did not think about the possibility of expansion of delinquent debtors, and they considered that such a scenario could be resolved by sale of houses and they would turn a profit.

In addition, banks are increasingly relying on securitization. By this action banks moved junk assets to separate legal entity (SPV Special Purpose Vehicle) and thereby improve credit potential with reducing a risk. This phenomenon has led to the expansion of securities which had a base in subprime loans (MBS Mortgage-backed securities).Relatively new financial products were not only attractive at financial markets in the USA, but considerable volume of trade with them was a registered in stock exchanges throughout the world , especially in Western Europe, China and Japan [3].

Reflection on the economy has been extremely positive and contributed to the increase in activity and significant growth in GDP during this period. And everything proceeded in a positive direction while the banks, after the expiry of the fixed interest rate for hybrid loans, decided to change interest rates and made numerous of debtors over night unable to service debt. The rate of delinquent debtors and the number of seized houses grew rapidly. Only in 2007 seized nearly 2 million houses and most of that banks offered on the market initiating fall of property prices. Negative impulse initiated the collapse of the mortgage market and the spread the dizzying pace and crept into every pore of the financial system.Bankruptcies of banks, insurance firms and other companies which trade with the securities issued by the subprime loans have become a daily routine. Financial giants such as Bear Stears, "Lehman Brothers", and others collapsed in the first wave of the crisis initiating numerous negative externalities on others.

This was a clear signal to the U.S. government to seriously tackle the sea of illiquidity and the other difficulties which finance companies faced with. Uncertainty, the biggest enemy of investment, again played a significant role in deepening the crisis and contributed to the value of shares on stock exchanges around the world more extensive depreciated. Regardless of the fact that the crisis resulted from hazard behavior of financial institution in the U.S. the losses initiated by collapse of these institutions affected world economy[4].

3 Crisis of mortgage loans in the UK

For years, United States and Great Britain, as an image and likeness, had the same structure and business in the financial sector. With strong political support, and motivation of the Central Bank of England securitization was gaining importance, so the number and types of securitized assets were growing rapidly.

[3] A. Blundell-Wignall "The Subprime Crisis: Size, Deleveraging and Some Policy Options", *OECD Working Paper*, Dec. 2008, 1-25.

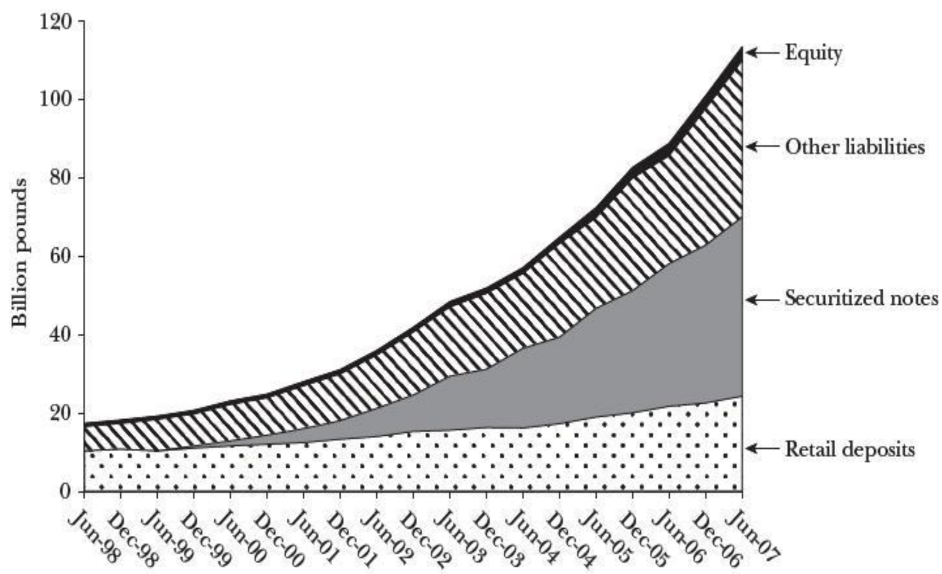
[4] Hans-H Bleuel "The Germany Banking System and the Global Financial Crisis: Causes, Development and Policy and Responses", *University of Applied Sciences Dusseldorf*, February 2009, 1-24.

The most attractive activities related to securitization of debtor a “prime” and “subprime” mortgage were performed by many banks. What is characteristic for the U.S. and Great Britain, but significantly different from the rest of the world is the fact that in these two countries a large number of mortgage loans was approved by the brokers. In this way, active analysis of the debtor and concerns on the outlook of debt repayment was put aside and the quantity of loans became priority. The market of financial derivatives in the UK was the largest in the world and the whole financial industry produced a 7% of GDP.

Decline in interest rates and a weakening of credit standards, in recent years, caused growing tendency of the population and companies to borrow. Number of credit arrangements and real estate prices kept rising (price index of real estate in the UK from 100 in 2000. reached a level of 240 in 2007.).

However, the fall in prices of real estate that occurred after that, as a result of negative impulse in the U.S., contributed to the deterioration of situation. The largest banks in the UK market, one by one, reported the liquidity problems and asked for help from the state. In its assets, these banks like U.S. banks, reported a numerous worthless securities issued on the basis of subprime mortgages. "Northern Rock", "HBOS", "Bradford and Bingley are just some of them.

Figure 2. Capital Structure of Northern Rock Bank[5].



Northern Rock Bank was eleventh largest bank in the UK with a total capital of 113.5 billion pounds. It was extremely active in the mortgage loans market what is obvious from the fact that in the mid-2007. value of approved mortgage loans was approximately 10.7 billion pounds or approximately 19% of the total value of loans granted that year in the UK. The following graph shows that from 2000. shares of these securities constantly grown. The first level is the savings deposits, which are relatively stable source of funding, with the standard participation. The second level are securities resulting from

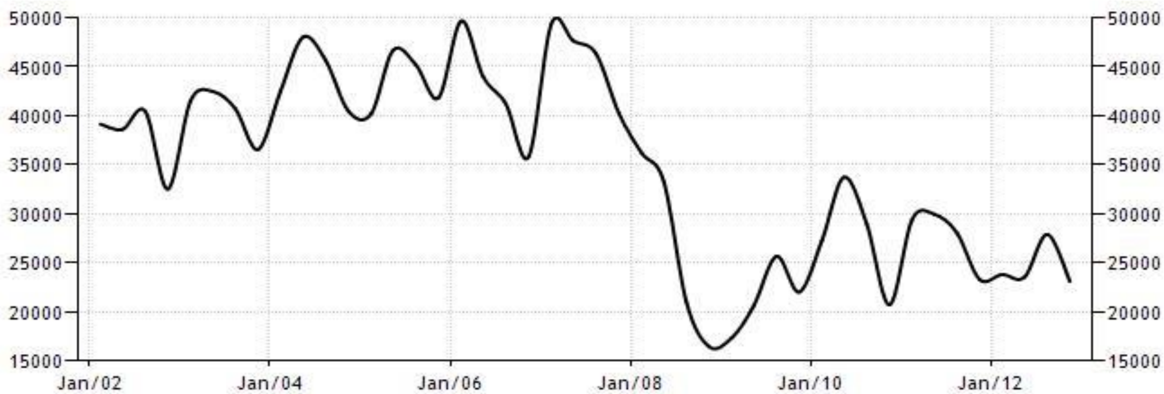
[5] Ibid

securitization of loans, which share as mention above has increased dramatically since 2000. The third and fourth levels are other liabilities and assets whose participation was standard[6].

Such a sensible structure and active participation in international financial markets caused first effects on the 17th September 2007. when bank sought the assistance of the Central Bank to be able to continue further operation. The analysis shown that the bank is solvent and that giving of guarantees by the state would be the best solution to return the trust of its clients. However, it did not show results and 21 February 2008. The Northern Rock Bank was nationalized.

Financial institutions such as "HBOS" had 36 and "Loyds" 23 billion pounds in these toxic loans. Such a structure threatened to create problems in the operations of these institutions. The first problems that "HBOS" reported on February 2008. were related to loss based on securitization of 227 million pounds. Unfortunately, the loss did not stop at that figure but increased and in July the same year reached a level of 1.09 billion pounds. After that, it was clear that nationalization is the only solution, which happened in October of that year when "Loyds TSB took over the control package. Besides manufacturing, significant effects were also reflected in unemployment, which is currently at the level of 7.9%. As regards the structure, the worst situation was in financial and construction sector that had permanent growth since 2008. In addition, unskilled and young employees paid highest price of global economic crisis.

Figure 3. United Kingdom Housing Index[7]



It was clear to everyone that situation is alarming. The necessity of serious reaction at all levels was highly desirable. In order to avoid blocking the operations in the financial sector, which is caused by liquidity problems in banks, permanent injections of money by the Central Bank of England have been required. This would help banks to continue issuing credits and customers would be confident in banks. In addition to motivate savings, the value of guarantees on savings deposits increased from 35,000 to 50,000 pounds.Government plan and plan of committee for the economic crisis were to create an atmosphere for increased investment and consumption. By expansive monetary policy of lowering the Central Bank interest rates (0.5%) and expansive fiscal policy of lowering tax rates they created the

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[6] H. S. Shin "Reflection on Northern Rock: The Bank Run that Heralded the Global Financial Crisis", *Journal of Economic Perspectives*, Winter 2009, 101-119.

[7] UK Housing index available at : http://www.tradingeconomics.com/united-kingdom/housing-index

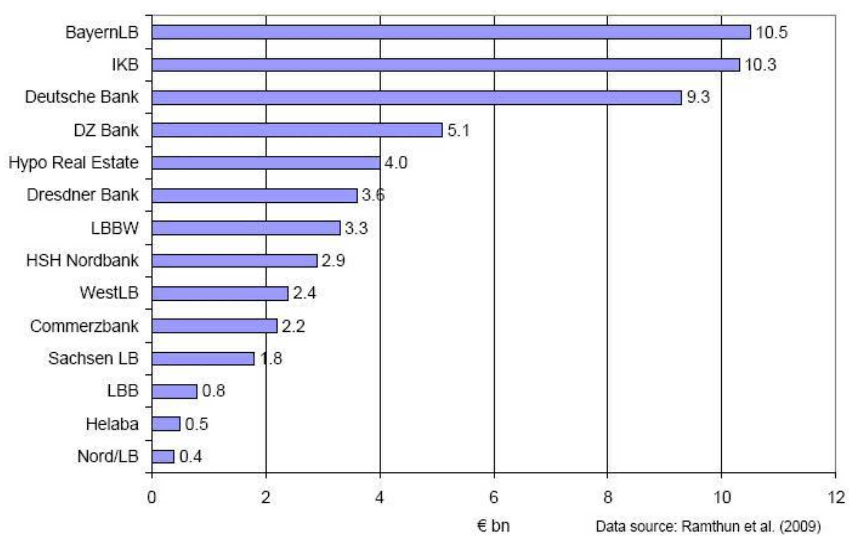
climate for increased investment of business sector.Economists believe that after each crisis, during which there is a depreciation of real estate prices, this market has the slowest recovery since the speculators and ordinary resident's opinion is that prices will fall more and they wait a moment when prices reach a minimum. In this waiting period prices are left fall free. From the figure number 3. we can see that there is some signs of recovery but it is obviously far from desired level.

4 Impact of the Crisis on Germany

Development of financial sector of Germany in the previous years did not follow the progress of the financial systems of the countries from the region. Mortgage market in Germany, which exists for about 200 years, was significantly different from the Anglo-Saxon type of the mortgage market. In addition to that, German banks have issued bonds (Pfandbriefe) since the 1990s based on mortgages, but in contrast to the methodology of the USA and UK, mortgages were not transferred onto the legal entity, but kept for themselves. Those bonds are sold with the low interest rate, because they are really liquid and safe, since their correctness is being constantly monitored by the bank.

Besides, for a bond issue, it is necessary to get a state's consent, which can only be received if all the legal rules are being followed and if it is allowed for the state to monitor the bonds all the time. Regardless of the previous, the financial sector does not play significant role in the domestic product of Germany, meaning that direct contribution of financial industry to the GDP of the country is not significantly big. Compared with other countries from the region and world, it is clearly seen that its minor contribution to the added value of GDP is only 5%. The following graph confirms that empirically[8].

Figure 4. Losses of banks in Germany in 2009



From the previous statement it could be badly concluded that any positive and mostly negative change in this sector would not have negative consequences on the real economy. On contrary to that, since the

[8] S. Kooths and M. Rieger, "Germany Losses its Wallet but Escape Major Harm" *DIW Berlin Discussion Paper 825*, Oct 2008, 1-30.

beginning of the financial crisis, financial sector suffered from the loss of about 38 billion Euros, which is by some forecasts about 10% of the overall loss.

Real estate market has stayed pretty much stabile, with growth of only 5,9% in the period from 2003 to 2006, on contrary to the markets of other country from the region, where the prices have grown rapidly (Ireland 153%, Greece 148% and Spain 132%). That was one of the main reasons that enabled German economy to save itself from the first wave of the crisis caused by the rapid downfall of the real estate prices. However, the second wave, which was created as a consequence of bankruptcy of big investment banks and loss of the value of the bonds, which were issued based on the mortgages, could not left Germany immune to the global crisis.

First serious problems have been reported already in August 2008 by Sachsen LB and Deutsche Industriebank AG. Sachsen LB reported losses, which were the consequence of the trade with securities issued on the base of subprime mortgages, and they asked for the loan to keep its current liquidity. Later on, all the other banks one by one reported huge losses and decrease of value of equity, but first of all were BayernLB, IKB, deutsche Bank and others. Next graph shows the list of German banks that have reported hugest losses in 2008[9].

It is also important to pay attention to the distribution of the loss between three basic columns of banking that exist in German financial sector. First and third level are commercial and cooperative banks that had significantly lower losses in comparison to their market shares, which is the reflection of interests of their managers, who wanted to make lower, but more certain income. Second level are savings banks, which had disproportionally huge losses when compared to their market shares. Reason for this is their active participation in international financial market, as well as the extremely hazard behavior of their management, which is topic of discussions for a longer period of time. Forth level are specialized banks, which are the only one to make lower loss in comparison to their market share[10].

Damage that entire economy suffered directly as a consequence of loss of the financial sector (about 0.4% of its total value or 1% of GDP) is minor when compared to indirect effects of this crisis. The first step every bank takes the moment it becomes aware of its loss and possible liquidity problems is to tighten the conditions for lending and to increase the interest rate.

Such behavior results in increase in savings (in period from 2007 to 2008 saving is increased for 14.6%), but also the fall of investment from firms, as well as the investment from the population. Moreover, decrease of inter-banking loans falls that additionally complicates the situation and liquidity problems. All together it makes the number of allowed loans drastically to fall, which was the case with Germany, and that is proved by the following graph that analyses the number of approved loans to small and medium firms. However, policy makers are aware of possible consequences of the fall of

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[9] Hans-H Bleuel "The Germany Banking System and the Global Financial Crisis: Causes, Development and Policy and Responses", *University of Applied Sciences Dusseldorf,* February 2009, 1-24.

[10] Ibid.

total savings and therefore they undertook a serious action to help banks in order to enable to them doing their business normally[11].

Action plan for stabilization of financial market (Finanzmarktstabilisierunggesetz - FMStG) is developed incredibly fast and already on October 18th it was made public and applied. Basic idea of that plan was to balance money market and banks' business. Modeled according to American TARP, huge amount of money was planned to be use in that purpose, about 400 billions of Euros. First 400 billion were planned to serve as a guarantee for the assets of the bank, while the rest of it was used for the recapitalization of banks and purchase of valueless assets. Nationalization of the banks was also one of the possible solutions for the liquidity problems, so that way the state would pump liquid assets into the banking system and rehabilitate it for normal business, and in return it would get a share in the ownership. First nationalization was done with Commerzbank, when the package of 25% of equity was overtaken[12].

5 CONCLUSION

Hazard behavior of individuals on the financial market of the USA brought the mentioned sector to the complete collapse, and pulled the entire economy into a recession. Bankruptcies of investment banks and other financial organizations, involved with businesses with the new financial products, became everyday thing, while the value of these assets depreciated over night. Under the influence of spill-over effect, the negative consequences of this were felt in the entire world. Banks in UK and Germany have reported huge losses and asked for help of the central monetary institutions.

The consequences on the real sector of the economy were not absent. Stock indices reflected every vibration and pointed out the state of the economy. Daw Jones fell in November of 2008 on the historically low level of 7552. Fall of the economical activity initiated huge growth of the unemployment in the USA for 10,2%, in Euro zone 9,7%, in UK 7,8% and also in the other countries of the world.

The fact that this was the world economical crisis, and not just a small problem, made even more important the moment when it was decided about common steps for overcoming the newly emerging problem. On the other hand, conscientiousness of the policy makers about big similarity of the crisis that is happening these days and the crisis from 1929 made them more confident that the only possible solution is active role of the government. Regardless of the great resistance of the tax payers, who were supposed to carry out the burden of the stabilization programs, TARP, EFSF and other programs were accepted without any correction.

First, but small positive effects of the mentioned programs have been felt already by the mid of 2009. Banks that received the money from the TARP were able to make profit and return the loan, and the stock indices in the USA and EU have recorded the increase. However, the entire economical picture is far from ideal and it is unreal to expect any improvement any time soon.

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[11] S. Kooths and M. Rieger, "Germany Losses its Wallet but Escape Major Harm" *DIW Berlin Discussion Paper 825*, Oct 2008, 1-30.

Literature:

Books and articles:

Lucian A. Bebchuk, " *A Plan for addressing the financial crisis*" Harvard University, 9/ 2008, 1-13.

A. Blundell-Wignall "The Subprime Crisis: Size, Deleveraging and Some Policy Options", *OECD Working Paper*, Dec. 2008, 1-25.

G. Mudradoglu, "The UK of 2008: What is real and what is behavioral", *City University of London*, London, April 2009, 1-18.

Hans-H Bleuel "The Germany Banking System and the Global Financial Crisis: Causes, Development and Policy and Responses", *University of Applied Sciences Dusseldorf*, February 2009, 1-24.

S. Kooths and M. Rieger, "Germany Losses its Wallet but Escape Major Harm" *DIW Berlin Discussion Paper 825*, Oct 2008, 1-30.

H. S. Shin "Reflection on Northern Rock: The Bank Run that Heralded the Global Financial Crisis", *Journal of Economic Perspectives*, Winter 2009, 101-119.

Internet sources:

Global Property Guide, available at: www.globalpropertyguide.com.

S. Greenhill, Trend of real estate prices in UK, available at: *http://www.thisismoney.co.uk/money/mortgageshome/article-2009766/House-prices-flat-buyers-sellers-reach-stalemate-say-Nationwide.html*. Jun 2011.

Comparative analyses of negative effects of mortgage credit crisis in USA and Euro Zone, available: www.tradingeconomics.com,

Trend of GDP in UK, available at: *www.news.bbc.co.uk*