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Causes and effects of 2008 financial crisis

Term Paper presented by

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1. Introduction

Beginning in the mid 2007's the US financial market started to slide into the "worst financial crisis since the Great Depression of the early 1930's"¹ (Thakor, 2015: p.156). The domino effect of several events and occasions were leading first to a countrywide recession in the USA then later spreading globally. In the following this term paper will deal with the main causes and effects of 2008 financial crisis. Unlike other topics in literature there is no consensus about the question of guilt in this sense. Among economists there are different approaches to explain the main causes of the financial crisis. Therefore, the central ideas behind this paper are first to clarify different trigger points and secondly to answer critically the question who is to blame for it. Another part will then deal with the resulting effects for all involved parties and will show the consequences for the US and global economy. The last part will refer back to the questions posed, summarizes the main parts of this paper and will take a look in the future of the financial sector.

2. Causes

To analyze the main reasons for the meltdown of the financial sector resulting in a worldwide recession and economic crisis one have to look back into US history. A complex mix of government policy, financial market structure and the development of the real estate market in the USA were only a few of the main forces to collapse the financial sector. In the following it will be analyzed that also a mix of failed regulation and pure greed of money on side? of Wall Street bankers and investment firms enabled such a severe outcome for the global economy.

2.1 History – US government policy

After the second world war, the US government was interested to reestablish the domestic economy as well as the creation of new housing grounds. Therefore, America introduced a new lending system coming from England, called mortgage - a legal agreement between two parties which transfers the ownership of a property to a lender as a security for a loan². A mortgage allows you to loan money from a bank or other institutions in order to finance a house³. Main characteristics of mortgage loans include a specific amount of down payment, usually between 3 – 20 % or private mortgage insurance to insure repayment. A verification of employment and income are minimum requirements for taking a mortgage loan. If a mortgage borrower fails to repay the monthly rates plus interest, the exchange value of the mortgage, as in this case the property, gets into possession of the mortgage lender. Therefore, these loans were only made for prime market citizens which means a lot of citizens were frozen out of the American dream of homeownership. So back in 1992 the US government started to introduce a new lending policy to increase "the homeownership rate of low and moderate Americans"⁴. Traditional underwriting standards like down payment were relaxed and a second market for so called subprime mortgages was created. Under President Bush, the National Bank of America – the Federal Reserve, lowered interest rates

¹ Thakor (2015)

² Parkinson (2006)

³ Cambridge advanced learner's dictionary (2013)

⁴ Matthews, Driver (2016)

to 1% from 2001-2004 to again enable the dream of homeownership for middle class citizens and also to bust economic growth and development and to create new jobs during the recession of 2001. What followed was a fundamental change in the housing market. Due to low interest rates the demand for the mortgage loans increased heavily as more and more citizens saw their chance to own a house. At this time house prices were steadily rising and were expected to rise further due to increased demand in the real estate market. In the meantime, “some counties in California”⁵ reduced possible building grounds while “supply for houses is somewhat inelastic because it takes time and investment of resources to produce new homes for sale”⁶, the prices for houses rose even more.

US Banks and other investors saw their chance to gain money in the housing market. As interest rates were very low it was easy and profitable for Banks to borrow money at 1% for itself to create mortgages. In literature these loans are seen to be the starting point for the financial breakdown, but why?

2.2 US real estate crisis and housing bubble

The financial sector invented an own market to trade these mortgages. In order to obtain a profit, US banks sold these mortgages, also called mortgage backed securities, to other Banks and investors not only in America but all around the world. Against a specific fee the claim for repayment plus interest gets transferred to the buyer party. As default rates were historically very low due to high underwriting standards for mortgage backed securities and are also seen to be secure because of the rising prices in the housing market, banks and investors as well as pension and retirement funds invested in MBS as they promised steady (continuous) interest payments. The demand for these new financial products increased heavily and soon banks were not able anymore to stimulate the demand given on the market. The maximum capacity of prime mortgage takers was reached. Due to this, US banks started to issue subprime mortgages, to borrowers with no proof of income and employment, to create more mortgages for the market. Banks guaranteed low and flexible interest rates, diminishing down payments and often more than one mortgage, which enabled low and middle class Americans to borrow even more money for bigger houses they normally could not afford. In 2006 US housing prices reached their peak and “many buyers were buying not for shelter, but to resell at a quick profit”⁷. The housing boom was created. What followed next is a downward trend due to several events. Subprime mortgages default rates soon started to rise as borrowers were not able anymore to serve the monthly payments. In 2006 the Federal Reserve increased interest rates to 5,25% which caused the delinquency of even more and more loaners. Especially subprime mortgages with flexible interest rates were effected the most. Their monthly payments increased heavily as interest rates rose. The result was that these houses went into property of banks and investors who issued or bought mortgage backed securities. As houses prices were up, the banks still had the opportunity to sell their property’s with a profit, because emerging house prices protected investors from losses. But soon the house supply in the US market exceeded the demand for houses which indicated a stagnation of house prices immediately. As a

⁵ Ibit.

⁶ Ibit.

⁷ Ibit.

consequence of stagnating house prices, the value of houses in the market dropped also. The housing bubble busted and what happened next can be described as a domino-effect. Feared of a downward trend, house holders, banks and other investors wanted to get rid of their property's before losing even more money. In the subprime mortgage market, "foreclosure rates increased by 43% over the last two quarters of 2006 and increased by a staggering 75% in 2007 compared with 2006"⁸. Therefore, in 2007, "New Century Financial Corp., a leading subprime mortgage lender, filed for bankruptcy"⁹. The downward trend in the US housing market was now unstoppable. Even prime lenders got into trouble as their houses value decreased steadily. At this time, continue paying the mortgage was more expensive than selling the house. Suddenly as the riskiness of these subprime mortgages became clear, the first actors in the financial sectors were concerned about the subprime mortgage development.

2.3 The role of US investment banks – CDO's and rating agencies

The US banking and investment sector has a long history and has always had a central position in the American economy with its important Wall Street in New York. It was the time around the 80's where investment banks started to grow and expanded in America and all around the world. Numerous of banks were now big enough to go public and further enlarge their business. Through mergers and acquisitions, investment banks grouped together and soon reached a monopoly status in the US financial market where only a few huge firms influence and control the market development. Five investment banks like Goldman Sachs, Lehmann Brothers, Morgan Stanley, Bear Stearns and Merrill Lynch, only three main insurance companies like AIG and three big rating agencies: Standard & Poor's, Moody's and Fitch were dominating the whole industry.

2.4 No regulation

In 2000 US government announced the deregulation of derivatives in the financial market. As the financial sector was characterized by highly competitiveness and rather low profit margins for standard products, investment banks were encouraged to "search for new financial products, especially those whose creditworthiness not everybody agrees on"¹⁰. Based on less regulation the financial market was enabled to develop financial products with speculative character and riskiness. At this time investment bankers were given almost free space on how they have to build up their business and in which sectors they focus to speculate in. Because of the introduction of subprime mortgages in the housing market, speculation for investment banks got profitable as they created special financial products for the market. One innovation and form of speculation was that mortgage payments can be sold to other actors in the market. US banks started to sell mortgage backed securities to investment banks to sell them again to other investors. Therefore, investment banks created a new financial derivative called collateralized debt obligation (CDO). As the terms says, a CDO contains numerous debt obligations, in fact thousands of home mortgages and other loans like car and student loans. As in the financial markets are investors with different risk preferences, there is demand for different kind of yield rates. At this time existing derivatives could not meet all the investor's needs.

⁸ Thakor (2015)

⁹ Duca (2013)

¹⁰ Thakor (2015)

With CDO's there was now a possibility to serve the needs of all investors, because this derivative is divided into 3 different slices, called tranches. Investment Banks then went to rating agencies to let them evaluate the value and risk of their CDO's. The idea of pooling different loans into one product and later separate them into different tranches is that the risk gets divided and is seen to be lower than one individual mortgage loan when different kind of mortgages can be put together into one financial product. The senior tranche¹¹ is seen to be the most secure. Senior holders of debt obligations are the ones who get served the first when money repayments from mortgages and other loans get filled in. For this reason, received interest rates were comparably low but still more profitable than the 1% interest given by the Federal Reserve Bank. As this premium tranche of a CDO is characterized by a triple A rating, the highest and safest investment rating, investors with risk restrictions like pension and retirement funds were now able to invest into these derivatives. The middle slice called mezzanine tranche¹² is usually rated with A and B ratings carrying moderate interest rates as debt holders of this tranche get served secondly. The equity tranche¹³ is the one providing both the highest possible risk and highest possible interest rates in the market. Only after all investors of other tranches have being served with payments, money gets filled in the equity tranche. Therefore, rating agencies gave them the lowest possible rating grade or did not even gave a rating at all for these "junk" debt obligations. Risky investment seekers like speculative hedgefunds were typical for this kind of tranche.

In the following time the market for CDO's grew tremendously as the demand for this new financial product went global. Local banks and retirement funds from all over the world, especially in Europe, started to buy CDO shares. This means that mortgage payments from American house buyers were no longer transferred to their local lender but to banks and institutions all over the world. Investment banks received their fees for every sold CDO share and made millions of profit in this time.

The new loaner and borrower relationship also added up to a new form of complexity in the financial market. To serve the market demand, investment banks soon struggled to fill in their CDO'S with mortgages.

2.5 Relationship between Investment banks and rating agencies

The investment sector had to create new CDO's for the market. In contrast to old ones, they were now filled up with a lot of subprime mortgages containing a high default risk. In order to sell them to investors, US investment banks paid rating agencies to continue giving high class ratings (AAA) to their CDO's, although these new "toxic" derivatives were risky securities. Rating agencies not only tripled or quadrupled their profit, they also formed alliances with the big investments banks to continue their partnership. The fact that competition was high under the three main rating agencies, not giving the desired rating may have resulted that investment banks just went to another rating agency next door to finally receive their triple A rating. And the rating agencies had no liability if there their ratings of CDO's proofed wrong, to justify their rating, these agencies claimed that it is just

¹¹ Crotty (2009)

¹² Ibit.

¹³ Ibit.

their personal opinion so they cannot be blamed for it. As barely no one exactly knew what kind of mortgages and loans were bundled together in a CDO, not even the investment banks, buyers trusted rating agencies and felt secured by the rising house prices in the real estate market. As there were almost no government regulations requiring a certain amount of retained equity capital for CDO's to prepare for losses, investment banks did not care either about the risks of their CDO's and continued to sell them in large quantities, often with a single volume of more than 700 million dollars. The financial sector created a ticking time bomb and it was just a matter of time when the first losses for investors should occur before the whole financial market was ready to explode.

2.6 The role of AIG – the biggest insurance company in the world

The world's biggest insurance company, the American International group, was not only selling normal health insurances but also insurances for products of the financial market. A credit default swap (CDS) is probably the most important one. For investors who owned CDO's, credit default swaps worked like an insurance policy. An investor who purchases a credit default swap had to pay a quarterly premium to AIG. In case the investor's CDO defaults, AIG had to pay the investor out for his losses. In contrast to other insurance companies, AIG not only sold CDS to protect CDO holders but also sold them to speculators in order to bet against CDO's they did not own. And they could also sell them in huge quantities as there was no government regulations for CDS requiring to put money aside. Instead they paid huge bonuses for their employees as soon as contracted were signed. Later when lots of CDO's failed and AIG had to protect their investors, it was clear that the world's biggest insurance company could not serve their payments duties itself. Not only AIG managers were greedy to boost their profit to the top, Investment bankers were so too. The big players like Goldman Sachs and Lehman Brothers secretly bet on their own CDO's they were selling without disclosing their secret intentions to their customers¹⁴. Purchasing CDS from AIG with a volume of \$22 billion in assets, Goldman could bet against CDO's they didn't own and did get payed when they fail.

3. Consequences

3.1 The crisis

Back in 2006, when the US housing market started to collapse and prices fell tremendously, consequences for the economy as well as for US citizens had been severe. Unable to serve their mortgages, people had to leave their homes for sale. Foreclosure of houses reached 6 million until 2010. But not only people had to leave their homes, it was also the building industry and the real estate sector facing hard times as there was no longer enough demand after the bubble busted. Soon the first mortgage lending companies were sliding into bankruptcy and the subprime mortgage crisis turned into a financial crisis.

The credit markets reacted highly on the ongoing housing market recession. As more and more CDO's failed and property values oft owned houses had to be adjusted in investment firm's balances, first huge losses were generated. In 2008 two giant mortgage lenders,

¹⁴ Gordon (2009)

Fannie Mae and Freddy Mac, got taken over by the Federal Reserve due to illiquidity. Soon the first investment banks began to struggle too. First Bear Stearns was acquired by J.P Morgan later it was the famous investment bank Lehmann Brothers which first faced a tremendous fall in the stock market price, later ran out of cash to serve their clients and filed for bankruptcy. The entire banking industry was now affected and insecurity around the credit and stock market caused even more problems. Afraid that loans could not be payed back, mistrust among banks caused that they stopped making loans anymore and banks were searching desperately for money lenders. In the case of AIG, the world's largest insurance company had to be taken over by the government as they made huge losses with credit default swaps.

3.2 Investor losses

Probably the most severe consequences of the collapsing housing market and financial crisis had to face investors. Not only investment firms and hedgefunds manager made huge losses when their collateralized debt obligations and mortgage backed securities defaulted, there were also smaller institutions and private investors who placed their money in CDO's to profit from interest earnings. Especially retirement funds and public employee pensions, who invested in the most secure tranche of a CDO, almost lost all of their money.

3.3 Global recession

As the financial downturn in the US continues irresistibly, the recession now starts to spread globally. The world economy is nowadays linked together so close and interactions between companies, investors and banks increased heavily the last decades. In late 2008 the world stock market reacts to the crisis with a tremendous fall. In Europe several subsidiaries and offices of the banking companies had to close and banks in Germany for example had to be rescued by the government as they also invested heavily in American real estate securities.¹⁵ Consumers around the world consume less and spend less because they either lost money or feared to lose their jobs in an insecure development.

As a consequence of that, exports especially in the US collapsed, which affected suppliers from China and Japan. Highly dependent from the US market, Chinese manufacturers faced problems as their major markets stopped to invest and reduced demand. Only in China more than 10 million migrant workers lost their jobs.¹⁶ In the meantime, unemployment's rates in the US also "shot up to 7.2% in December from its recent low of 4.4% in March 2007, and it was almost certain to continue rising into 2009."¹⁷ Later at the end of the crisis unemployment rates both in the US and Europe should be risen to 10%, the highest value since the 70's. The recession had reached almost every sector of the world economy. Even world leading firms like G.M and Chrysler who employ together more than 280.000 people were facing bankruptcy and also had to be rescued by government funds.

¹⁵ Hodson, Quaglia (2009)

¹⁶ Ferguson (2012)

¹⁷ Havemann (2009)

4. Conclusion

After having looked at the financial crisis with different perspectives, the main events can now be summarized. Starting first with lowering the interest rate by the Federal Reserve and therefore enabling more and more Americans to realize their dream of homeownership was definitely a factor to encourage risky lending which later resulted in the housing crisis. But what created those unsafe subprime mortgages was not only due to lower interest rates, it was mostly caused by reduced underwriting standards for mortgages – a fundamental change in the lending policy. Believed that the housing market has to be completely deregulated and will manage itself cut down the possibility to intervene in case of need for action. Relying on steady housing market developments in the past, the US government failed to identify the risk of modified mortgage products and therefore enabled the housing market breakdown at the end of 2006. But not only failed regulation in the housing market can be blamed for the crisis. The financial sector including banks and investment banks, insurance companies, rating agencies and especially the market for derivatives at this time was highly deregulated. For the big banks there were almost no requirements for retained equity capital to secure large investment deals. Moreover, a low federal funds rate combined with deregulation of derivatives encouraged investment firms to construct complicated financial products almost incomprehensible for outsiders. And investment bankers exploited the non-transparent characteristics of their products: Sold to millions of investors all over the world, those investment banks were no longer serving their clients as serious consultants but to sell CDO's as many as possible.

The fact that bankers worked closely together with corruptible rating agencies is another main driver for the financial crisis. Because giving the desired rating for CDO's while knowing that this rating is completely inappropriate is a case of bribery. These rating agencies knew exactly what was going on and they could have stopped the party but instead they continued their practices, feared of losing important clients. Driven by pure greed of money investment banks lost track of their products and so created the downturn of the financial sector after all.

To conclude we can say that several parties have been involved to trigger a financial crisis and it is still highly complex to answer the question of accountability in this sense. What we know is that these banks, institutions and people created a crisis that cost tens of millions of people their savings, their jobs and their homes. They created trillions of dollars of wealth loss and it needed more than 700 billion only to save the banking system in the US. As there were players involved from all over the world, the economic crisis brought many countries' to the edge of insolvency. Like for example Iceland, whose three largest banks, privatized by the government, collapsed as their liabilities were ten times higher than their country's annual economic output during the financial crisis.¹⁸ But in the end almost no one of these bankers were condemned by the court. Leaving their firms with the hands full of money and no one sees himself accountable. In the end it is as always: the poorest pay the most.

¹⁸ Matthiasson (2009)

4.1 Future

We live in a more and more unequal society and US economy becomes less crucial. Inequality of wealth is now higher in the US than in any other country of the world. High paying jobs are easy to find and the financial sector grows tremendously. Besides Lehman Brothers, all other big banks effected by the crisis have now more influence than ever before. Only in the financial sector more than 3000 lobbyists are employed to influence politics and they have already plans to deregulate again some areas of financial products. In a world that is more and more globalized, country's will have to find concepts and solutions to prevent another financial crisis.

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