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Carina Dubnyicsek

Abstract

The topic „Subprime crisis"is one of the most used words in the financial sector since the beginning of the summer of 2007. It had its origin in the US where credits were issued to people that were not creditworthy. In correlation to risks in the banking sector there should be rules and regulations that try to prevent such crises from getting that predominant as at the moment. These structures which are embedded in the risk management of a bank are known as "Corporate governance" and are very important in financial problematic times. They should give incentives how to react in such situations and to avoid crises. In our case as comparing the different corporate governance structures between countries, we see that they are not really well developed and had little impact to avoid such crises. Most countries have deficient corporate governance systems.

My diploma thesis is primarily dealing with the relationship of the subprime crisis to the corporate governance systems. It suggests that a unified and matured corporate governance system should be implied. In the part about the subprime crisis I basically deal with the origin of the crisis. Why does the crisis really happen? What were the basic factors that resulted in the crisis? This in turn will be discussed with the macroeconomic reasons of the subprime crisis, if the structure of loans were too risky or if the market mispriced the risk and how this mispricing could happen. These are main questions that are worked out in this thesis.

In the history of the subprime crisis the time line from the real supposed beginning to the developments at the moment are explained. In principle it is explained why the subprime mortgage market was as attractive as it was and why it took this development. The impacts on banks around the globe like on Northern Rock, Kommunalkredit, Hypo Real Estate and the impacts on households and financial institutions are described in Chapter 5 and 6.

The chapter about Corporate Governance Structures is basically dealing with the regulations in the banking sector. How the banks are supervised in Europe and which restrictions are basically dominated. The new regulation "Basel II" is basically discussed in Chapter 9, what it consists of and why to apply. In the chapter about the intermediaries in corporate governance it is basically written about the different systems we differentiate and the task they are dealing with.

Chapter 11 is dealing with corporate governance in banking, how financial institutions basically vary from unregulated firms and so on. In Chapter 12 the different corporate governance systems are compared to each other. In the last chapters the cases of no corporate governance are discussed as to show a case where there is no corporate governance and the impacts when this is the case. Last but not least the different forms of investor protection and their importance are introduced and why this topic is so important.

1. Introduction

The subprime crisis in the US became a headline issue at the start of the year 2007. It had impacts on some of the largest global financial institutions and a number of specialized mortgage banking institutions have declared bankruptcy or have been sold since then.

Many households are defaulting and foreclosures have been rising enormously, reaching 75 percent in 2007. Particularly many major metropolitan areas are showing a decline in housing prices of around 10 to 15 percent per year. This development reduced the sales of existing homes to the lowest level in 27 years and also reduces the sale of newly constructed homes. The forecasts also predict additional falls in the next years and the prognoses do not anticipate a return to normal levels before 2010.

Through the rapidly rising housing prices, it is getting more costly for families to afford their own house. Many borrowers are stretching over their financial possibilities and misreport financial status. Also speculative borrowers obtain loans on the basis of collateral with no consideration if they are able to pay back the mortgage payments. Through this, the average subprime borrower credit scores have been rising.

Subprime mortgage loans are securities that do not possess the same criteria as the loans of the "prime" market. The subprime loans have a lower probability of full repayment and show lower credit scores. Subprime lenders are the lenders who meet the criteria of the credit score but not the full income documentation. This new market[1] creates possibilities also for borrowers who were normally denied by getting a credit through the fact of discrimination or through the non qualification. Mainly in areas of many minorities and weaker economic conditions the subprime lending gets a more attractive form of lending. As it is very simple to do, it is also very expensive.

There was an intermediary primarily focus on generating loan volume rather than the safety to get the money back. In 2006 the prices were rising and distressed borrowers had the possibility to sell equity and their home to prepay their mortgages. In times were the interest

[1] See S.Chomisengphet; A.Pennington-Cross,2006

rates rose and the house prices declined these borrowers had difficulties in paying back their mortgage payments.

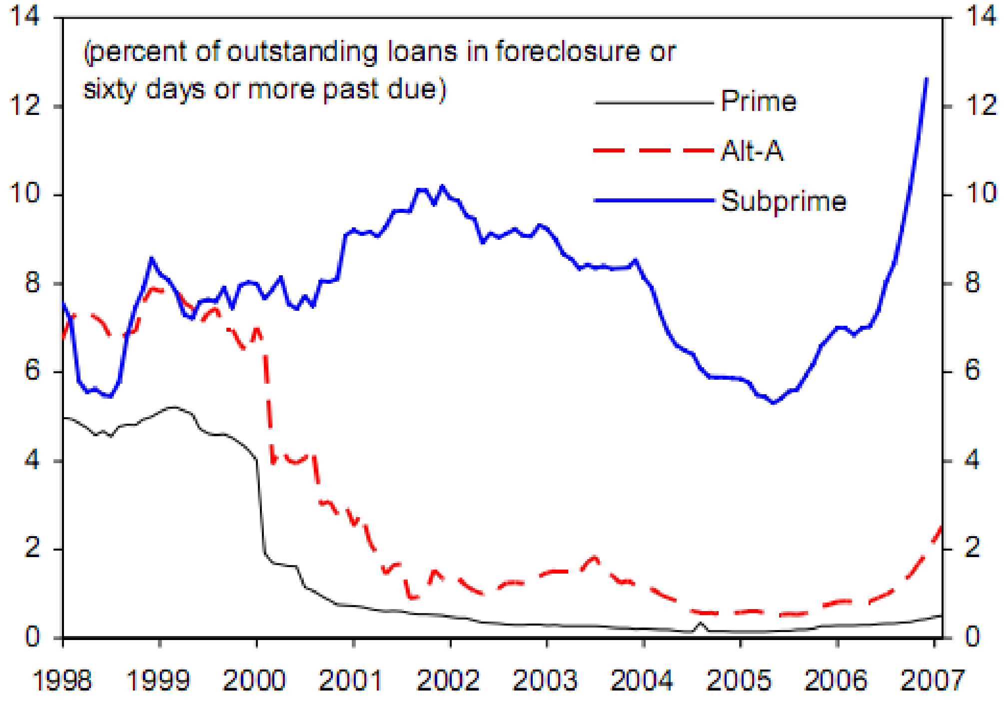

Figure 1: ARM Delinquencies and Foreclosures (Source: J.Kiff;P.Mills, July 07, p.9)

The first figure distinguishes between prime and subprime loans. As it will be explained later in more detail, the prime loans showed lower fluctuations over the past years than the subprime. As you can see the delinquencies of subprime increased sharply during the last years during the prime remained constant.

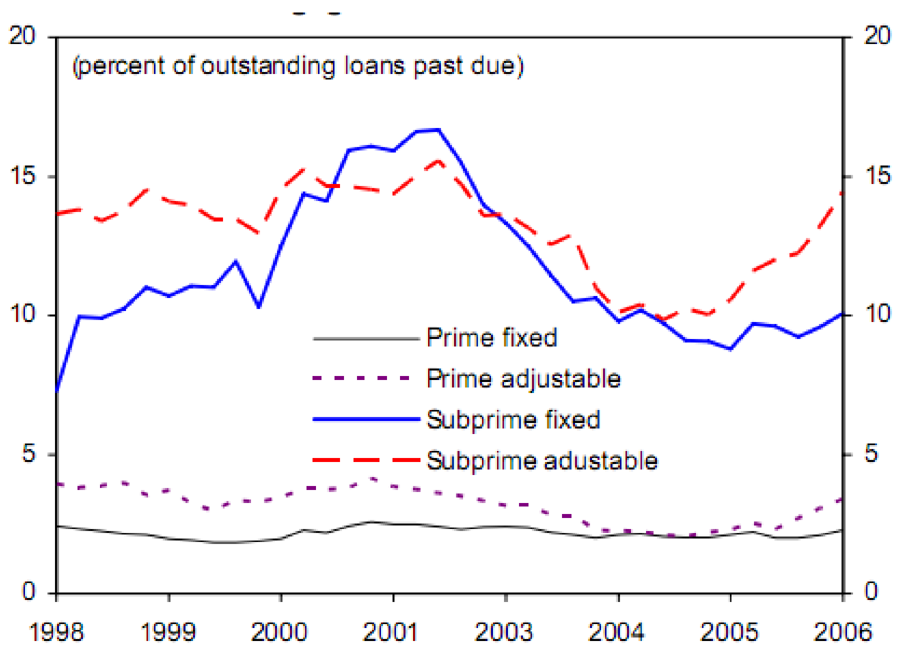

Figure 2: Delinquency rates for adjustable rate and fixed rate mortgages (Source J.Kiff;P.Mills, July 07, p.10)

In this figure you can observe the changes of the subprime and prime mortgages over the years. When looking at the changes of the subprime loans you can see that the fixed rate experienced bigger changes than the adjustable one. The subprime adjusted rate mortgages increased during the past two years. As you can see the subprime fixed rate has been strengthened since the year 2004 while the adjustable one increased.

This is due to the reason that fixed rate mortgages promise regular payments and offer insurance against interest rate fluctuations. Borrowers have to pay a premium for these insurance and therefore adjustable rate mortgages provide lower interest rates.

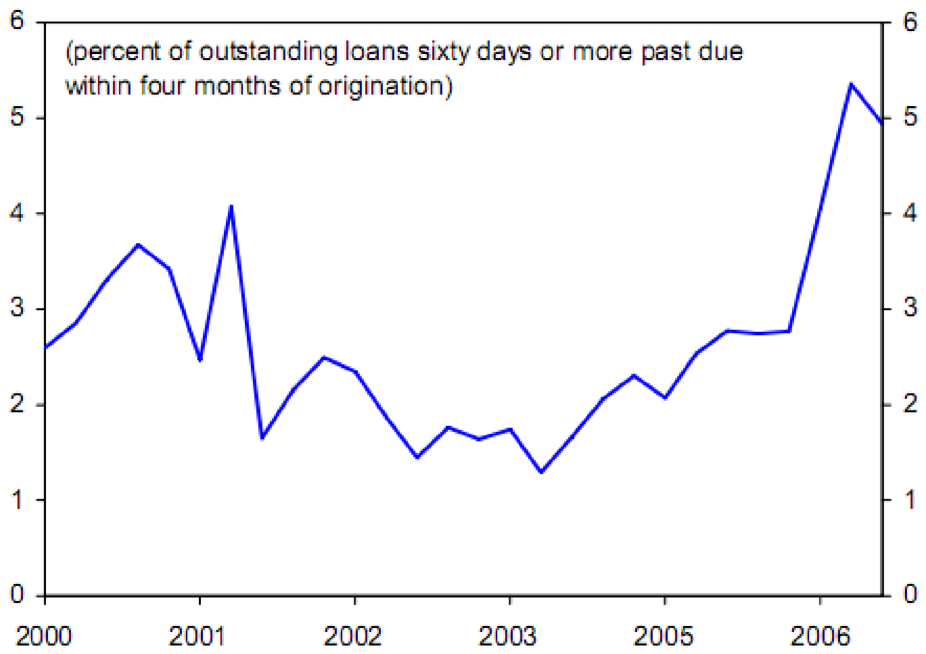

Figure 3: Early payments defaults (Source: J.Kiff;P.Mills, July 07, p.10)

The early payment defaults also experienced a strong change. Early payment defaults reached their peaks in 2001 and till 2006 they increased heavily. The sharp losses and the large number of cases of bankruptcy of subprime lenders lead to the decision that the financial institutions misjudged the market and did not fully understand the riskiness of the individual subprime borrowers and the uncertainty of the market conditions at the time of loan origination. [2] It would be advisable that the legislative try to maintain the subprime market while restricting the possibilities for lenders of originating high cost loans that could harm them.

2. Subprime Market

The permanent rise and fall of the subprime mortgage market and the increasing demand in mortgage backed securities led to the collapse of the market. The result of the increasing demand was a trend to a lower loan quality. The quality of the loans is based on their performance which is adjusted for loan characteristics, borrower characteristics and house

[2] See T.J.Zywicki, J.D.Adamson

price appreciation[3]. Some areas also showed larger price declines than others, which resulted in larger foreclosure rates.

The subprime[4] market could be described through the characteristics of the borrower, the lender or the loan. A subprime borrower is basically a person who neglected or forgot a few payments or went bankrupt during the last few years of the contract. But not only investors with bad credit scores are in the subprime market also people with good credit ratings used the time during the housing booms by profiting of the cheaper prices to invest into real property.

The lenders typically grant loans to subprime borrowers by charging higher fees and interest rates. By looking at the loan we could also define the subprime market. A subprime loan could be packed into a Mortgage Backed Security (MBS).[5]

The department of Housing and Urban Development (HUD)[6] gives a list of all subprime lenders since the year 1983. This list is based on the characteristics of lenders' business models. This list is observed over the years to classify the firms into subprime and prime.

The subprime market experienced an explosive growth through the years 2001 to 2006. Since the last years, this type of investment, mainly investments into houses increased heavily and through this development the quality of the loans declined.

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[3] See C.Foote,K.Gerardi, 2008

[4] See J.Kiff,P.Mills, July 07

[5] MBS stands for Mortgage Backed Security. It is basically a bond or another financial obligation that is secured by a pool of mortgage loans.

[6] HUD is the Department of Housing and Urban Development; basically the federal agency is assigned with the task of improving housing development. It offers programs that primarily deal with better housing and urban continuation.

	2001	2002	2003	2004	2005	2006
			Size			
Number of Loans (*1000)	624	974	1676	2743	3440	2646
Average Loan Size (*$1000)	151	168	180	201	234	259
			Mortgage Type			
FRM (%)	41.4	39.9	43.3	28.2	25.1	26.1
ARM (%)	0.9	1.9	1.3	4.3	10.3	12.8
Hybrid (%)	52.2	55.9	54.7	67.3	62.0	46.2
Balloon (%)	5.5	2.2	0.8	0.2	2.6	14.9
			Loan Purpose			
Purchase (%)	35.1	33.9	32.9	42.0	45.7	45.4
Refinancing (cash out) (%)	52.1	51.2	51.6	47.9	45.7	44.8
Refinancing (no cash out) (%)	12.3	14.6	15.1	10.0	8.6	9.8
			Variable Means			
FICO Score	620.1	630.5	641.4	645.9	653.7	654.7
Combined Loan-to-Value Ratio (%)	80.0	79.9	80.6	82.8	83.5	84.4
Debt-to-Income Ratio (%)	37.8	38.1	38.2	38.5	39.1	39.8
Missing Debt-to-Income Ratio Dummy (%)	41.6	44.1	38.3	35.1	39.2	31.7
Investor Dummy (%)	10.0	12.0	14.0	14.0	15.0	15.0
Documentation Dummy (%)	68.5	63.4	59.8	57.2	51.8	44.7
Prepayment Penalty Dummy (%)	66.3	63.8	61.4	60.1	60.6	61.6
Mortgage Rate (%)	9.4	8.3	7.3	6.7	6.6	7.2
Margin for ARM and Hybrid Mortgage Loans (%)	6.2	6.3	5.9	5.3	5.0	4.9

Table 1: Loan characteristics at Origination for different Vintages (Source: Y.Demyanyk; O.Hemert, February 2008, p.7)

Table 1 shows the changes of the loan characteristics over the 2001- 2006 period. Primarily the number of loans that were issued increased during the last years by more than the double. In the mortgage market you can differentiate between four different types of loans to consider. The Fixed Rate Mortgage (FRM)[7], the Adjustable Rate Mortgage (ARM),[8] the Hybrid[9] and

[7] The Fixed rate mortgage (FRM) is a mortgage loan where the interest rates are not fluctuating over the life term of the loan.

[8] The adjustable rate mortgage (ARM) is a loan where the interest rates can change over the period. They normally start with a better rate than a fixed rate mortgage to compensate for the higher exposed risk and

the Balloon loans[10]. You can see that the fixed rate mortgage declines over the last years by nearly fifty percent and become through this development less attractive than before. On the other hand, fixed rate mortgages are often used and most popular in the prime market.

The hybrid form of a mortgage loan is the most attractive and most often applied type of loan by nearly 50 percent in 2006. By investing into this type interest rates are fixed for the first few years and after that they are adjusted every six months.

As you can see most people invested in this market to purchase houses, while the years before the financing to get cash was more attractive. By getting cash the clients' goal is to basically refinance their existing mortgage loan by a new larger and more attractive one.

The variables also changed heavily through the last years. The FICO score rose over the sample period.[11] The FICO score basically describes the value of the loan in the year of issuing. The loan to value, measures the value of the loans divided by the value of the house. This term increased over time because of the increasing popularity of taking a second or a third loan.

How was the evolution of the subprime market?

increase continuously as they were adjusted to market rates. An annual specified maximum interest rate should protect the investor that the interest rate increases not by more.

[9] This loan is composed of a fixed rate mortgage and an adjustable rate mortgage. It starts with a fixed interest period and is the adjusted by an index and a margin.

[10] The balloon loan is a loan where the majority of the payment has to be done at the end of the loan time. It offers the advantage of low interest payments during the life term and the possibility of utilizing the capital.

[11] The FICO score is a credit score that depends on the payment performance in the past. A higher fico score basically indicates better credit.

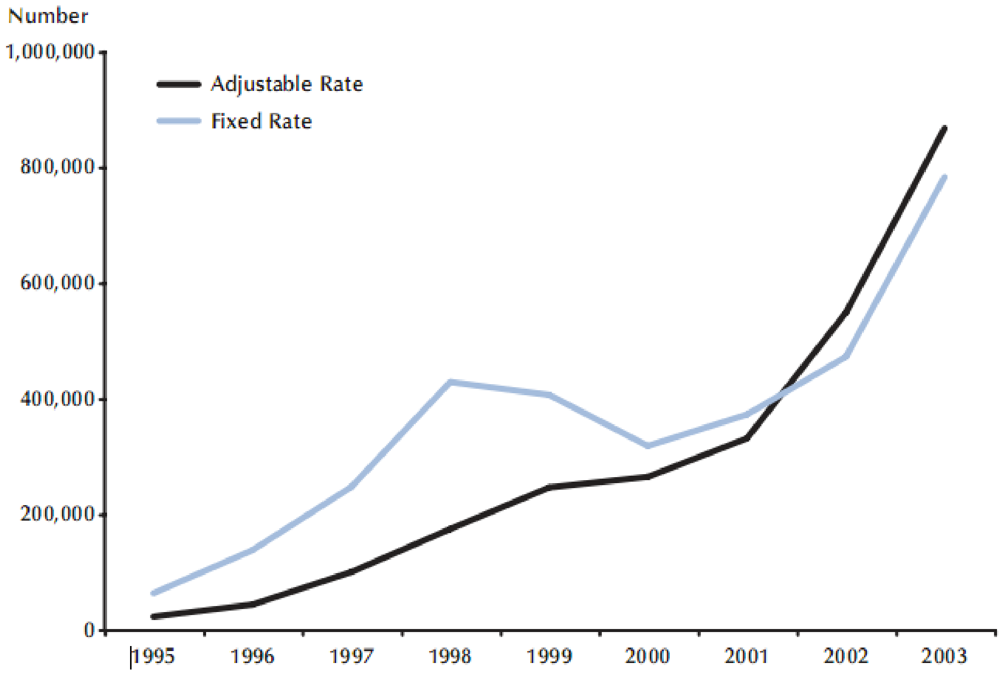

Figure 4: Number of loans originated (Source: S.Chomisengphet;A.Pennington-Cross, January/February 2006, p.13)

As you can see on the graph both loans, the fixed rated loan and the adjustable rate loan increased sharply during the last years.

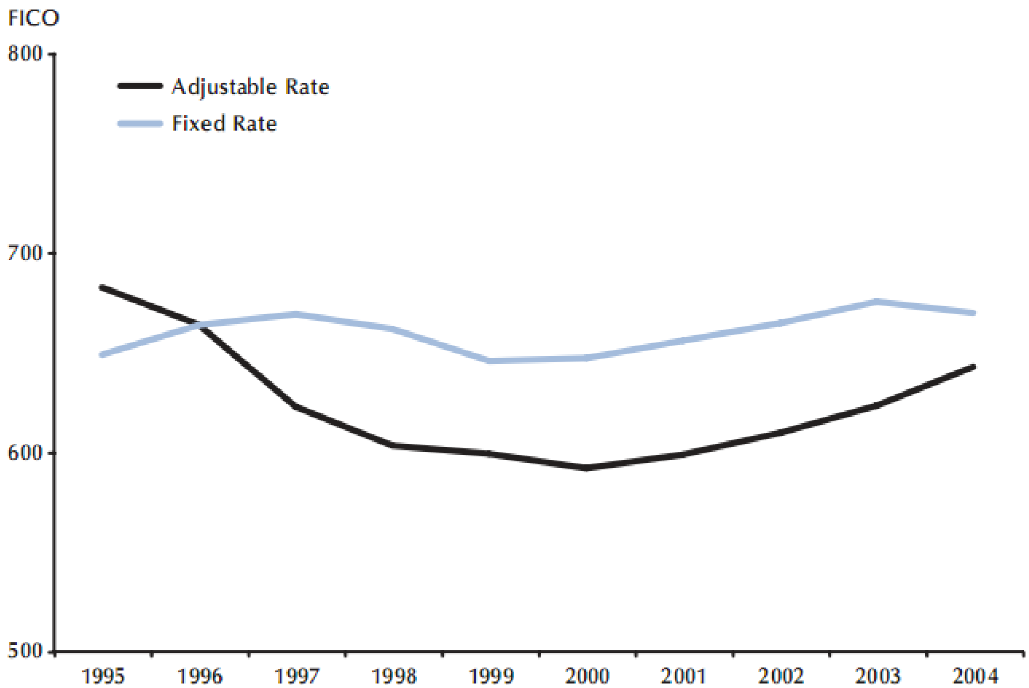

Figure 5: Average credit score (FICO) (Source: S.Chomisengphet;A.Pennington-Cross, January/February 2006, p.14)

The next graph confronted the adjustable rate with the fixed rate. As you can see borrowers with adjustable rates have lower credit scores than fixed rated borrowers. Since the year 2000 credit scores have been improving from year to year.

3. Causes for the subprime crisis

The subprime boom is mainly affected by financial innovations, changes in the market structure and fast rising house prices.

Due to the rapid growth of the credit expansion in the subprime mortgage market during the past years the credit standards declined. In areas where this development was stronger, more difficulties happened. The mortgage market was developing from a niche market to a fast growing one which could be seen by the decline in credit standards and the excessive risk taking by lenders. In 2006 the subprime market already reached a volume of about 1.3 $ trillion.[12]

There are two main indicators of lending standards, the denial rate and the loan to income ratio. In areas where applicants feature higher per capita income and an income growth, lower denial rates are the consequences. Also in areas of larger population, most of the applicants show lower denial rates.

In areas where the lending was more booming the standards to get a credit were simplified. The lowered standards were associated with a fast rate of house price appreciation. Therefore the market mattered because large, new institutions entered the market and this resulted in the decline of credit standards. During the boom, banks began to behave more aggressively then during tranquil times which resulted in a mattered market. Through this knowledge banks lend more heavily at the peak of the boom and the results were extensive. Most of the loans which were issued at this time turned out to be bad loans. Therefore it was very important for banks to adopt additional lending standards during a boom as the credit expansion would be very difficult to measure.

Which loans could be associated as subprime loans? In this market these are basically loans which are 60 days or more in delay of being paid. The lending standards declined more in areas where higher mortgage securitization rates were associated. Due to the growth of this market the current mortgage delinquencies were arising. They augmented more in areas where the number of loans increased stronger. This development leaded to the decline in lending standards and loan denial rates. Several years ago, the interest rates were low, but through the US monetary policy in the mid of 2004 increasing interest rates were imposed.[13] In the prime market this resulted in the ability of loan affordability through the reflection in denial rates. In the subprime market this did not happen. If the number of competing lenders increases strongly the lending interest rates also growths.

[12] See G.Ariccia;D.Igan,L.Laeven;2008

[13] See S.Chomisengphet;A.Pennington-Cross, 2006

We can imagine a subprime borrower as a person who is in general willing to take higher risk to be more heterogeneous and to show shorter or worse credit histories than their counterparties, the prime borrowers.
In the prime market borrowers with low income deny more likely. Applicants who show a higher loan to income ratio generally invest more into riskier loans and in turn are more confronted to easier denying in the subprime market. Higher loan to income ratios are associated with lower unemployment rates basically situating more in high income areas. On the basis of their gender loan applicants can be differentiated. Male lenders basically prefer to invest into the more risky subprime market and female into the prime one.

House price changes are mainly standing in relation to lending standards. If the standards decline the supply of mortgages increases which in the end causes an increasing demand for housing. Also the number of applicants has an impact on the denial rates. As the number of entrants increases the denial rates of the mortgage market also rises. The relationship between the mortgage boom and the therefore associated standards are basically stronger in larger markets.

As the market expanded and the number of subprime borrowers increased in entering specific metropolitan areas the denial rates went down. As a poor credit history of a borrower is associated with higher delinquent payments, the interest rates are normally higher than for prime loans. One important fact is that subprime loans default six times higher than prime loans and respond less sensitive to interest changes. The costs of originating a mortgage loan are basically higher than of prime ones. The borrower has to pay in principle application fees, appraisal fees and other fees which accumulate. There are also costs which arise during the mortgage contract like mortgage insurance payments, principle and interest payments, late fees and fines for delinquent payments.

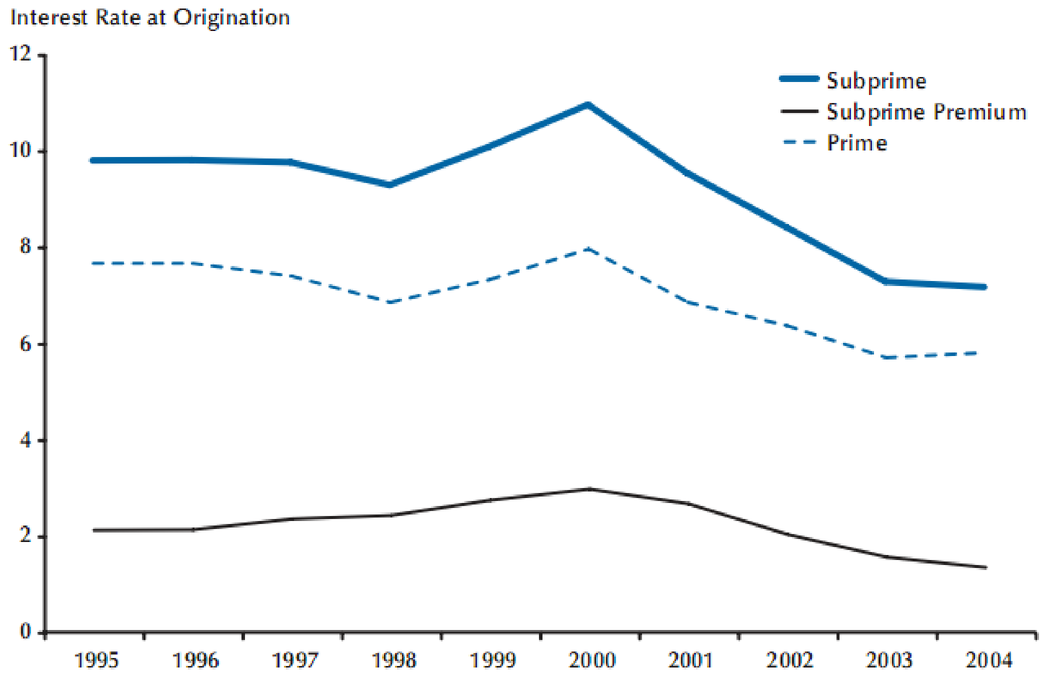

Figure 6: Interest rate at Origination (Source: S.Chomisengphet; A.Pennington-Cross, January/February 2006, p.3)

On this figure you could observe the interest rate changes over the years. The first thing that catches our eye is that the subprime interest rates always lie above the prime one. This is because of the higher risk which is associated with the subprime loan. The subprime borrower has to pay a certain premium. This can vary over time and is the difference between subprime and prime. This is based on the risks in case of a failure as a homeowner and the risks in the case of default on the mortgage.

3.1. Macroeconomic reasons:

3.1.1. <u>Was the structure of subprime loans unreasonably risky?</u>

In the last recent years homeownership became a very attractive form of investing as the house prices appreciated. From the years 1995 to 2003 the mortgages have been risen from 65 $ billion to $ 3.76 trillion.[14]

[14]See T.J.Zywicki,J.D.Adamson, p.36

As the goal was to expand the excess to home loans to a widespread of people the reduction of the underwriting standards was resolved. This decision in the end let to apply now high default and foreclosure rates.

The stated income loan is one type that received criticism for his action. This loan is useful when a person don't want to show full documentation of his income. Self employed workers or second job workers are often likely to take out such a loan.

The next type of loan which was created in the subprime market was the so called "piggyback loan". This is an attractive form of investment for borrowers who have limited assets and would only be able to pay a certain percentage of the down payment. When holding a piggyback loan, borrowers receive a first mortgage and a junior-lien piggyback loan. The piggyback loan is basically useful to finance the portion of the purchase price which can not be financed through the first mortgage. This can be in general 20 percent of the purchase price. These loans are mainly calculated in a way that the first lien loans can be met. In the year 2006 about 22 percent of mortgage loans were financed through this type of loan. But the big disadvantage is that the probability of default is about 43 percent higher than with a standard loan.[15]

As already mentioned a certain percentage of the piggyback loans are financed by the existence of a second loan. As a certain part of the desired equity of the property is missing it is more likely to default. An additional reason for default is that there are no down payments to be done and the decline in the values of the properties will lead to a fast default.

Compared to a loan that compromises a 20 percent down payment, the loan with the down payment will only default in cases when the value of the house depreciates by more than 20 percent which in turn makes it a safer form of investment. Rising mortgage interest rates and declining property values lead to higher risks of default. Most mortgages today are long term fixed rated mortgages. This involves that interest rate fluctuations don't matter unless the property is sold. In the subprime market most loans that are issued are adjustable rate mortgages or "hybrid" loans. With this type of mortgage an increase in interest rate will not only affect new borrowers but also existing ones.

[15] See T.J.Zywicki,J.D.Adamson, p.44

In areas where there are high interest rates to pay, declining house values are the consequence. This is also an indicator for higher default and foreclosure rates. Another incentive of taking out a subprime loan is for speculative or investment purposes. This is a possibility for young and single individuals which want to capitalize the low interest rates to purchase a house. These people basically want to own this property for only short periods and are strongly affected in cases of rising interest rates.

Through the adjustable rate, mortgages become more risky when interest rates rise and become more attractive when interest rates fall which in turn lead to the decision that adjustable rate mortgages are not unreasonably risky.

3.1.2. Was there a mispricing of the risks?

There were several misunderstandings in relation to the pricing of the risk.[16]Not the risk associated to the individual loans were crucial only the systematic mispricing of risk in the market. Also the belief that systematic market risks were no longer worrisome to investors was a misunderstanding of the real problem.

One major problem was that the risks were underpriced in the market, meaning that the interest rate differences between US. Treasury notes and risky assets were even smaller as they had to be. Market participants explained this by arguing that the financial markets have become less risky. People also thought that better monetary policies around the world reduced the inflation and therefore contributed towards a less volatile environment.
The use of credit derivatives was thought as been dispersing the risk in ways that reduces the overall risk levels. There was also the thought that the Federal Reserve would respond to any financial market problem by an appropriate monetary policy.

The belief that the risk on the market disappear was incorrect and the overuse of credit derivatives mispriced the risk in the market. Whenever there was no mispricing of the risk in the market, there could also be a misunderstanding and mispricing of risk in the subprime mortgage market. Till 2004 there was deterioration in underwriting standards for subprime

[16] See T.J.Zywicki, J.D.Adamson

loans.[17] Through the deterioration the spread between subprime and prime loans was reduced, which leads to a huge mispricing of risk.

3.1.3. How could this mispricing happen?

The costs that arise when dealing with an agency were leading to further reductions in subprime lending standards.

There are different relationships on the market which play major roles for the banking industry. The first correlation exists between the mortgage broker and the lender. The broker's goal is to grant as many loans as possible and the lenders to also take into consideration the risk when taking out a loan. This problem is well known but it has not been priced into the mortgage market. To account for this risk the interest rates roses on broker originated loans.

There is a further aspect when looking at the agency costs. This is known as the spread of risk across many investors to secure the loans. This opportunity reduces the possibility for banks to screen borrowers but it increases reputation.

In the prime market similar things happened and it is not clear till now why it has developed differently. One explanation of this is the strong growing market of subprime loans which leaded the secondary market to misprice the risks of subprime lending.

One interpretation is that lenders were lending loans unsuited to their current market context, while traditional lending models were based on their credit scores and assumed stable house prices. These models don't predict when having subprime borrowers or a declining real estate market. If there is the case of real estate prices declining, credit scores are not valid enough to predict for default.

There are a lot of relationships which includes also individual households and so it is difficult to determine which borrower would be likely to default. As it is very difficult to estimate how the region will develop also the value of the option is difficult to assume.

[17] See T.J.Zywicki,J.D.Adamson

3.1.4. *Were the subprime borrowers too risky?*

Subprime borrowers are in general more risky than prime borrowers. Many subprime borrowers are nearly qualified for prime mortgages. They are more risky but many borrowers repay their loans and try to repay their credit scores to qualify as prime borrower.

A study at the Federal Reserve finds out that most homeowners are classified beyond their house values and mortgage terms.[18] With adjustable rate mortgages borrowers have more difficulties in understanding how their mortgage will change when interest rates develop. Subprime borrowers are often people which are older, less well educated, a minority group or less financial sophisticated.[19]

In general subprime loans are more complex than prime ones. Neither prime nor subprime borrowers know if their loan documents contain a prepayment penalty or how the penalty would look like.

Prime borrowers are likely to receive fixed rate mortgages while subprime borrowers receive adjustable ones. Fixed rate mortgages have a monthly payment that stays constant through the life of the loan. Subprime borrowers interest rates are adjusted within a certain period.

3.2. *Microeconomic reasons*

3.2.1. *Major market players*[20] [21]

The financial markets are dominated by their major market players. There are several market participants which interact and are dependent from each other. This is one reason why they are all exposed to the risks of international markets.

[18] See B.Bucks;K.Pence, 2006

[19] See H.Lax, M.Manti, P.Raca, P.Zorn, 2004

[20] See M.Crouhy, R.Jarrow,S.Turnball, 2008

[21] See E.Kitzmüller, H.Büchele, 2004, p.115-161

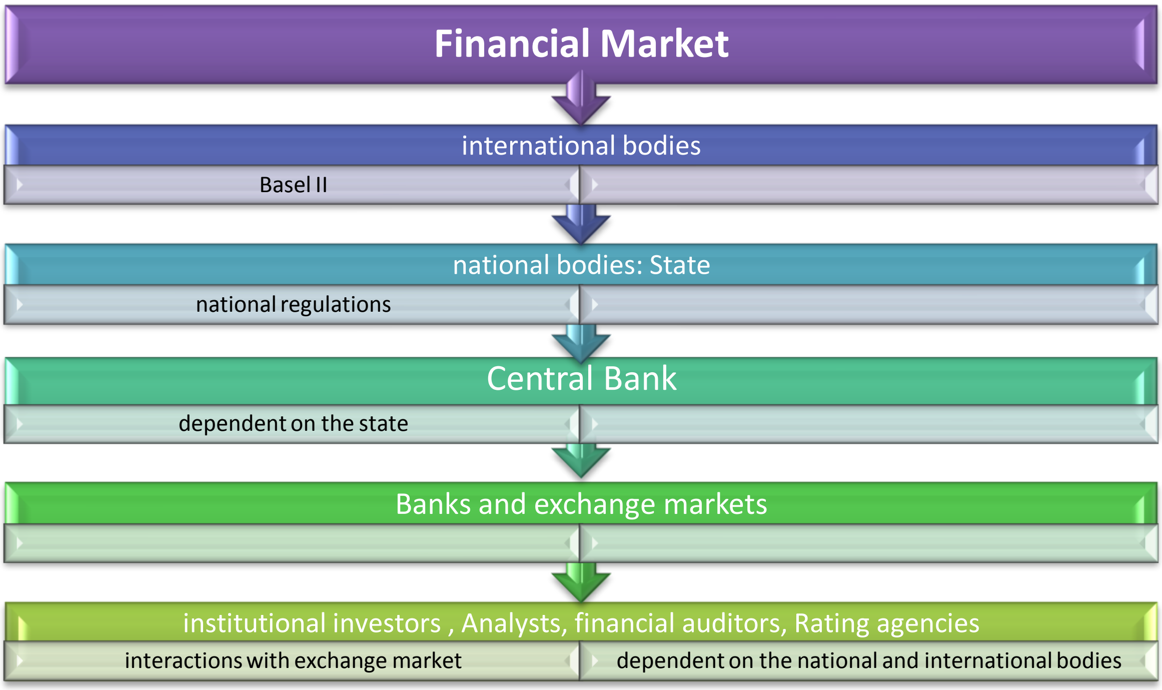

Table 2: Different market players on the financial market (self constructed)

<u>International bodies:</u>

These are very important players that have major impacts on all the bodies below them. They give a general valid framework for all bodies to apply where in further institutions this rules and standards are specialized.

Two of the most important international bodies are the World Bank and the International Monetary Fund which have been created on behalf of all other players in the market.

Their major goal is to make operations beyond boundaries possible and to always work on behalf of their stakeholders. That this task is possible and that the regulations and rules are similar when dealing with an Austrian and when dealing with an American, they imposed Basel II. Its objective, why and where it is used is explained more in detail in the chapter Corporate Governance.

State[22]

The permanent increasing importance of globalization and the interest of acting internationally have caused the regulations to change. This development caused the relationship between national politics and financial markets to change as the state has obtained a more expanded regulation function over the financial markets and the participating actors.

Exercising influence leaded to a change in features and form of the financial sector. The state heavily influences the actions of financial transactions. It basically exercise influence by giving financial incentives or by the opportunity of financial recourse on money political instruments on the financial market.

These new rules could be against the interest of individual market participants, for example if the state decides higher equity reserves for the banks to maintain. This equity reserves may be higher than the banks desire. Also it could be against the interests of the banks, if there is an obligation to report in more extensive way.

Through this higher level of federal control, the market could be stabilized and financial relationships become more secure. This development leads the state to become a more important player and gives the possibility of exercising significant influence on the banks and the different market players. This implies that the market and also the state are getting more important.

Central bank [23]

This player is created by the state to offer services to the public and the international financial institutions. In some countries it is more important in others less always depending on the significance of the state in the states system. For example the central bank in the USA, the Federal Reserve and the European central bank are very important and well known banks.

[22] See R.Czada, R.Zintl, 2003, p.107-127

[23] See U.Götze, K.Henselmann, B.Mikus, S.Betz, 2001, p.159-185

Their major task is to maintain the stability of the financial market by offering better competences. Particularly in times of financial changes and through the increasing of financial risks the stability of the system began to bounce. This raised the task to increase the competences of the banks by maintaining their stability. This development should give the central banks more power and more responsibility in the future as they have the necessary marketability, as they are participating on the flow of money and as they have the right insight on financial markets.

For example the US bank of circulation was improved by getting better competences which should give it additional stability. As the transnational transactions in the financial sector have been increasing since many years, it has got more difficult for the banks to observe and to control the market and the market participants. The banks are further growing with the increasing interest of internationalizations but as it is a national bank it doesn't have the right abilities to control these transactions. Therefore there exist international bodies which control these workflows on the market.

Stock exchange and banks

This market player builds the framework of the international economy. They grant credits and the whole economy is dependent on them. Their basic goal is to transform savings into investments.

In the last years the interest of the banks changed from normal banking operations to more speculative investments. These investments are carried out at the stock exchange. The bourse is characterized through regular trading of securities, goods and foreign currency. The prices are made by the ratio of supply and demand and the brokers act as agents between buyers and sellers.

One problem in the last years was that there has been hard competition between the different banks, concerning who is granting more credits. Due to this the big banks granted credits which were too risky for them and the whole economy. In normal cases they were not allowed to issue credits in this volume and their particular risk parameters.

The failure of one bank also influences the health of other banks and so one bank could cause harm to all others. It is like a virus, that extend like a chain reaction and damages the whole international financial system.

To avoid this, Basel II was levied on all banks. This approach should stabilize the international financial market and should protect banks from a crisis. In Basel II the bank has to put more equity aside for security purposes. They want to prevent the bank of getting into financial troubles when big firms go bankrupt. Its major goal is to increase the equity to better handle the credit business. More detailed information about Basel II is given in the Chapter Corporate Governance.

The agents that work in the name of the bank on the stock exchange are the mortgage brokers. The goal of the brokers is not to monitor a borrower’s credit worthiness and to perform due diligence. They are based on the volume of loans originated and the negative consequences in cases of default are limited.

Their first problems started as the fed decided to raise the interest rates. This development made it more costly to borrow money and people had it more difficult to meet their interest payments. Very big mortgage brokers like Ownit Mortgage Solutions Incorporation, New Century, and American Home Mortgage went bankrupt.

Many other institutions like small mortgage brokers are tightening their lending standards. Through this it should be secured that people no longer receive a credit without looking at their income or assets.

The Citigroup Incorporation, Wells Fargo & Co countrywide financial corporation and the mortgage bankers association spent funds to persuade legislators to reduce new laws restricting lending to borrowers with low credit ratings. These companies spent high amounts on lobbying.

Rating Agencies, financial auditors and analysts

One major player in this crisis are the different rating agencies, financial auditors and analysts. These players are important because they enrich the market with their knowledge and conscience.

Rating agencies basically mark states, firms and banks. The goal of these institutions is to give regular information about the deteriorating state of the subprime market. They shed light on the chance to get back the invested capital. The probability of default is measured with a scale that reaches from A to D. Rating agencies are very important in times of crises because lenders rely on their ratings for mortgage bonds, and asset back commercial papers which are issued by structured investment vehicles, derivative product companies and monolines.

Worldwide acting and known rating agencies are Moody's, Standard and Poor's and Fitch.
These agencies should provide a regulator barrier to entry. The basic reputation is based on their performance over time. Through the existence of institutional and regulatory frameworks a regular demand for their services should be granted.

But many investors are restricted to certain details, like monetary market funds are restricted to invest into AAA rated assets, pension funds to investment grade assets and so on.

Rating agencies basically don't rely on the quality of the borrower's information which is provided by the originators. As we think of mortgages we think of high recovery rates but through the declining underwriting standards this changed. Through this development also the probability of default and the loss given default could not be applied in real life.

Ratings have to be approved and controlled regularly and if they decide to downgrade the loan from AAA to A, the reduction of the prices is the consequence. If we have loans without any rating they are called "junk bonds", these investments are offering high interest rates.

By thinking of an investment an investor decides based on the assumption that ratings are stable and timely. Nobody thought about a scenario, where AAA assets were downgraded to junk bonds within short time. This simplicity implies that the investors misjudged the risk.

One important change affected Standard and Poor's asset backed securities. They reported that more than the half of their asset backed securities, mainly 66 % were downgraded and 44 % were downgraded from investment grade to speculative grade also including default. For the residential subprime mortgage backed securities, 17 % were downgraded and 9.8 % were downgraded from investment to speculative grade. They also looked at certain transactions more in detail as they had been already closed down. Also the rating agency Moody's took their first rating action on vintage loans for 2006 in November 2006. Through the overall poor performance of loans the default rates rose. Also the rating agency Fitch had to downgrade subprime bonds which were sold by Barclays, Merrill Lynch and Credit Suisse. It is therefore very important that the rating agencies also react to changes in the market. As losses are expected they should increase the amounts to keep the ratings constant.

Banks basically remunerate analysts on the way they undertake the transactions, meaning that if the favor the banks they get a higher payment. Companies that are interested in going into the market and to make their shares public, have to look for a bank who promotes them. They normally take the bank where the analysts showed excellent future predictions. This is the reason why this type of job is very stressful for the people because they are standing under deep impression to give the banks a good feedback.

Institutional investors

This market participant mainly consists of investment funds, pension funds and insurance companies. They are very important for the stock exchange and also for the lenders because their goal is to preserve the share holder value.

They do not take the deposits of the clients and give them out in the form of credits. Their major task is to make a collective investment of their money to achieve the highest possible outcome.

Investment funds basically consist of the deposits of private persons, companies and public corporations. Through the pooling of large money volumes they could spread the risks. Pension funds take the investments to pool it to their further contributions. Insurance companies invest themselves through the premiums they receive.

Through the very large money volumes that flow, institutional investors have been called to be the motor of dynamics in the financial market. The funds manager receives enormous power through the enormous money quantity which in turn could be again invested into shareholder value.

The funds managers have to control the top manager and as they don’t achieve the necessary results they could be promoted. Funds manager are basically remunerated of their performance. As it doesn’t apply to the agreed one, they could be exchanged. Companies also have the possibility to bring the funds companies to trial if they don’t achieve the determined performance.

If the funds managers[24] make good decisions and the market price of the individual shares increase the result will be positive as the value of the fund increases.

4. Facts we know about the subprime crisis

We distinguish between seven different facts concerning the subprime crisis.

4.1. Fact 1: Interest rate resets

The opinion of lenders is that repayment problems arise as the interest rates are beginning to fluctuate. The mortgages are often issued as Hybrid adjustable rate mortgages. This is a loan that starts with a fixed interest rate, which is in general at the beginning low. After origination this rate increases. This form of mortgage offers opportunities for both sides. The lenders like it because of high post interest rates and the borrowers because of low tease rates. What is forgotten are the increasing mortgage payments through the increased interest rates. This could result in higher payments as the borrowers could afford.

One reason for this misinterpreting is that the interest rates are not low at the beginning of the contract and also do not experience high changes.

[24] Fund managers are basically managing a mutual fund and are deciding on the volume and the type of stocks they purchase. They are supported by a team of analysts who advise and analyze the different funds. They basically rely on forecasts, and their own judgments in deciding on the securities to buy or sell.

To better understand this difficulty table 3 shows interest rates for subprime 2/28 mortgages. 2/28 stands for a 30 year term mortgage with contains of a fixed interest rate for the first 2 years like the “2” indicates. For the rest of the 28 years the interest rates are adjusted every 6 months.

Year of origination	Initial (pre-reset) interest rate	1-year prime ARM rate	Margin of fully indexed (post reset) rate over benchmark rate	Fully indexed interest rate
2004	7.3	3.9	6.1	11.5
2005	7.5	4.5	5.9	10.5
2006	8.5	5.5	6.1	9.1
2007	8.6	5.7	6.1.	9.1

Table 3: Interest rates for Subprime 2/28 Mortgages, by Year or Origination (Source: C.Foote;K.Gerardi, 2008, p.15)

The interest rates are not explosive but after the interest rate expires it is calculated again on the basis of a benchmark plus a fixed margin. As benchmark they use the London Interbank Offered Rate (LIBOR) which adjusts every six months.

As you can see on the table the fully indexed interest rate is always a few percentage points higher than the initial interest rate. This leads to the already mentioned increased mortgage payment. In times as the housing boom takes place many households used second mortgages to finance their homes. These second mortgages had higher interest rates but smaller amortization periods. These mortgages were fixed rate loans which were not affected by interest rate changes.

Nowadays people need longer periods for prepayment than in the years 2005 and 2006 for example. This is due to the declining house prices, which resulted in a reduction of the worthiness of the house. So the outstanding mortgage balance increase in comparison to the value of the house.

The problem in the mortgage market is that also the fixed interest rates are expected to deteriorate. Till the year 2007 only adjustable interest rates made troubles through rising but now also the fixed began to rise substantially. Through this development subprime borrowers began to default before the interest rates resets occur.

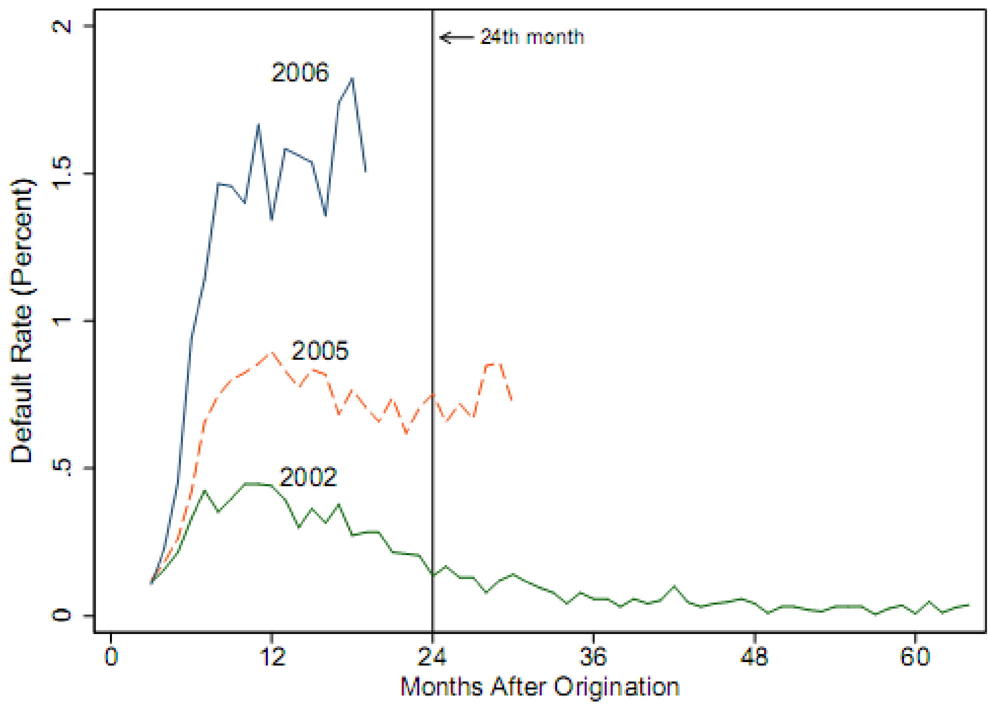

Figure 7: Default rate within 24 months (Source: C.Foote; K.Gerardi, 2008, p.20)

Figure 7 shows that the default occurs in 2006 before the interest rates resets occur while in the years of 2002 these happened after the interest rates resets. When the problem occurs that the mortgage rates get higher than the borrowers could afford, they immediately default.

If the housing prices are rising, this has a positive impact on the households. The borrowers could have a positive equity and therefore could repay their payments. But if the housing prices are falling, they have no chance of getting out of the financial problems by a sale or home equity loan.

4.2. Fact 2: A decline in house prices causes the foreclosure rates to rise

The assumption is that the explosion in foreclosures is due to the falling house prices. The most probably idea behind this is that a negative equity is the reason of loosing their home not the foreclosure rates. Negative equity is an indicator for default but not the reason for default. In cases where the outstanding mortgage balance exceeds the current market value also default rates rises because of negative equity. But negative equity not automatically means loosing the own house, financial shocks are more often the problem which can affect cash flow problems. Financial shocks are for example job loss, illness or divorce who can persist for longer periods and are not depending on the economy.

So this has nothing to do with the falling market value of the house but with their ability to repay their mortgage payments.

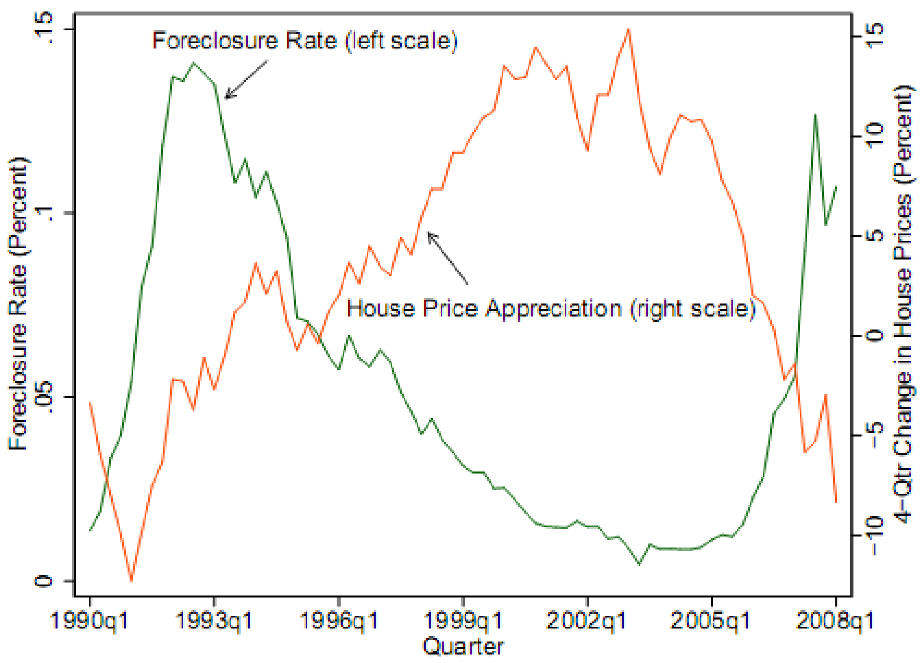

Figure 8: Foreclosure rate and House price appreciation (Source: C.Foote; K.Gerardi, 2008, p.21)

As you can see on the graph while the housing prices fell in the years 2005 to 2008 the foreclosures rises. Homeowners buy their houses at different times and through that they also have different levels of house appreciation and this could be an indicator of foreclosure.

People who bought the house in 2005 are defaulting more easily than investors in 2002. In reality it indicates that it doesn't depend on current prices but on future prices.

The optimal level of foreclosure is not zero, because this would indicate that families have to save the full value of the house to buy it in cash. As already mentioned high foreclosures are not optimal and also have a negative effect on the prices of other homes in a neighborhood. Each additional foreclosure reduces the value of all other homes in this neighborhood. The community wealth and support of governmental services like the quality of schools, police and fire protection would be impacted.

4.3. Fact 3: Most of the loans offered by the subprime lenders would have been rejected by the prime lenders

Since the mid 2000s the borrowing of subprime mortgage contracts increased. Normally these are borrowers with poor credit histories but through these boom also clients with good histories invested into the subprime mortgage market. The subprime market mainly consists of borrowers with poor credit histories. Subprime loans are riskier than prime loans. The foreclosure can occur when two events are happening, the borrower gets under the mortgage value and when there is a value shock between values received today to value received later.

4.4. Fact 4: A short ownership due to the bad credibility of the forecloses

As already mentioned banks issued credits to borrowers, who were in general not liquid enough to afford. They didn't set enough money apart and so they were not able to own their house for more than three years.

In the Years of 1991 and 1992 borrowers had to put more money aside and so they lived in their houses for much longer periods.

	≤ 1 year	≤ 2 years	≤3 years	≥ 3 years	≥ 5 years	≥ 10 years
2006	4.0	26.9	42.4	57.5	42.3	21.8
2007	3.1	25.8	45.1	54.9	38.8	21.1
1991	5.8	11.7	24.8	75.1		
1992	3.2	6.6	15.3	84.6		

Table 4: Ownership Experience Lengths among Foreclosures by Year of Foreclosure (Source: C:Foote, K.Gerardi, 2008, p.35)

This table shows the length of time that an owner lived in a house before a foreclosure occurred. As you can see the changes over the years are very big. Beginning with small foreclosure percentages in 1992 and now in the years 2006 and 2007 about one quarter within the first 2 years and about 40 percent within 3 years. As you can see many people only live for short periods in their new house until foreclosure occurs.

4.5. Fact 5: Multi-family dwellings are also involved in the foreclosure process

Multi family dwellings are basically consisting of two to four separate units. These units are normally rented and in the case of a foreclosure the family will loose their home. The building boom in Massachusetts in the 1990s was used by many families to buy condominiums as an investment vehicle to make profit. As this boom ended housing prices fell and people ended in foreclosure.

Many people in Massachusetts live in multi family dwellings where the effects of a foreclosure would have a more serious effect than a foreclosure from a condominium. Through the foreclosure also the values of the properties fall. If a multi family foreclosure it will be more costly than for a single family foreclosure through the eviction of tenants.

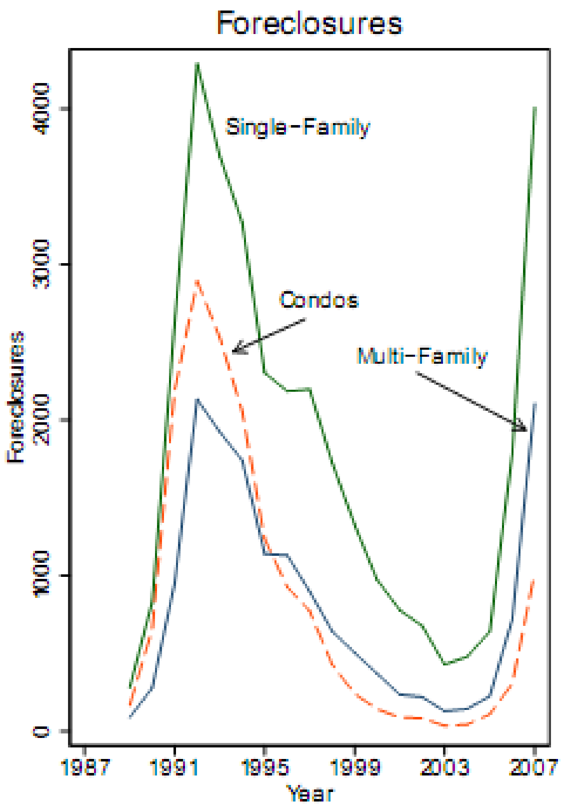

Figure 9: Foreclosure of single families, multi families and condos (Source: C.Foote; K.Gerardi, 2008, p. 37)

As you can see on the graph the foreclosure of a single family experiences larger changes over time than a multi family and condos. As it is more costly for a single family to put money aside the foreclosure occurs easier. The foreclosure of single families and multi families are fast rising since 2003.

4.6. Fact 6: A high number of foreclosures were initially purchased with prime mortgages

Homes with subprime mortgages basically show higher default rates as prime mortgages due to their higher sensitivity to house prices. Foote and Gerardi argued that in Massachusetts about 15 percent of all purchases were out of subprime purchases. When borrowers bought their house at the peak of a housing boom, their chance of getting troubles and to default rises. As we already said this is due to their lower positive equity.

If subprime borrowers buy houses for which they are unable to afford, their social benefits of subprime lending are reduced. Also important to know is that contracts that begin with prime contracts end fewer in defaults than subprime mortgages.

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Single family	2.3	2.3	2.6	3.5	5.9	8.6	13.2	11.4	2.6
condominium	2.2	2.1	2.2	2.5	4.3	6.0	10.7	10.7	3.4
Multi family	4.2	4.6	6.4	9.4	18.0	26.4	32.6	28.8	5.8
All	2.5	2.5	3.0	4.0	7.0	10.1	14.8	13.1	3.1

Table 5: Subprime Purchase Shares (in Percent) for Massachusetts Homes by Type of Residence and Purchase Year (Source: C.Foote,K.Gerardi, 2008, p.43)

As you can see on the table subprime mortgages were used more to purchase multi family homes than single households or condominiums. In the year 2005 it reached its peak with 32.6 percent.

4.7. Fact 7: Nearly 50 percent of the residential foreclosures were based on subprime mortgages

In this fact it is important to understand why people could foreclosure if the house prices were low in the year of purchasing. The problem here was that many people spent their housing equity in cash out finance. One important fact is that about 70 percent of homes which foreclosure in the years 2006 and 2007 were due to prime mortgages.[25] Only a third of all defaulted mortgages were through subprime mortgages.

The big problem was here that many people bought prime mortgages and tried to refinance themselves through a subprime mortgages and this failed and so they defaulted.

[25] See C.Foote,K.Gerardi, 2008

5. History – Time line of the crisis

5.1. The rise of the subprime mortgage market

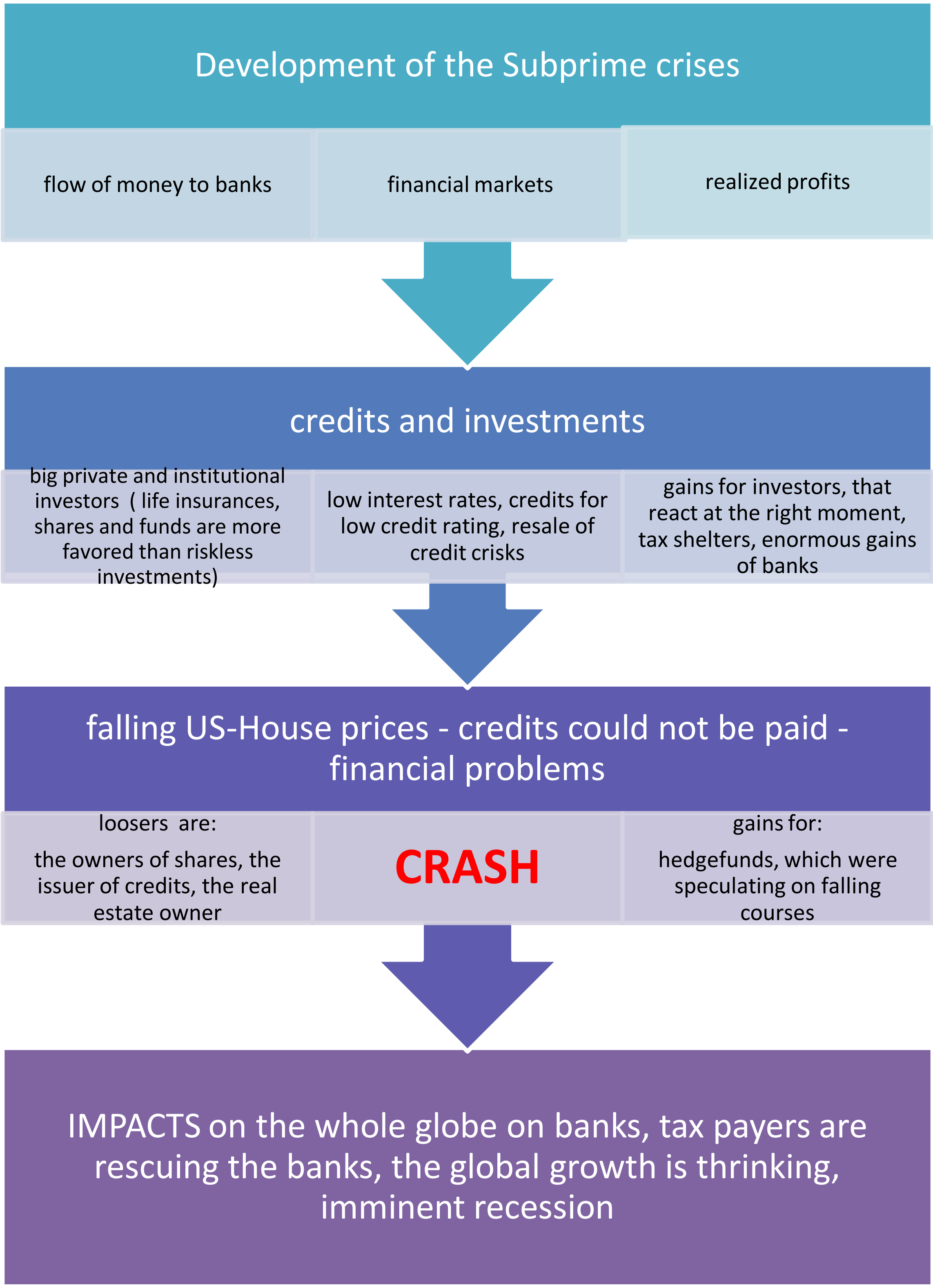

Table 6: development of the subprime crises (self constructed)

This table basically gives a short overview over the development of the subprime crises. The financial markets received in the last years a large amount of capital from big private and institutional investors. There was a trend towards investing the money into life insurances, shares and funds rather than investing into riskless forms of saving like savings books. The investors basically invested because of the low interest rates that were offered at the financial markets and the possibility of receiving credits in cases of low credit ratings. The banks were speculating on rising house prices and therefore issued credits to not creditworthy clients.

Basically investors that had the talent of reacting at the right moment were able to make profits. This was a very exciting time of investing as they caused a development of tax shelters and of enormous gains of banks. Everybody was hopping of gaining a lot of money and of receiving credits. But it happened what cannot be avoided, the US house prices were falling, the credits could not be repaid and the financial problems take its 'courses. The owners of shares, the issuer of credits, real estate owners and so on suffered very high losses, lost their houses as they could not repay their debts.

Investors that were basically speculating on falling courses were gaining in the financial markets. As the banks were safeguarded the credits and sold them in tranches to other banks around the globe the crises took its course. It had negative impacts on the whole globe, the tax payers were beginning to rescue the banks and the whole economy began to suffer.

But to get a more detailed understanding of the crises the whole history is explained in the following chapter. This type of lending basically known as "subprime lending" had its first developments in the mid 90-s and contributed to the expansion of home ownership. Before this type of lending was created, minority groups were not able to realize their wish of their own house and lending money to them was considered as too risky. As you can see the wish of an own house increases significantly after this type of financing had been developed.

In the year 1980 interest rate caps were imposed by the government of the United States while lenders were allowed to offer adjustable rate mortgages from 1982 on. [26]

[26] See J.Kiff,P.Mills, 2007

In 1986 the residential mortgages were the only consumer loans on which the interest was tax deductible. Through this development home equity withdrawals got a more attractive form of financing home improvements.

Further key developments were the automated underwriting and the securitization. These two evolutions were important to reduce the cost of subprime mortgage lending. What is automated underwriting? This is when the use of computer models is more appreciated than the use of persons which in the end makes the loans more cost efficient. The basic aim behind securitization is the facilitation of market risk by dispersing risk.

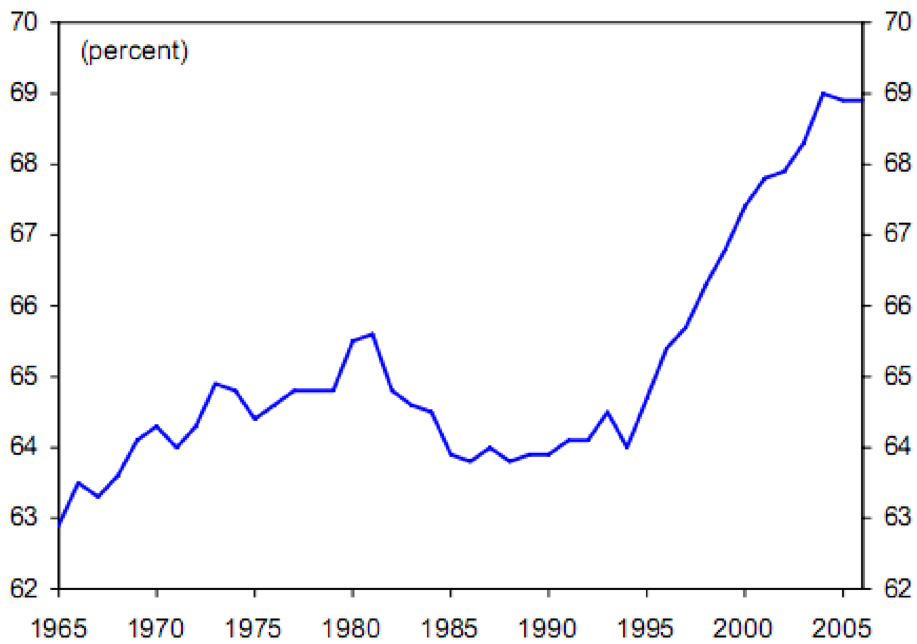

Figure 10: Homeownership rate (Source:J.Kiff,P.Mills, 2007, p.4)

This graph basically reflects the development of homeownership during the last past years. As you can see the demand of an own house has significantly increased from 63 percent to nearly 69 percent.

Subprime mortgages are in principle securitized through the form of a mortgage backed security (MBS). Most of this credit enhancement comes from features such as subordination, overcollateralization and excess spread. What is meant by these phrases?

Subordination is the application of losses to junior tranches before they are applied to senior tranches. As the junior tranche is completed the defaults will be connected to the next tranche. The most senior tranches are rated AAA and are secured against credit risk.

The AAA rated tranches are very safe and are comprised for high grade bond investors, they comprises about 80 percent of a typical transaction. The few other tranches are called “Mezzanine“, which include AA, A, BBB and below. The other twenty percent are divided into 10 percent AA, five percent A, 5 percent BBB and the below ones.

Overcollateralization is the excess of outstanding mortgage loans over the par value of the outstanding securities. This is used as a certain form of internal credit insurance. The Excess spread is the present amount of interest which is set aside each month from the servicing of the collateral each month. Until the year 2003 the majority of the mortgage loans were classified as “prime” ones and since the year 2006 less than the half of all originations could not meet the necessary criteria. Therefore the issuing of mortgage loans increased sharply.

Why was the rapid expansion of mortgage loans as attractive as it was? In the last years the single family households experienced a strong increase with the same wish of an own house as normal families, but through the lower income they normally had were fewer possibilities than after the introduction of this type of loan. Mortgage loans made it also possible for this people to afford an own house. As the prices of houses in the US rose more loans fell outside the criteria to make it affordable for singles.

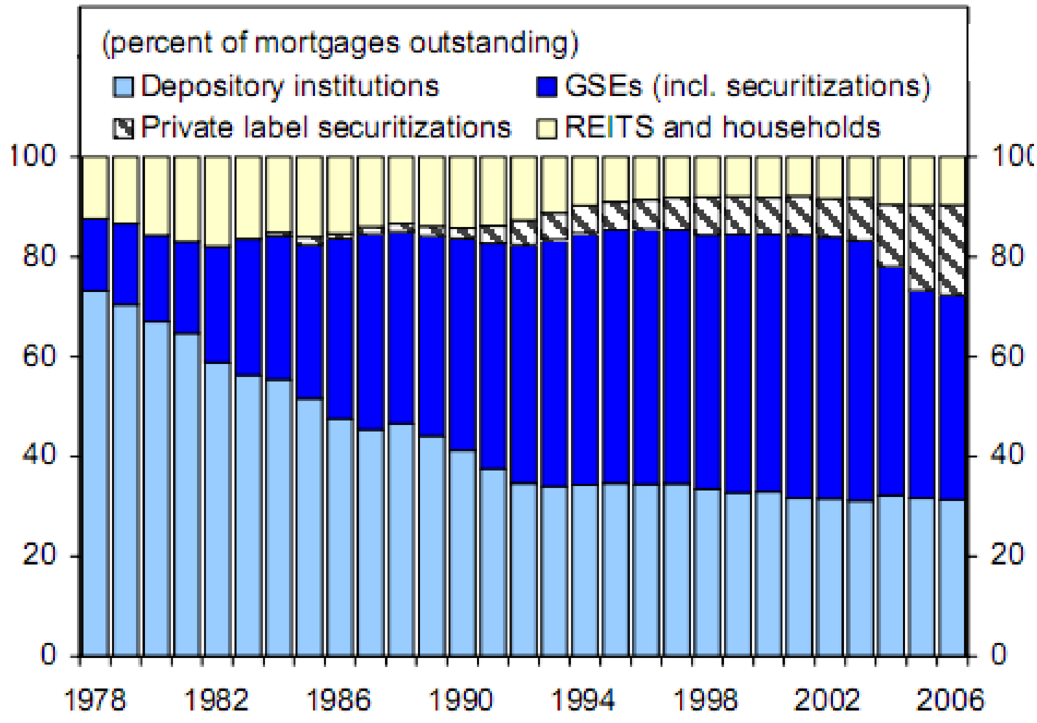

Figure 11: Declining mortgage holdings of depository institutions (Source: J.Kiff, P.Mills, 2007, p.7)

Figure 11 shows the changes of mortgage holdings over the 1978-2006 periods. Depository institutions lost nearly half of all mortgages till the time of 1978 until now about 30 percent.

The major interesting question that arises at this point is:”When did the crises happen at all?” In the years 2000 and 2001 the US were confronted with two major problems for the economy, one was the “Internet-shares-boom” that failed to appear and the second were the terrorist attacks of the 11.September. These were interferences that the US could not anticipate and resulted in major problems for the economy. The central bank of America the so called Fed had the fear of a deflation and so they decided to reduce the prime rate to 1 percent.

This decision opened new possibilities for homestead owners as they had the chance of terminating their fixed rate mortgages without paying any penalties. This in series reduced also the interest of long term mortgages which were utilized by millions of households to save money. With this they had more money at disposal which they could use for other investments like the acquisition of a new car.

The low level of interest rates enhanced the demand for residential property which leaded to an increase in the prices of houses. The result of this development was that people consumed more and more and the goal of saving was less favored. First in 2004 the Fed began to increase the prime rate but the therefore anticipated rise of the long term interest rates were missing.

In countries like China or India the goals were to hold the currency as low as possible and in order to achieve this, banks bought enormous volumes of dollars. As these countries had this kind of attitude a balance could not be achieved. As we take for example Japan and China, in the years 2003 and 2004 Japan bought around 300 milliards of dollars and China about 460 milliards which increased their reserves enormously. [27]

As the bank was holding their prime rate as low as possible for many years the consequence was that the Yen was also low rated and therefore supported the export of Japan, which threaten to decline in comparison to China. Investors around the whole world wanted to take this cheap Yen credits by buying shares around the world and by buying raw materials or bonds which drove the prices up. Banks around the whole globe were in competition and therefore accepted the overpriced nominal assets and granted further more new credits. The result of this was that the financial system was growing and growing.

The Asian countries in principle invested their dollars in US long term government bonds and similar papers which leaded to an increase in the exchange rate and caused the returns to fall. The Building industry boomed and boomed and in the end almost everything was financed by a credit. The American people began to live above their normal standards and the other countries joined this new living standard. The government had already warned concerning the dangers of the global unbalance and tried to find a correlation to Japan that they would increase their prime rate.

Millions of Americans received subprime mortgages loans, also people that normally were not credit worthy enough to receive one. The banks in principle bundle big volume of credits and

[27] See F.Benedikt, 2008

sell them to investors. As funds managers and bank managers were participating from the profit and as the losses are paid by common stockholders and creditors, they accepted higher risks. One big problem was that the downward slopping courses on the stock exchanges resulted in crashed or nearly crashed credits and this resulted in a massive problem for the banks and funds as they were receiving milliards of losses.

The start of the subprime crises itself is said to has taken place in August 2007. It has been developing more than a year before financial institutions and governments take the necessary actions to get the financial system into balance. At the beginning of 2007 banks and other entities that were involved in the subprime housing came into financial problems because large losses of investment firms and downgrades of speculative grade securities were noted. Through this development the fear of the future of some financial institutions became a new and important subject.

One major problem was that also losses in unexpected places were found and this started the crises to diffuse across credit markets. Also commercial and leveraged buyout deals were affected by it. What happened? Banks had the problem that they didn’t know how strong they had to augment their balance sheets by straightening their conditions. Many banks tried to receive liquidity by hoping on the central banks. Many governments in many different countries supported the banks with large sums of guarantees to stabilize the financial markets again. Through the increasing problems in this area the lending standards had been improved in 2008.

In September 2008 the two largest government entities in the US, Fannie Mae and Freddie Mac were nationalized by the US government. This caused a chain reaction, many large financial institutions as well as in the US as in Europe collapsed or got into enormous problems and this resulted that the investors began to think more risk averse than before. As the banks didn’t get out of the troubles additional nationalizations were the consequence. This development had negative impacts on the currency as it was going down and the government had the obligation to support the banks with fresh money.

In October 2008 a number of governments began to arrange certain measures to restore market confidence and to establish market liquidity again. The EU leaders arranged a framework for national interventions namely that central banks undertook certain rate cuts and governments store macroeconomic policy measures to stimulate their real economy. There were several reasons for the problems arising, like the weak risk management systems which were showed by weaknesses across all business activities, inadequacies in bank stress testing and insufficient appreciation of market liquidity risk.

5.2. Policy issues

In principle financial crises cannot be forecasted and they are often associated with difficult circumstances which are resulting in innovative actions of the governments. In countries that are definitely developed it is important to think about the weaknesses in financial institutions, the stresses that exist in financial markets and the slowing global economy.

Financial problems in general give an opportunity to reconsider the constancy of their financial and economic systems and to give a certain range of improvements like credit ratings and international cooperation. In times of crises also certain scopes are found like how to observe the way central banks are handling financial stress. They primarily adapt new instrumentation to provide a greater liquidity to the market.

In the future financial institutions are acting more global as international authorities also have the task to deal with times of financial stress effectively and to guarantee that liquidity across markets is granted. This should augment the economic growth by rate cuts and fiscal packages.

5.3. Important developments during the crisis

Since the mid of 2007 financial institutions are fighting against the problems of the subprime crises. On the 15th November 2008 the G20 states[28] in Washington agreed on a unified regulation and observation of the financial markets and financial institutions.[29]

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[28] The G20 states contains the 8 leading industrial nations Italy, Canada, Russia, UK, Japan, Germany, France and the US, and 11 smaller countries Argentina, Australia, Brazil, China, China, India, Indonesia, Mexico, Saudi Arabia, South Africa, South Korea, Turkey and the EU. It was basically founded to open developing countries the possibility of creating a global economy.

Their basic goal was to get out of the crises by a certain reform of the financial market which basically is structured into nine different assumptions. The first three demands are primarily dealing with the collapse of the coordination and to establish certain important incentives, the demands four to six are basically looking into more detail on the role of the state in future and the tasks he has to operate. The next assumptions are dealing with the supervision and nine is actually looking at the higher equity quote banks will have to establish. In the US the mortgaging of a house of nearly 100 percent was not so unusual. The mortgages loans were basically pooled, tranche, got certain ratings and were sold around the whole globe with different ratings.

A special problem was that through securitization buyers of securities bought the higher rated tranches by a special purpose vehicle that was combined to a new structure the so called CDOs (collateral debt obligations). These CDOs receive new ratings from the rating agencies. Further copies from the buyers of the CDOs created so called chain securitization. The losses associated with this were basically carried first by the equity tranches, which in normal cases should be left at the producer. It was also the cases that high risk rated tranches were bought by investors of Hedge funds.

The crises got real as the investment bank Bear Stearns closed two of their Hedge funds that were invested into mezzanine CDOs. After this occurrence Standard & Poor's downgraded their mortgage rated loans for the first time. Further downgrades were following which caused several special purpose vehicles to get into troubles with liquidity.

This caused hedge funds which were funded by bank credits, going short and repurchase agreements to higher securities. Additionally at the increasing returning quote of investors the liquidation of funds were also increasing. As you see the development of the shares indices which were developing very well until 2007 and were then subject to several fluctuations and were downward going since the mid of 2008.

[29] See D.Schäfer, 2008

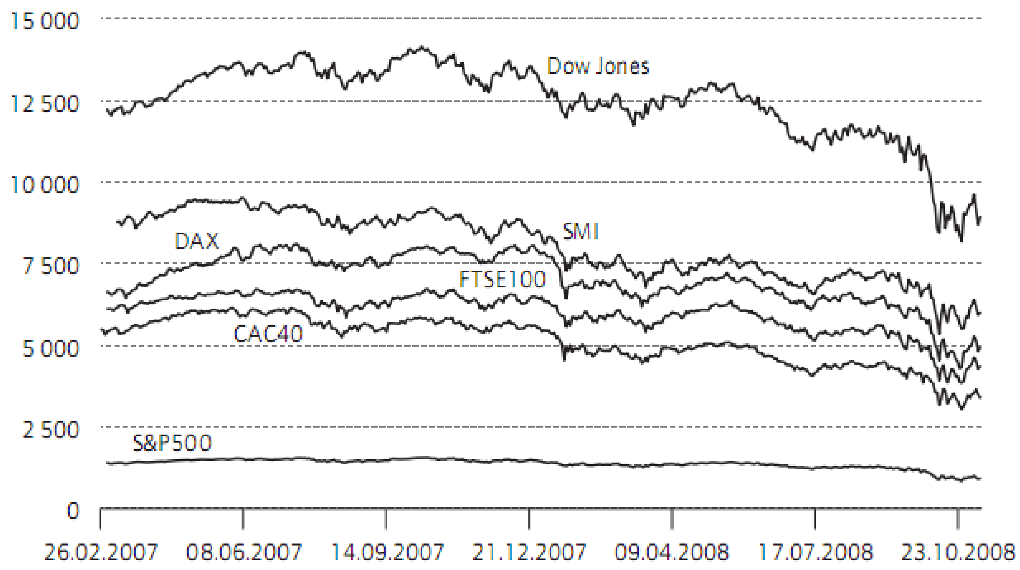

Figure 12: Development of important shares (Source: Schäfer, 08, p.5)

Through this cognitions the liquidity quote of the banks increased, the uncertainty concerning the willingness of the state to help increased, the increasing depreciation because of the constant downgrading of the shares and the decreasing confidence on the actors in the market had massive consequences for the market. In order to help, central banks around the whole globe began to support by offering banks liquidity. In short run they thought that the markets were already recovered, this was the reason why the DAX received one's more more than 8000 points from 2007 to 2008.

As the investment bank Bear Stearns was sold to JP Morgan at the start of 2008 the risk premiums for long term assets increased once more. As the demand of liquidity increased and increased the courses were going down around the whole globe.As you could see on the two figures below the courses of international and German banks experienced strong downward developments since the last past years. In particularly the course of "Goldmann Sachs" and "Allianz" was downward sloping from nearly 200 to less than 100 within almost 2 years.

But not only these two banks experienced strong developments, also other big international banks like Morgan Stanley, Deutsche Bank and Hypo were affected negatively by the crises.

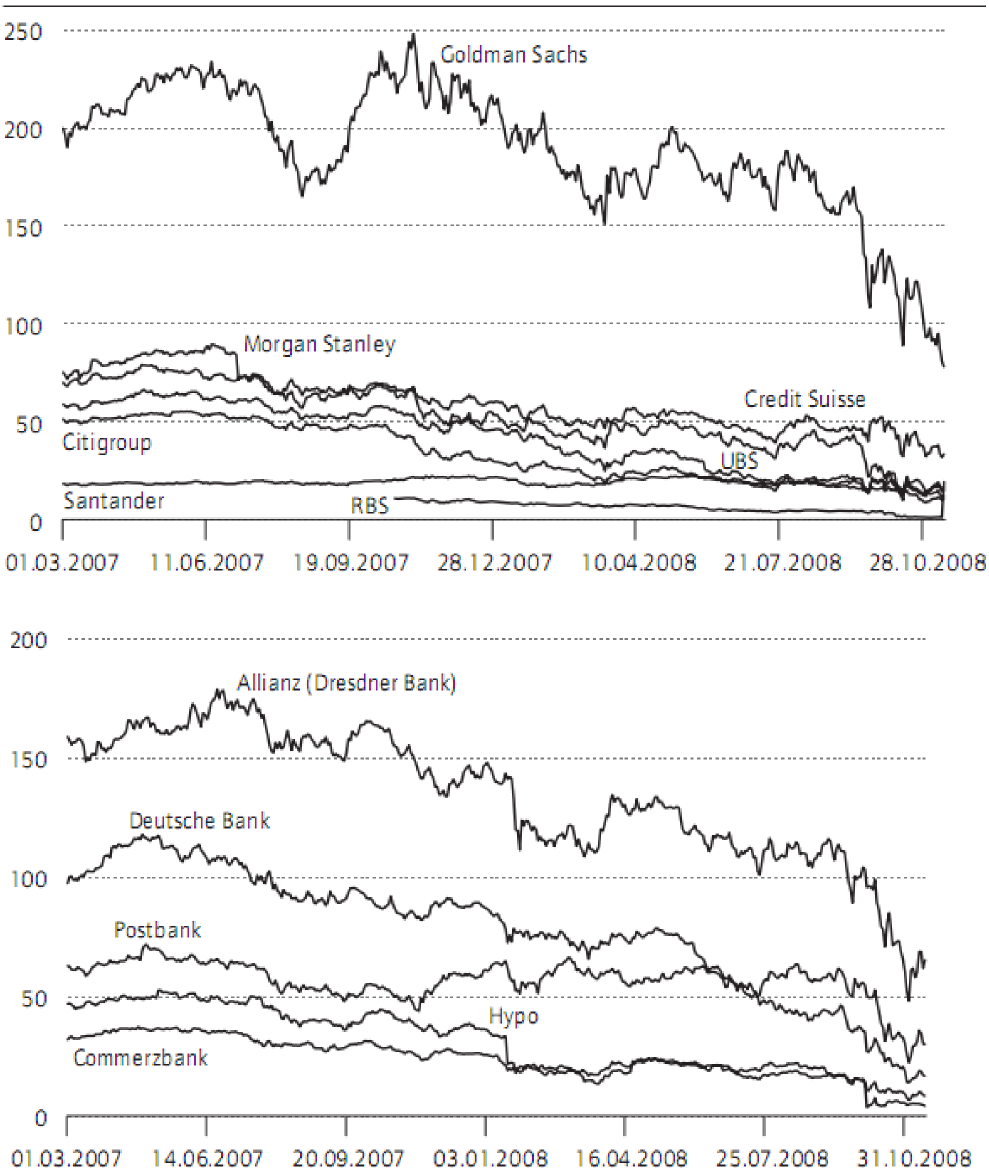

Figure 13+14: Share prices of International and German banks (Source: Schäfer, 08, p.6)

In September 2008 Fannie Mae and Freddy Mac were nationalized because of high liquidity problems. The basic task of these two banks which were both listed on the stock market was, to buy mortgage loans and to refinance by issuing securities. By speculative short sales on the stock market the course of the shares got into enormous problems. Which in turn lead Lehman Brothers as the first investment bank to go into bankrupt on the 15.September 2008. The collapse of Lehman Brothers leads to a strong impact on all other banks around the whole globe as they were all acting together in exchange with each other. The fear that appeared was that further more banks would collapse and this in the end got reality. The central banks got a very important part as they were the address of financing.

5.4. Rescue packages

What was the consequence? The investors lost more and more confidence on the banks and this had negative impacts on the stock market. This confidence deficit caused the governance to very appropriate recovery missions. In America for example they agreed on a rescue package of about 700 milliards of US dollar. In Germany they also tried to help by offering guaranties for all savings deposits and by establishing rescue up to the amount of 500 milliards for securities, co operations and the buying of illiquid securities.

As well as inside the EU and in the US the goal of a unified crises management system is aimed. The only good task would be to introduce new rules or to change and to improve the existing ones to establish robust finance market architecture.

5.5. *The collapse of major banks around the globe*

5.5.1. *USA*

Lehman Brothers:

This corporation was founded in 1850 by two brokers in Montgomery and was moving to New York after the civil war.[30] At the start of September 2008 they disclosed bankruptcy as they were incurring very huge losses, a large diminution in confidence of investors and as they were not able to find an appropriate buyer. The downgrading of Lehman Brothers started at the beginning of the subprime crises in summer 2007, where the share prices began to fall.

As the time went by, the losses increased and increased and the investors started to change their attitude toward Lehman Brothers in leading their critics to climb up. In June 2008 this corporation realized losses higher than expected, up to an amount of 2.8 $ billion and tried to receive fresh money from investors in the amount of 6 $ billion. These goals could not be achieved and also by the nationalization of Fannie Mae and Freddie Mac the situation got worse and worse in September 2008. On September 13 and 14 it was already clear that there would be no rescue for the firm anymore and it filed for bankruptcy on 15 September 2008.

As you can see on the following graph, the share price declined from $70 and above in May and June 2007 to 0 $ in September 08.[31]

On the trading day the share lost nearly 90 percent in Frankfurt. [32]This event leaded to a high risk aversion of the investors which involved losses in shares and benefits with gold and bonds. The main problem in this case was that the US governance did not want to provide additional taxpayer's money. In March 2008 the US central bank tried to help by offering 29 milliards of dollar to protect the risks by the case of a distress sale of Bear Stearns to JP Morgan.

[30] See The New York Times, Lehman Brothers Holding Inc

[31] See The New York Times, Broken Brothers

[32] See Handelsblatt, Lehman Brothers muss Konkurs beantragen

Figure 14: The development of the share price of Lehman Brothers (New York Times, 15.9.2008)

This investment bank was the fourth largest one in the US and went bankrupt after the intention to rescue it. Furthermore it was predicted that a collapse of Lehman would release a spate of financial disaster around the whole globe.

The US government additionally nationalized Freddie Mac and Fannie Mae and therefore helped them to survive. This repeated rescue trials leaded the private investors to constrict this intentions. There were proceedings between the British Barclays Bank and Lehman Brothers, but they revoked their choice as they come to know that there would not be a governmental rear cover and that this in turn would be too risky for them. As they were reckon with a bankruptcy of Lehman they started an exceptional business of the so called "Credit Default Swaps". [33]

Because of the bankruptcy of Lehman Brothers a shock throughout the whole financial system was the consequence.[34] It leaded the confidence of investors to decrease enormously and caused the credit markets around the whole globe to freeze. This development encourages the governments to take the necessary steps to calm markets.

[33] This type of investment basically deals with the transfer of risk from one party to a third party. It involves three parties interacting with each other. One party is the lender which basically faces credit risk from a third party and the second party guarantees to insure this kind of risk by desiring periodic payments.

[34] See The New York Times, Lehman Brothers Holdings Inc

The bankruptcy of this very old bank, namely 158-year old one, caused thousands of people to lose their jobs as they have around 25,000 employees. [35]

The case of Bear Stearns and JP Morgan

Bear Stearns was a bank of 85 years of independence as they were going into financial problems[36]

The fifth largest US Investment bank, Bear Stearns nearly went bankrupt, as they denoted huge liquidity problems.[37]The Fed of New York and JP Morgan tried to rescue them with financial aid.

They provided money for 28 days, so that Bear Stearns would have the possibility to override the financial problems. The problems occurred because they had incurred very high speculation losses on the US mortgage market.

Figure 15: The development of the share price of Bear Stearns (Source: Neue Zürcher Zeitung, 17.3.2008)

[35] See The Financial Times, Lehman Brothers files for Bankruptcy

[36] See The Financial Times, JP Morgan to buy Bear Stearns for $ 236 m

[37] See Neue Zürcher Zeitung, Bear Stearns nahe am Kollaps

As you can see on the graph above the share price decreased sharply from more than $60 to less than $30 until March 2008. Than it remained constantly and in December it already started to recover and then it increased again. This bad news had consequences on the whole bourses around the world as they were all negatively affected.

Through the failure of two of the main hedge funds of Bear Stearns the publicity had a first insight in the dimension of the subprime crises. This two hedge funds were basicallly investing into mortgagee funds and therefore suffered losses of 1,6 Mrd $. The third largest US investment bank JP Morgan was paying about $2 per share, in total about $236 Milliards for his competitor. [38]This price is below the market value of Bear Stearns. They were hoping that a integration of this bank into JP Morgan would lead to benefits of
$ 1milliards.

The fed was supporting JP Morgan in order to avoid a collapse of this investment bank, as this occurrence would lead to higher uncertainties on the financial markets.

5.5.2. Germany

Hypo Real Estate

One of the biggest lenders in Germany, namely Hypo Real Estate, was rescued by the government and other banks as they had liquidity problems of an amount of € 50 billion[39]. [40]
The Hypo Real Estate is primarily participating in the mortgage sector, in the national and international area. It basically consists of three German banks, the Hypo Real Estate Bank AG, Hypo Real Estate Bank International AG and Depfa Deutsche Pfandbriefbank AG.

This bank was the first bank in Germany that was rescued by the state. It also wanted to gain money from the stability fund of the state which was granted for an amount of 500 milliards of euro. [41]

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[38] See Neue Zürcher Zeitung, JP Morgan Chase übernimmt Bear Stearns

[39] See The Financial Times, Hypo Real bailed out by German peers

[40] See The Financial Times, Rescue package for Hypo Real Estate approved

[41] See Süddeutsche Zeitung, Hypo Real Estate zapft Rettungsfonds an

The share of the Hypo Real Estate in the DAX profited as this decision was announced. In comparison to the weeks before the share suffered a loss of nearly 80 percent. Private Banks first did not want to use the rescue funds while federal state banks as the Bayern LB, HSH Nordbank and WestLB declared that they would accept this offer.

As they had financial problems they had to cut back the workforce by more than 40 percent, namely to reduce the personnel from 1800 to 1000 in the next three years.[42]The Hypo Real Estate is basically the german bank that has been most affected by the financial crises.

5.5.3. Great Britain

Northern Rock

This bank, which was founded in Great Britain, was developing enormously in the last years. As the subprime crisis was occurring this had negative impacts on this mortgage financier. Northern Rock has basically settlements in 76 locations around the world servicing about 1.4 Milliards of clients. [43]

The troubles were arising because they basically had to fund themselves in exchange with other banks on the money market as the clients were investing only small amounts. As the crises of this bank was beginning, the investors got the fear that they would lose their money and began to withdraw their money in an volume of about 3 milliards of euro. There were also clients that were opening a new account because of customer loyalty where it was existing since the year 1850. [44]This leaded the share prices to increase.

The subprime crisis leaded the whole banking industry into times of fluctuations and caused the banks to mistrust each other and not to lend to each other money any more. As Northern Rock was dependent on funds in the interbank market it could not be refinanced anymore and had to be supported by a rescue program of the central bank.

[42] See The Financial Times, Hypo Real Estate to cut 40 % of workforce

[43] See Handelsblatt, Aufstieg und Fall von Northern Rock

[44] See Handelsblatt, Staatsgarantie kann Panik nicht stoppen

The problems that were arising through the crises wanted to be resolved by the decision of guarantee bonds for all deposits. The fears of the clients at this time should be dissolved with the agreement of the state and the bank of England to set rules to help the bank in times of financial distress. As the clients had the fear of losing their money, the share declined on one day by nearly 30 percent. [45]Northern Rock had not received money anymore because of the uncertainties occurring when the banks would not get any funding from the other banks. It was the first bank that was nationalized in Great Britain.

5.5.4. Austria

Kommunalkredit

In Austria it was the first time that a bank has been nationalized by the state as it was gotten into troubles through the financial crises and to prevent a collapse. The state was basically taking over around 99.8 % of the bank for an amount of 2 euro. [46]

The republic bought 50,78 percent of the Kommunalkredit from the Austrian Volksbank AG (ÖVAG), the other 49% of the Kommunalkredit were bought from the france-belgian Dexia. Dexia suffered huge losses from different investments and credits and so it was forced to get rid of their Kommunalkredit share.

6. Impacts

Not only the US were affected. In the UK for example Northern Rock, which is a major housing lender, has closed after they were unable to find an appropriate buyer as there was a bank run by its depositors. Also banks in Germany suffered big losses through their investments in asset linked mortgage loans. IKB already received capital injection by the German Government to survive. Another example is the WestLB which is a state owned bank. This bank also received a capital injection from the state to cover their losses in

[45] See Handelsblatt, Regierung greift bei Northern Rock ein

[46] See Die Presse, Finanzkrise erreicht Österreich

subprime securities. The consequences of the crisis influence the whole economy around the world.

6.1. The Impact on financial institutions

The subprime crisis affected banks and specialty finance companies very heavily. Poorly capitalized firms represent about 40 percent of 2006 subprime originations that closed down, declared bankruptcy or being bought till now.

Some investment banks reacted and now hold residual interest because losses have been limited and have been partially offset by gains on hedge transactions.
Normally losses came out at the end of the securitization chain, favored in the lower rated equity and mezzanine tranches. The losses appear mostly in lower rated tranches and applicants do not have to revalue their portfolio to make their losses apparent. The complexity of losses depends on the dollar volume of defaults.

But not all delinquent losses default at the end of the period, it takes a long time from the registration of the default to the moment where these payments are impacted. The foreclosure process can take about 18 months to complete. [47]During this time the lender has to make his further principal and interest payments to have a claim on the foreclosure proceeds.

6.2. The Impact on households

The consequence of interest rate resets resulted in payment shocks for borrowers starting from 2007. About 59 percent of all adjustable rate mortgages who had their originations in the years 2004 to 2006 will have to anticipate with payment increase of about 25 percent or more. 19 percent will have an increase of about 50 percent or more in the next years. [48]

[47] See J.Kregel, 2008

[48] See Kiff, and Mills, 2007, p.11

13 percent of the adjustable rate mortgages will foreclosures because of these payment resets during the next seven years. It is documented that about 800.000 mortgages foreclosed in the year 2006.

In the last years borrowers were able to limit their defaults by refinancing but now this get harder. If the subprime borrowers show a full payment history for the first two or three years it is categorized as “prime” borrower. Borrowers who show only low credit scores are likely to receive refinancing.

7. Corporate Governance Structures

Banks are in general confronted with many risks as for example the volatility of financial markets. In different countries they are applying various banking practices and as they are working together beyond boundaries it is important to establish certain rules and minimum standards banks have to comply with. The present crisis again demonstrates the importance of certain standards that try to prohibit scenarios such as the present. In reality the corporate governance structures have weaknesses and these should minimize the likelihood to go into bankruptcy.

In his paper (We aren't done yet: Comments on the financial crises and bailout, 2008) Joseph E. Stiglitz[49] is dealing with bad loans that had been issued at the financial markets and caused a crisis of confidence. The beginning of this tumult was the housing boom and the therewith associated overvaluation of the house prices. The continuous drop of the prices caused a shortage in the banks balance sheets. They tried to eliminate this problem by only paying the fair value of the assets. But the shortage could not be terminated. Investors like Warren Buffet were trying to find a way out of this dilemma by proposing equity to Goldman Sachs. This should be done by issuing preferred shares with embedded option rights. This routine should offer two main possibilities. First it decreases the public's downside risk and secondly offers the alternative to participate at the up-side potential. The problem was that the loans were basically calculated on basis of inflated prices but in reality the real estate values were declining.

The 700 $ billion bail out plan is now trying to rescue the financial system. Joseph E. Stiglitz states that the bail out will dispose some Wall Street firms to profit during this time but will also cause an enormous increase in the national deficit as $ 700 billion will not be enough money to rescue the entire American economy. The only thing that will help in such times would be a new and more mellowed regulatory system.

[49] See J.Stiglitz, October 2008, p. 1-4

Corporate governance rules should guarantee that the financial system in the individual countries is stabilized.[50] The topic “corporate governance” is very important because it can help to monitor and to supervise all countries around the world. One very important thing is the establishment of a unique corporate governance framework for the global banking industry.

Corporate Governance in the banking industry is of enormous practical importance. It also varies between different countries, as some countries are hardly developed and others like the United States are well developed. There are many different points of views on this topic. One might be to think about the straight forward agency perspective which deals with the separation of ownership and control.[51] The major question in this perspective would be how the investors can get the managers to pay back their money.

This part about corporate governance is in principle dealing with the different rules and standards that are used around the globe. There are many different definitions of corporate governance; in the following some of them are mentioned.

”Dealing with the ways that suppliers of finance to corporation assure themselves of getting a return on their investment.”(Shleifer and Vishny, 1997, p 737)

“Corporate Governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set and the means of attaining those objectives and monitoring performance”. (OECD, April 1999)

[50] See M.Ungureanu, 2008, p.1-2

[51] See A.Shleifer, R.Vishny, 1996

7.1. Importance of banks and their corporate governance

In the last years the topic Corporate Governance has become a more and more relevant factor especially in the banking sector. If new corporate governance laws are resolved, they are usually applicable to all businesses. Basically these laws should help the banks to ameliorate their supervisory functions. It is important that new regulations and guidelines banks resolve should be in line with the enhanced corporate governance. The corporate governance in a bank has to fulfill tasks for example basic financial services and access to payments systems.

The existence of corporate governance is important to ensure an adequate banking supervision. As there was an increasing demand of having similar regulations between the different countries, the international banking standards have been formed. They are known as the international banking standards by Basel Committee on Banking Supervision.[52] The interest of acting uniform was increasing because of worldwide financial threats like financial corruption and the problem of political unrest in the financial services industry.

The new regulation which was formed by the Bank of International Settlements in Basel is known as "Basel II." It should eliminate the barriers to work globally and make it easier to compare.

The Basel committee issued "Enhancing Corporate Governance for Banking organizations" in September 2009. A few rules that have been mentioned in the Basel II guidelines are[53]:

- Certain objectives and corporate values are important because they assure that there is a communication process through the whole bank.
- One additional rule is the establishment of certain lines of responsibility and accountability in the organization.
- Members of the board have to have the right qualification for their positions and an understanding for corporate governance.
- One crucial rule is that the board managers are not subject to the exercise of influence of outside managers.

[52] See Usui T, 2003

[53] See Usui T, 2003, p. 4-5

- The next guideline is the control by a senior management and the compensation that should be in line with the bank's ethical values, objectives, strategies and control environment.
- The results of internal and external auditors should also be effectively utilized.

In particular banks have a significant impact on the success of firms. They are able to exercise influence on the formation, increase and allocate their capital and stimulate the growth of companies. Due to this fact they have a huge influence on the corporate governance.

7.2. Regulation and Supervision

The structure of financial regulations and supervisions has been the subject of fluctuations, so a regularly adoption to new requirements got a very important task. Also the structuring and refreshing of the financial regulations became necessary. Basically in the banking sector an increasing amount of regulations were established.[54]

Through the increasing number of crises in the banking sector, continuously changes in the technology and the globalization of the banking sector caused the importance of banks' regulation and supervision to rise. We distinguish several aspects which are influencing the corporate governance of a bank for example the banking supervision in the EU, the regulatory restrictions in the banking industry and the regulation and supervision impacts on the banks corporate governance.

Banking supervision in Europe

National Central Banks play a significant role in the banking system. Regulation in the banking sector is basically needed to maintain stability and confidence in the financial system. Also other factors like a well developed financial sector infrastructure and an effective market discipline are necessary. [55]

The goal is to establish a legal framework that protects banks to exercise above their usual risk levels. Normally the banking industry is composed of two authorities, the regulatory and

[54] See Ungureanu M, 2008

[55] See Ungureanu M, 2008, p.6-11

the supervisory one. Decisions that are based on the national banking sector are assigned to the National Central bank. Since 2008 the trend is to assign the tasks of supervision to an external entity independent from the Central bank.

Different countries in principle apply different supervisory functions. The US in comparison to the UK carries out their supervisory tasks more effectively. In European countries there is a trend in connecting the supervisory practices across countries. The Committee of European Banking Supervisors (CEBS) is basically overseeing the practices across the EU and provides advice to the European Commission and promotes cooperation and convergence of supervisory practice across the EU.

Regulatory restrictions in the banking industry

Through the increasing importance of banks in the economy, the governments show more interest in controlling the banks through regulation and by imposing several restrictions to their activities. They are primarily focusing on restrictions like the entry of new domestic and foreign banks, bank activities or foreign ownership. [56]

- *Entry restrictions of domestic and foreign banks*

The main problems we are confronted with are information asymmetries that individual banks dispose. This can happen by producing misleading information to customers and could cause a destabilization of economies as the banks are committed to the risk of fraud. The consequence is that depositors think that the do not have the right information about risks that could occur. Governments can take influence by arranging entry barriers to limit the competition between banks.

But there are also positive effects related to the entries of new banks. One positive aspect is that foreign banks basically provide better practice than home country supervision and this would force domestic banks to operate more efficiently. Competition is created between the countries in applying the best supervisory activities, which in return help to apply better corporate governance.

[56] See M.Ungureanu, 2008, p.11-14

- *Restrictions on bank activities*

Restrictions on bank activities follow the objective that banks have to be licensed and are subject to regulations which primarily specify the activities those banks are allowed to carry out. The task of governments is to allocate them to a certain field of business and to pretend to what extent the banks differ from country to country and how banks and non banks firms differ from each other.

Basically banks around the globe are offering different activities whereas regulatory authorities decide on the range of actions. Also the securities or brokerage activities are limited to a certain range of operations that are associated to this field of action.

- *Safety net support*

Every bank has the possibility to rely on a safety net of the government. The safety net support is divided into two elements, the lender of last resort and the deposit insurance system. With the first one the National Bank has the possibility to provide unsubsidized support to illiquid banks and to permit uninsured creditors to suffer losses. This in series led to an increase of moral hazard and could in the end result in a banking crisis.

The deposit insurance system is basically effecting the regulation of a bank. It could cause conflicting predictions on the impact of the stability of the bank which results in augmented moral hazard and therewith associated increased risk taking behaviors.

- *Disclosure*

Information gaps occur in cases where imperfect information is existent. Through the creation of rules and procedures by regulators, the banks have better possibilities to act in preferable ways. The irregularity of information makes it in principle difficult for depositors or rating agencies to examine bank managers.

Basel II and its' third pillar "Market Discipline" pretend certain guidelines how to disclose, in order to tighten the market discipline of banks. It is important that the disclosure is in general reliable, comprehensive and timely.

- *Government ownership*

Countries that basically rely on tightened rules and regulations in the banking sector basically have better developed banks. There are two types of ownership to consider: state and private ownership. La Porta, Lopez–de-Silanes and Shleifer basically discuss this topic in their paper[57]. Government ownership in banks is very common around the world and has influences on the economic and financial development. Gerschenkron (1962) states that in undeveloped countries the government carries out the banks activities. In the 1890s countries like Russia where financial institutions were not well developed the government took over the banks and this boosted the financial and economic development. There is a various set of different views on this topic as for example Myrdal (1968) has a positive thought of governmental ownership of banks in India and other Asian countries. Also Lenin thought about the idea of government ownership as the big banks are important to make socialism possible. This idea was adopted through the whole world as many governments nationalized banks in the 1960s and 1970s and created new ones in regions like Latin America, Africa and Asia.

Government ownership in such a country in principle provides permanent employment, subsidies to supporters and other benefits to receive by contrast votes. This form of ownership is applied in countries with underdeveloped financial systems, in poor countries, in countries with heavy government interventions and in countries that offer less protected property rights. Through the influence of the government, regulations are decided that favor political interested topics.

[57] See R.La Porta, F.Lopez-de-Silanes and A.Shleifer, 2002, p. 1-25

7.2.1. *Impact on banks' corporate governance*

Through the stopped official supervision of banks and the strengthening of capital standards, the improvement of banking performance is not granted. There are only few similarities between the UK and the Continental European systems of corporate governance concerning its supervision and its governance. [58]

Through the application of market discipline, bank received tasks to follow. Basel II provides a combination of a regulatory system and a corporate governance system. It was created by the Basel Committee on banking supervision to give an approach for regulation and supervision. It is a set of regulations that tries to soften the banking environment by applying the best practices.

With Basel II and its pillar 3 "Market Discipline" the government tries to offer regulations that are forward looking, flexible and adaptive. In principal bank directors and managers are responsible for the risk exposure and the therefore better matured corporate governance. By encouraging good corporate governance, supervisors should consider market discipline by Basel II.

- *The new regulation Basel II*

The basic goal of Basel II is to give certain supervisory regulations to charge the capital adequacy of internationally active banks and to strengthen and stabilize the international banking sector.[59] The resolved proposals were floating to supervisory authorities around the world. With Basel II they want to observe better risk measurement practices by a precisely calculation of the risks and by covering them with an adequate equity rate.[60]

The purpose is to create a standard that eliminates competitive inequality among internationally active banks by offering and applying stronger risk management practices. Basel II mainly consists of three pillars, the minimum capital requirements, supervisory review and market discipline. The basic goal behind this is to provide at least nationally

[58] See M.Ungureanu, 2008, p.14-16

[59] See Basel Committee on Banking Supervision, 2004

[60] See S.Gerhardt, 2005, p.1

operating banks to work as uniform as possible. Through their more precise calculation of equity, strong cohesion and security of the whole financial system should be granted. [61]

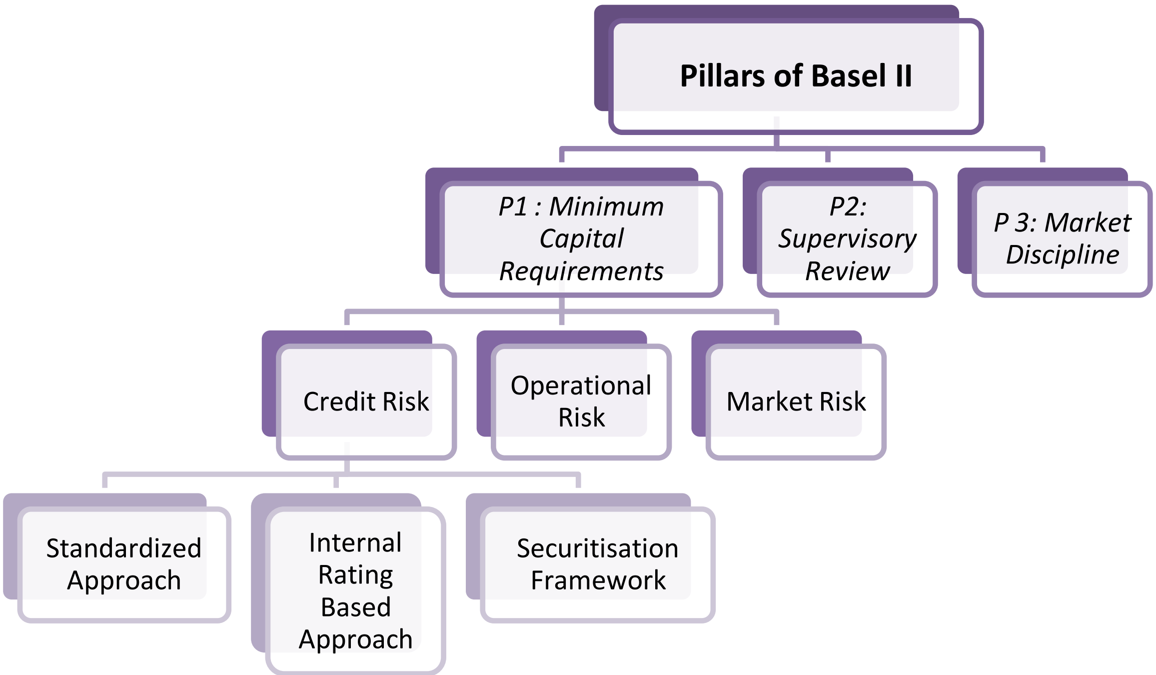

Table 7: pillars of Basel II (self constructed)

The first pillar "Minimum Capital Requirements" pretend minimum levels of capital for internationally active banks to avoid completely different guidelines among countries and to facilitate the cooperation among countries. National authorities have the possibility to set higher levels of minimum capital in their own countries. The Minimum Capital Requirements are divided into three different risk categories, the market risks, the credit risks and the operational risks. The credit risks are nowadays very important as they are the risks correlated with the credit. The operational risks are risks that occur when losses happen caused by failures of people or systems. [62]

The two most important possibilities[63] to measure credit risks are the standardized approach and the internal rating based approach. The bases of the measurements are ratings, whereas the standardized approach is based on external ratings and the internal rating based approach

[61] See S.Gerhardt, 2005, p.48

[62] See S.Gerhardt, 2005, p.48

[63] See S.Gerhardt, 2005, p.49-50

is based on ratings within the bank. This internally weights are basically lower because they assist the development of internal risk management systems and the information advantages the banks can use.

“Supervisory review” is the second pillar in Basel II which clarifies how the supervision on the market should work. One task would be that the supervisors ensure that the banks operate above the minimum regulatory capital levels. This pillar has to be applied to all internationally active banks to protect depositors.

Pillar 3 “Market discipline”[64] is a pillar where the banks have to report regularly about certain specified topics like risks, quality of the risk management and the level of equity. One major advantage is that many market participants like Rating Agencies or competitors receive an insight into the company.

7.3. The tasks of intermediaries in corporate governance

We basically distinguish between two different possibilities in dealing with information, the internalization and the externalization. There are two different types of corporate governance systems, the insider control system and the outsider control system. [65]

The internalization process is normally integrated in the insider control system and as the name already states the externalization is integrated in the outsider control system. Banks are intermediaries that play a more important role in corporate governance than investment or pension funds. Corporate Governance has to act in the interests of the stakeholders not only of the shareholders of a firm. In general its goal is to improve the existing quality of the decisions of the management through the constant flow of information.

As we are basically concentrated on the financial market, the exchange of information is a significant part as it gives a general view over certain facts like existing regularities and relationships.

[64] See S.Witte, 2007, p.10

[65] See R.Schmidt, 2004

Externalization is basically used to facilitate the flow of information to the public. This offers better possibilities than with the information obtained within the company. With Internalization we are confronted to limits that cannot be breached and the avoidance of generating different prices. As we already said there are two types of corporate governance systems who Franks/Mayer (1994) distinguished, namely the insider and the outsider control system.[66]

7.3.1. Insider control system

This corporate governance system is mainly used where the information is more or less generated within the company itself. The information is created through narrow relationships to the corporation and distributed among their participants.

The system basically takes care on the "interests" of different stakeholders of the firm, by finding solutions that are personnel friendly. The corporations are run in a way that the interests of several stakeholder groups are taken into account. The insider control system is identified by non public and confidential internal information.

7.3.2. Outsider control system

This type of corporate governance system basically contains information that was gathered outside the company. In countries like Great Britain this system is already working because they are looking on the financial interests of shareholders. The outsider control system is remarked by clear and enforceable contracts and well functioning markets. It is more restricted to certain standards for example the board of directors has to include a certain number of external directors.

This in general makes it easier to supervise as the management is limited to a certain set of functions they are allowed to do. The outsider control system is basically a capital market based financial system. The outsider and the insider control system show certain similarities as the governance plays an important role in both systems and as they are both acting in a financial, legal and economic environment.

[66] See R.Schmidt; M.Tyrell, 2004, p.13-19

7.3.3. *Financial intermediaries in corporate governance*

There are many different intermediaries for example banks, non bank financial intermediaries, financial markets or the regulatory environment that are important when talking about corporate governance. We can identify financial intermediaries as organizations that show financial assets and liabilities within balance sheets. Banks and non bank financial intermediaries are actively participating in the market while capital markets are not acting on their own. They are more or less represented by banks and other institutions.

By applying bank based financial systems, banks play a major role in financial intermediation. They can offer external financing to companies and receive households' funds instead. The share of risk is basically taken by banks because they have better possibilities of allocating risks. In this case the bank based financial system is superior to the capital market based financial system. One basic goal is to try to avoid interim fluctuations. In the insider control system lenders and investors in long term engagements mainly depend on the decisions of the management.

In general banks and their debtors are standing in close relationships to each other. Banks are involved in the corporate governance system and therefore they have to obtain information. This gives them the possibility to make better lending decisions and to lower their risks.

In the insider control system, pension funds and investment funds are not really involved in the monitoring process of companies. The outsider control system of financial intermediaries is different because also the external market players as non bank financial intermediaries, investment and pension funds are taken into account.

Listed companies, pension and investment funds are basically institutions holding large volumes of shares. With the outsider control system they want to achieve a cross sectional risk sharing process as the information is primarily distributed among the different market players. Mainly investment and pension funds are working to avoid problems by gathering information. The investment funds goal is to maximize their own value and to maximize the interest of their investors. Information intermediaries are also important to enable the flow between the different players, like the rating agencies and financial analysts.

7.4. Corporate Governance in Banking

In times of globalization where the banks can profit from each other, it is important to have adequate corporate governance. This is necessary to assure the stability of the market and to protect themselves against speculation risks. Because of the various problems and crises, the different market players are continuously trying to improve the corporate governance systems. The idea behind these improvements is, to avoid such crises in the future.

It is very important to constantly improve and to develop the governance of financial institutions and banks. By only applying uniformed designed proposals, the effect of an increasing efficiency would fail because different industries exhibit different criteria and goals and the governance structure has to take this into account.

Governance structures in general should be industry specific and are different for unregulated, nonfinancial firms. One reason for this is that there are lots of parties involved in an institutions activity who strive different goals. This in the end could lead to the handicap of the governance of a bank. Not only investors but also depositors and regulators have an interest in the banking performance. Regulators are very concerned about the performance of the bank because they are responsible for the so called "health of the economy". In general regulators have more expectations in banks than other stakeholders because of their higher responsibilities.

The opportunity of a stock based compensation should increase the motivation of the top management by enhancing their decisions. This offer on the one hand could have positive effects on shareholders by protecting them but on the other hand it could also cause problems to stakeholders like depositors and tax payers due to the fact that they are not directly correlated to options. [67]

Unregulated firms are having more problems in finding financial aid in times of financial stress, which in the end could lead to reorganizations within the company. In times of crises top managers have to react quickly and to protect the company by making the right decisions. Because their decisions making is so important, the company is offering fixed income to them. So they get paid even if the company is getting into bankruptcy. This arrangement has

[67] See R.Adams, H.Mehran, 2003

been founded to motivate the managers in times of financial distress. This is done to give incentives for giving their best in getting the company out of difficulties.

In times of financial problems firms have to liquidate their assets and the incumbent has to be eliminated from the management. When a liquidation process takes place, depositors have priority in comparison to the management. Stock options are long term contracts and through the fact that they are worthless if the company goes bankrupt rational investors prefer cash compensation instead of equity based compensation.

Large grants to top managers have major impacts on the capital of the banks in the future. The firms in general have to repurchase their shares from the market and this fact would decrease the flexibility of the firm because of losing capital. There are several possibilities of exercising compensation we differentiate. One is the investment opportunity set of the special firm. It is more advised for a firm to use fixed compensation programs than stock based ones. Because they can more likely result in higher liquidity problems. The competition in the managerial labor and product market could also influence the governance of a firm. The banking industry is competitive in both markets and through this similarity the governance structure of the firm will be affected. Contracts are also easier to create in industries where more information is available and where the replacing of a top manager is not so costly.

Homogenous markets in principle have the advantage that the relative performance is very easy to measure and poor performing managers are easier to identify. Through the homogeneity it is not so important to set shares as incentives for top managers.

One additional factor which could exert influence on the compensation is the capital structure. The stockholders normally favor to compensate top managers with stock options. This again results in a higher motivation of the managers to invest into riskier investment strategies.

Through the absence of an active market the possibility of taking over the less successful firms and to remove their boards is prevented. Through this fact the fear of external hostile takeovers is more or less reduced.

7.4.1. Hostile takeovers

In countries like the United States and the United Kingdom where large shareholders are uncommon, hostile takeovers are possible. How does a takeover look like? There are at least two parties that interact with each other. Basically the bidder makes a tender offer to the shareholders and if the shareholders decide to accept the bidders offer he gets control over the company and has the power to replace the management. In most cases the managers are replaced once the takeover took place.

Primarily takeovers are found in situations where there are governance problems and where the bidder expects profits afterwards. A takeover process is very expensive as the bidders also have to pay the expected increases in profits. One reason for the small number of hostile takeovers is that the banking regulations impose substantial delays on hostile bids. This helps firms by looking for new bidders or by trying to arrange defenses to neutralize attacks. The basic problem with this is that investors rarely involve themselves if there are mergers or acquisitions. Acquisitions take longer in the banking industry and therefore it is more difficult to receive higher offers by practiced investors until the approval process is completed.

One other fact that hostile takeovers are not so common is that stakeholder groups often use the delay for organizing an opposition to a regulated acquisition and so to influence the decision of the regulatory body. The third reason is that the exchange in a takeover is often cash. So banks are not willing to borrow funds for acquisition purposes because of their high leverage. The last reason is that many banks are holding are large number of shares. And this also reduces the possibilities of a hostile takeover.

7.4.2. Board of directors in a Bank

The board structure, ownership structure and compensation structure are influenced by each other as well as by a range of variables like the risk, real and financial assets, cash flow, firm size and regulation.

Adams and Mehran (2002), state that the banking board consists of up to 18 directors. This is a mean for the years 1986 to 1999 and this number gets smaller over time. The board of a national bank in general consists of at least five and at most twenty five members. The banking boards are usually larger than the boards in manufacturing firms but are declining in size through time. The banking board also has more outside directors. These differences are due to the size and the organizational structure of the firms. Larger boards in the banking industry do not directly lead to a decreasing value. The board composition also does not depend on the banking performance.

In different states the requirement of a board composition varies. The average banking boards meets more frequently than manufacturing boards. They meet in average 8.5 times per year.

Also the market value in the banking industry is smaller than in the manufacturing industry.

Ownership

Adams and Mehran (2003) state in a sample of thirty five internationally trading bank companies between the years 1986 to 1996 that bank top managers owned in general about 2.3 percent of the firm. This is less than in a manufacturing firm. In banks the outflow of options is low which lead to smaller ownership. The managers of manufacturing firms invest more into the equity of their firms and so they have the ability to increase their ownership.

7.5. Corporate Governance systems around the world

The United States, Japan and the United Kingdom are having the best corporate governance systems around the world. [68]Corporate governance systems are not identical and uniform among different countries. Around the world many different corporate governance mechanisms exist because of the different legal frameworks.

In countries like Italy corporate governance mechanisms are also less developed. In Italy banks basically try to reduce their flow of external capital to firms because of high associated risks. The United States and the United Kingdom in principle rely more on legal protection of the individual investors while Japan and Continental Europe only show less reliance concerning legal protection.

Japan focuses more on large investors while in the United Kingdom this type of investors are not favored because of the more concentrated ownership in the takeover process. In the rest of the world the ownership is more concentrated in families and contains only few large outside investors.

The United States has corporate governance which consists of many regulative authorities. Many years ago the United States had a weak and less developed corporate governance system. The Federal Reserve Act established a system of corrective actions to prohibit undercapitalization. This helped to become “adequately capitalized” and to reach certain

[68] See A.Shleifer, R.Vishny, 1996

capital levels. This is known as “Capital Restoration Plan”. It is basically provided for example to dismiss old and to employ new directors and to regulate the distribution of the capital by the parent holding company. The United States “enhanced Corporate Governance” contains a set of corporate values that set clear lines of responsibility and accountability and assure the independence of board members from management.

In Japan the Ministry of Finance, which heavily controls and manages the system, is trying to control every aspect of fiscal and financial administration. As well as in the United States as also in Japan bank regulators have the right to supervise and inspect banking organizations to assure certainty and compliance with laws and regulations. In this two countries bank regulators try to create new guidelines and regulations on corporate governance by respecting that the “Enhancing Corporate governance for Banking Organizations” is reflected. The new regulations become standards for bank supervision and inspection. These rules try to harmonize their standards, as it is an important factor for an international adjustment of banking regulation.

Good corporate governance systems try to combine the legal protection of investors and concentrated ownership. Countries like the United States, Japan and Germany combine these two factors. The United States for example protect the shareholders by ensuring minority rights and an easier transfer of shares.

7.6. Financing without corporate governance

When there is the decision that a bank is operating without a corporate governance mechanism there are two possible opportunities of financing.[69] The firms and managers could rely on their reputation to guarantee a certain standing. The second opportunity would be that investors are treated as gullible and are chosen.

For a firm a good reputation is not easy to achieve and it has to develop over years. The most important thing is that the investors should get the feeling that they are repaid at the end of the period. For a firm it is very important to raise funds on the capital market. It would be a problem if the clients have the feeling that they will not get their investments back. This

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[69] See A.Shleifer, R.Vishny, 1996

would lead to a changing behavior, as they would not be willing to lend their money to the firm in the future.

One major question which is standing behind this decision of non corporate governance is the following: What is the incentive for investors to lend their money if they do not receive any control rights in exchange? The basic idea behind this is that the investor's primary focuses on making a lot of money in the future. They normally have a positive attitude towards investing into the company and do not think about possible problems. In this case the investors have an excessive optimism by only receiving a certain explanatory power instead.

7.7. Legal protection

The legal protection of investors varies enormously around the world. One interesting question we can consider by looking at this topic is:"Why do investors provide external financing to firms?" Normally they receive certain control rights in exchange of their financing. One major right is voting on corporate matters like mergers or liquidations or the election of a board of directors.

Voting rights in a company are very complex and not so easy to realize, especially because of the fact that in many countries there is no possibility to vote by mail. The result of this is that investors will not come to the shareholder's meeting to hand in their voting because it would be too much work. In developing countries voting rights are in principle existent but cannot be really acted out. In such countries and also in countries with weak legal systems managers often try to interfere into the voting process by persuading the investors to decide on their interests.

In countries like the United States, Germany and Japan the law tries to protect the rights of the investors by providing certain standards.

In General it is easier for large investors to exercise their control rights as they have the possibility to put pressure on the company. Large investors are by definition investors who own a substantial minority stake like 10 or 20 percent. With this ownership they have the ability to monitor the management.

A 51 % control is known as "outright control", which is very uncommon in countries like the United States or the United Kingdom. There are certain restrictions which try to avoid ownership in this extent because it could cause harm to the economy. In the rest of the world this restriction is uncommon.

In cases of poor performance large investors are more likely to put pressure on the management and try to replace it. In a Russian investment for example a western bank will have more difficulties than a Russian one. Russia in general desires a 75 percent majority also for western banks to put pressure on the firm, while Russian ones have to give 25 percent to the state. They decided on such a regulation to avoid any kind of foreign investor.

Germany and Japan primary base their interests on systems with large investors with the desire to avoid hostile takeovers. In many other countries, legal protection of investors is less substantial and so firms prefer to remain family controlled. This can also lead to difficulties concerning raising funds outside of the firm as they normally have to finance themselves internally.

A lot of different corporate governance systems exist around the world, but what type works best? As all the systems are co-existing it seems that the corporate governance mechanisms of the United States, Japan and Germany work equally good.Large shareholders like the government in Japan and Germany also show some advantages like the ability to help corporate management by qualified investors. Such a type of investor is able to help distressed firms.

7.8. Investor protection

Corporate governance is defined as a set of mechanisms in which outside investors try to protect themselves against the expropriation of insiders.[70] The rights of investors should be basically protected and can be specified by law. This means that there should be a system of law and enforcement that help the investors to be guarded against harmful attacks.

Investor protection basically focuses on the problem how investors like shareholders and creditors can be protected by law. This topic is important because expropriation is a dangerous factor in many countries. Minority shareholders and creditors lose their rights as the power of the controlling shareholders is extensive. The corporate governance is very

[70] See R.La porta, F.Lopez de Silanes, A.Shleifer, R.Vishny, 1999

important for outside investors because they are more exposed to expropriation and risks. They are therefore more dependent on law than for example employees or suppliers.

We basically distinguish between two types of rights investors are subjected, contractual and residual control rights. Contract law is the privately agreement of two parties and the company. Bankruptcy or securities law instead deals with the rights of corporate insiders and outside investors.

When we are in a position where the rights of the investors like the voting rights are extensive and well enforced by regulators it is easier to win new investors because investing gets more attractive. If the opposite is the case and the protection of outside investors is not well developed, the corporate governance system does not work in this extent.

Why is it attractive for an investor to invest into a firm? Normally the investor receives certain rights or powers in exchange which are protected basically by law. This can be done by offering voting rights for directors, rights for receiving dividends, the possibility for participating in shareholder meetings and so on. There are also certain rules that additionally protect investors. They are constructed for cases like takeovers or bankruptcies. They basically deal with competition laws, stock exchange regulations or accounting standards. In many countries these laws are partly enforced by market regulators. Common law countries in principle have the strongest protection of investors, whereas French civil law countries have the weakest.

What is happening if the rights are hardly protected? When this is happening the control gets of immense value because the insiders get the possibility of expropriation. Normally firms are controlled by the state or by a family no matter if it is a small or a large firm. This is also favorable to accelerate the development of financial markets and to make it more secure for investors. If investors are protected against expropriation they have to pay more for securities, which on the other side makes it more attractive for firms to issue new securities.

Johnson, Boone, Breach and Friedmann (2000) found a correlation between investor protection and financial crises.[71] When we for example take a country with poor investor protection, investors are more interested in investing externally. The problem arises if future prospects deteriorate and the prices decline. What happens? Insiders expropriate and

[71] See R.La Porta, F.Lopez de Silanes, A.Shleifer, R.Vishny, 1999, p.17

outsiders do not have any possibilities to react. This coherence leads them to the result that investor protection and the law enforcement are very important topics.

We basically distinguish between two different corporate governance systems, bank centered corporate governance which we find in countries like Germany or Japan and market centered systems like in the US and the United Kingdom. In the last decade there had been several reforms of corporate governance in Western and Eastern Europe, Latin America and Asia. The goal was to create a “global financial architecture”. The reforms and modernization of topics like legal, regulatory and juridical reforms have gotten more and more important. In many countries the standards are not really matured and so improvements would lead to radical changes of the legal system.

When we take Germany as an example, a rule was applied that firms that are listed on the Frankfurt Stock Exchange have to comply with the international accounting standards and greater disclosure. The basic idea behind this is to expand the possibilities of financial markets, to make it easier to finance externally and to facilitate private restructuring of financial claims in crises. This means that countries with strong investor protection also have a higher securitization of rights against political interference. It is very important that financial markets receive protection of outside investors irrelevant if it is by the government, agencies or market participants.

8. Concluding Remarks

The subprime crisis in the US has been developing for almost 2 years and had wide ranging consequences around the globe. As all banks are interacting with each other, mistakes and the bankruptcy of one bank can cause other banks got into troubles.

The state now tries to help by resolving rescue packages for banks which could guarantee that banks will not go bankrupt so easily. The equity markets are in trouble and the share prices of many companies are falling down constantly. Another big problem is that many customers have lost the confidence in their banks, as many financial institutions have been affected by the crisis until now. Many investors went back to the traditional investment possibilities by giving their money into savings accounts. This cognition leads the shares of many companies to decline. For example the automotive industry suffered very big losses in the last past months, as the sales of cars declined.

The biggest US car producer General Motors is suffering from the reduction of sales by about 23 percent in comparison to the year before. Ford and Chrysler experienced similar problems. They also lost about 30 percent of their sales through the subprime crisis. The readmission of cars is basically reducing and the employees are sent to time offset as the demand is reduced.

Table 16: Development of the share price of General motors (Source: http://uk.finance.yahoo.com, access on 17.1.2009)

The crisis on the car market is Austria also affecting already, special offers and occasions are the consequence. In countries around the whole world losses in sales of nearly 50 percent are noted.

In my opinion the households are not confronted with the impacts of the crisis so far. At the moment only banks and companies feel the impacts of the subprime crisis and the households are spared. As the state is interacting and trying to help the banks that got into financial troubles maybe additional problems could be prevented. The real consequences as for example the cut in the number of workers and so on will show their first effects in the mid of 2009.

The clients are frightened of investing their money again into shares. Many of them lost a lot of money and lost the confidence in bank advisory. In my opinion the different corporate governance systems were also a problem as the crisis occurred. As all countries are interacting with each other, standards and rules that are unified across borders should be introduced. It is very difficult to enable comparisons between the different countries.

This crisis and the consequences should give the different governments around the world the chance to improve the existing reputations and to come up with a unified arrangement to make the teamwork easier and to avoid corruption and crises in the future.

9. Future

The predominant crisis in the United States with impacts on the whole world leads to a fear concerning the future. Many people lost their homes or lost a lot of money in the last one and a half year. Rescue packages have been resolved in order to help the banks but this does not help the people to get their money back.

The World Bank expects the hardest recession since the big depression in the 30s. The development of the worlds economy is shrinking and many countries are expecting negative forecasts for 2009. The World Bank expects only a global growth of about 0.9 percent. In the year before they had expected a growth of 2.5 percent.[72] It is expected that the economy of the rich countries is shrinking and developing countries will only note an increase of about 4.5 percent. The current financial crisis has stopped the growth of commodity prices and banks are suffering big losses. The problems in the economy will lead to an enormous reduction of the number of jobs around the whole globe in the following year.

A recession is supposed and this will lead to a reduction in the exports for the previous year. The Internationally Monetary Fund states, that a global growth below 3 percent will lead to recessions around the world. Many EU countries have also negative prognoses for the year 2009. Lettland for example documented a decrease of their economy in the third quarter of 2008 of about 4.6 percent.

In Austria the prognoses for the first half quarter of 2008 were not so bad; experts are expecting a growth of about 1.6 percent but a decrease in 2009 of about 0.3 percent. As all countries are expecting and experiencing a negative development it will end in a serious situation for the Austrian economy. For 2010 improvements are expected.

[72] See www.focus.de, access on 18.1.2009

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Appendix

Summary

The financial crisis had its origin in the summer of 2008. Since this time there had been a lot of incidents that affected the financial system. The US basically issued credits to clients that were not creditworthy enough to receive a credit in normal cases. These clients were in general minority groups such as single family households that had not enough money to realize their wish of their own house. The subprime crisis had been developed as the investors were getting credits for low interest rates. Then the biggest fear come to reality, the house prices fell, the investors were not able to repay their credits and so one by one lost their houses. The major problem in these crises was that the banks were safeguarding their credits, by putting many credits together and by selling them to other banks. So the crash of many households in America leaded to negative impacts around the whole globe. Many banks were negatively affected, as for example Lehman Brothers went bankrupt. Many other banks also suffered big losses as they were all interacting with each other.

We distinguish between international bodies like the World Bank that have impacts on all institutions below them like the national banks, the central bank, the banks and exchange markets and the institutional investors. All market players have their tasks to keep the financial markets functioning. Market players in principle have the task to decide on the interests of the investors.

There are many considerations why the subprime crisis developed. One assumption for example was that many borrowers got hybrid adjustable rate mortgages. This type of loan was only constant for two years and was then adjusted in a six months period.

The impacts of the financial crisis were serious. Many banks got into enormous liquidity problems and other banks like Lehman Brothers went into bankruptcy. The bankruptcy of this big bank in the US leaded to impacts on the whole world as they were all interacting with each other. Big banks like Northern Rock, Kommunalkredit, Hypo Real Estate and Bear Stearns needed help from the state to survive. As investors are afraid of investing and lost their confidence in the banks, the share prices on the bourses fell dramatically.

As it is important to set rules and standards for the banks to comply with, the Corporate Governance is a very important topic in correlation to the stability of the financial market.

Corporate Governance is basically dealing with the regulation and supervision of the individual countries. The basic goal behind it is to find a set of regulations that are unified across borders. The new regulation “Basel II” is basically formed to eliminate barriers and to make comparisons between countries easier.

Zusammenfassung

Man sagt, dass die Finanzkrise ihren Ursprung schon weit vor dem Sommer 2008 hatte, als in Amerika Kredite an Bauherrn ausgegeben wurden die unter normalen Umständen nicht kreditwürdig genug gewesen wären. Besonders Minderheiten und Single Haushalte, die durch ihr niedriges Einkommen nicht die gleichen Möglichkeiten gehabt hätten, nützten diese Zeit aus um sich den Traum eines eigenen Hauses zu erfüllen. In diesem besonderen Fall wurden Investoren besser eingestuft als sie waren, um ihnen Kredite zu niedrigen Zinssätzen ausgeben zu können. Die Banken spekulierten primär auf steigende Hauspreise. Doch der umgekehrte Fall trat ein und die Preise der Immobilien sank, was dazu führte dass die Investoren nicht mehr in der Lage waren ihre Kredite zurückzuzahlen.

Diese Entwicklung führte dazu, dass ein Investor nach dem anderen sein Haus wieder verlor und sich damit auch in extreme Schulden stürzte. Ein großes Problem in der Krise war es, das die Banken die Kredite bündelten und an andere Banken weltweit weiterverkauften. Dadurch lösten Bankenzusammenbrüche in Amerika eine Kettenreaktion im Bankensektor aus. Als Lehman Brothers Konkurs beantragte, hatte das negative Auswirkungen auf viele andere Banken.

Es gibt mehrere verschiedene Akteure am Markt, die miteinander im ständigen Austausch stehen. Internationale Institutionen wie die Weltbank haben Einfluss auf nationale Einrichtungen, wie die Zentralbank, Banken und Devisenmärkte. Die wesentliche Aufgabe der Akteure ist es einen gut funktionierenden Finanzmarkt zu garantieren mit Berücksichtigung der Interessen der Investoren.

Die Auswirkungen der Krise waren fatal, da viele Banken in große finanzielle Schwierigkeiten kamen. Banken wie Northern Rock, Kommunalkredit, Hypo Real Estate und Bear Stearns wendeten sich an den Staat um mit deren Hilfe diese Krisenzeit zu überstehen. Die derzeit vorherrschende Problematik besteht primär darin, dass die Investoren zu risikoscheu sind um in den Finanzmarkt zu investieren und ihr Vertrauen in die Banken verloren haben. Dieses Problem führt dazu dass die Kurse an den Börsen derzeit abfallen.

Da es von großer Bedeutung ist, dass ein geeignetes Regelwerk im Bankensektor zur Verfügung steht, ist das Thema „Corporate Governance“ sehr wichtig um eine Stabilität im Finanzmarkt zu garantieren. Diese Thematik beschäftigt sich mit der Aufsicht und der

Regulation der einzelnen Länder. Das Ziel ist es Bestimmungen zu finden, die sowohl auf nationaler als auch auf internationaler Ebene gleich sind. Die Regeln des „Basel II“ sind dazu beschlossen worden, um Handelsbarrieren zu verhindern und ein besseres Zusammenarbeiten zu ermöglichen.

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- Ziel war es, die Zielgruppe der KARE GmbH zu ermitteln um maßgeschneiderte Verkaufsfördernde Maßnahmen zu entwickeln.
- Ausbildungsschwerpunkt internationales Marketing
- Fremdsprachenwoche in Frankreich
- Vertiefender Konversationsunterricht in Englischer Sprache
- Erweiterte Schulungen für das MS Office Paket (Word, Excel, PowerPoint, Access)

Sprachen

- *Englisch*
  Fließend in Wort und Schrift inklusive Handelskorrespondenz

- *Französisch*
  Fließend in Wort und Schrift inklusive Handelskorrespondenz

- *Spanisch*
  Grundkenntnisse

- *Russisch*
  Maturaniveau

- Bilingualer Ausbildungsschwerpunkt an der Universität in Wirtschaftsfranzösisch und Wirtschaftsenglisch

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