Vol. 4, No. 9 September 2009

The Thinking of Subprime Lending Crisis

Cheng Shao

Department of Business and trade, Jiangxi BlueSky University
Beijing East Street 1118, Nanchang 330029, China
E-mail: shaocheng1213@sina.com

Zhiwei Xiong

School of intercultural Studies, Jiangxi Normal University 99 Zi yang Street, Nanchang 330022, China Tel: 86-791-6013-946 E-mail: lightinair@163.com

Abstract

Long time after the big and terrible world wild financial crisis between the year 1929~1931, today's international economic environment has been facing another influential problem-----the subprime lending crisis. The subtle causes have brought about profound influences. The whole world tries to find the solutions and expect the changes in the financial system.

Keywords: Subprime lending crisis, Mortgage, Default rate, Foreclosure, Bond

The subprime lending crisis originally happened in the spring of 2006 in America, in August, 2007, it spread to all of the important financial markets like North America, Europe and Japan. With the increasing of the interest rate and decreasing of the house price, the delaying rates of the housing mortgage from the subprime clients have been rising a lot, and the risk of the subprime mortgage has been uncovered rapidly. Generally speaking, the damages caused by the problems of subprime mortgage are relatively limited to some extent. But the consequences really serious are the Financial Innovations of the derivative damages based on the subprime mortgage which can bring a big scale of catastrophe so many times larger; furthermore, it can make the victims spread to the financial organizations almost in every democratic market.

1. The cause of the subprime lending crisis and its prevailing

1.1 Long time of the low interest rate

How the situations of this financial crisis happen? Exactly, from year 2002, the Federal Reserve in America always maintains a policy of the low interest rate in such long period. Stand in the position of the central bank, low interest rate means space big enough for macro-adjusting the economy and supplying a comfortable environment for economy facing the impact from outside. Nevertheless, the circumstances of long time low interest can bring a serious risk. Because of the low interest rate, the benefits the banks can get from each individual is low, therefore, in order to expand the business, a lot of the commercial banks decreased their standard of the first payment if anybody wants to get the mortgage loan, and even the situation without fist payment occurs. All of the facts have stimulated the bubble of the mortgage loan and especially for the subprime lending in the industry of real-estate. At the mean time, the situation of low interest rate also stimulated the demand of the real-estate. So, in America, the house price is always increasing in such an active market of real-estate. The low interest rate and the so called prosperity in real-estate have covered the risk of subprime mortgage loan. There are statistics to show that the fastest speed of the real-estate development happened between the year 2003 ~2006. According to the calculation of IMF, the part of the subprime lending business occupies 14.1 percent in the whole mortgage loan of the real-estate; the exact volume is 1.1 to 1.2 trillion US Dollars. Within 5 yeas actually, the house price had increased 100%, the subprime client could easily get money for supporting the monthly payment, and the default rate is far less than the original estimation. Under the prediction of the low default rate, there are so many organizations of the hedge fund utilized their interior mathematic formations to do the evaluation at the derivative products of the subprime mortgage, and soon found the astonished benefits. Thus, large groups of the investors came in. But the terrible thing is that the extremely low default rate under the real-estate prosperous bubble is untrue, the high benefits calculated by this sort of formation also can't be realized at all, the pioneers' income gives consequences to followers' great losses.

1.2 Increasing of the interest rate and decreasing of the house price

Similar to the situation that the prosperity of the subprime mortgage market is relied on the environment of loosely monetary policies, the realization of the risk is also beginning at the end of the loosely monetary policies. As we all know, when the tight monetary policies occur, the interest rate must be higher. Because most of the interest rate in the mortgage loan is floated, which means the interest rate signed by the contract will be changed all the time according to the up and down of the actual interest rate. So, when the actual interest rate is much higher en cause de tight monetary policies, it will increase the burden for the borrowers in the market of real-estate paying their money back. Otherwise, the new monetary policies would give influences to lower the demand in the marketplace of real-estate and decreased the house price, this can absolutely diminished the capital volume for the lenders, especially for the commercial banks, they were facing losing their abilities to gain capitals and do further investment. Also, the decreasing of the house price could lower the opportunity cost for the borrowers do not obey their contracts. Thus this would increase the credit risk absolutely. In order to forbid the investment bubble becoming even bigger, from the year 2005, the Federal Reserve enter into the duration of increasing the interest rate. Till the end of 2006, the central bank of America increases the interest rate for 17 times let the interest rate from 1 percent to about 5 percent. For the time later, the influence of the interest rate augmentation has gradually appeared. Under the influences of the two cases: the decreasing of the house price and the increasing of the interest rate, the risk in the market of subprime mortgage occurred to a big scale. In the whole year of 2007, the default rate in America reached 13.3 percent, and the rate of foreclosure reached 4 percent, but normally speaking, the two ratio could specifically be 2.57% and 0.5% in adequate.

1.3 Aggressive loaning conduct

The aggressive loaning conduct is also the indispensable factor to this financial crisis. In western countries, it is prevailing for people making loans. From houses to cars, credit cards to telephone bills, loans are in everywhere. The citizens seldom do the full pay when they buy houses, but always do it by the method of mortgage loan. Also, as we know, unemployment and reemployment are very common in these societies. Everybody needs house or apartment, but how can the people who get an instable income or even do not have any income do the purchase? Make the mortgage loan, absolutely! Because the credit level could not reach the normal standard, these people are defined subprime clients. And what is the aggressive loaning conduct? For a long time, banks lend money to the subprime clients in the guarantee that if the borrowers can't pay their money back, the banks have the authority to withdraw their houses. But according to the situation that the house price is diminishing and the interest rate is increasing. The banks found if the subprime clients could not do the repayment and they let the houses be sold in the market, the money the banks can get is even less than the original loan. With this sort of affair spreading to a big scale, subprime lending crisis occurs.

1.4 Over-structured financial system

The last part which gives the contribution to spread the financial crisis is the over-structured system of today's financial marketplace. The over-structured market has the characteristic that there are so many financial derivative products which may possibly bring the terrible leverage effects to the economic environment. The over-developed fictitious economy is not just a temporarily inadvertent action taken by the financial systems of America, exactly; the market which lacks of the basic support of the entity economy and owns a part of too much leverage effects and derivative products is extremely dangerous. According to the formula of the capitalized income:

Value of capital = income - interest rate.

This is exactly a formula which can transfer any current of income into the large quantities of the fictitious financial capital. Because of the global circulating system of US Dollar, all of the current incomes have the chance to be capitalized when get stable. Thus, in the 13 trillion dollars of the American national income, most of them could be capitalized. The most normal method for Wall Street capitalizing people's income is to make the mortgage loan in the industry of real-estate. After seeking the normal citizens, they turning their eyes into the current income owned by those people who have the relative lower credit level. Capitalizing the unqualified current income and the mortgage loan the commercial banks lend to them is called subprime mortgage. Furthermore, Wall Street rapidly creates the innovation of the mortgage bond simply based on the unqualified mortgage loan from the subprime clients. Every time re-capitalizing the current income there are new fictitious capital be created. This sort of the new fictitious capital can mean that the capital distance between the present and original lenders and buyers becomes even farther, the power of fictitious even stronger. For a long time, this could absolutely bring about the horrible bubbles in American economy. The global circulating system of US Dollar supply enough currency that can be used for the financial innovation inside America, this can make Wall Street capitalizing all sorts of current income as largely as possible. For a long period, the over fictitious economy has appeared. The most important thing during this process is that the current income owned by the

people who have the low wages has been capitalized for so many times, therefore, it becomes the chain of leverage. In one side, this makes the distance between the original risk and the last holder of the risk even longer. In another side, this can also make the functions of the different financial leverage be interweaved, bring about the risks even bigger in economy. Thus, the fragile of financial market represents the fragile of the whole economy. And this is exactly the reason why this subprime lending crisis could spread to such an extremely big scale. Perhaps, even if there is no financial crisis existing in the real-estate, there must be occurred in another industry in the prerequisite that today's financial systems have not been changed.

2. The characteristics of subprime lending crisis

With the subprime lending crisis spreading to world wild, subprime mortgage, the concept which was not so popular before, has been concentrated by all of the people. The so called subprime mortgage refers to the mortgage loan get by the group of citizens or families who gain relatively low wages, low level of education, low knowledge in finance. There are some of the basic particularities for this.

2.1 Low credit record of subprime clients

The borrower of subprime mortgage is the person who has the bad credit record, owns the low level of the credit marks. The evaluation firms of credit in America separate the credit level for different people in five standards: 750~850 points is outstanding, 660~749 points is good, 620~659 points is average, 350~619 points is bad, below 350 points is yet identified. Most of the subprime clients have the standard below 620 points, normally speaking; they have not the chance to reach the condition to get the mortgage loan if they choose to give a large sum of money for the first payment.

2.2 High rates of loan / house price, monthly mortgage payment / income

Among the subprime clients, proportion of loan / house price, monthly mortgage payment / income, both of the two statistics are very high. In the normal standard of the mortgage loan, the proportion of the loan in the total house price is about 80 percent, monthly mortgage payment in the individuals' income is about 30 percent. However, for the subprime clients, the average proportion of loan / house price is 84 percent, some of them over 90 percent, and even reached 100 percent. That means the first payment for the subprime clients is usually less than 20 percent, and even the situation of zero first payment occurs. Without the actual circulating of the individuals' currency, the banks lost the system of the risk afford that should be shared with the borrowers. And we can easily see the moral risks inside of it. Also, the high proportion of monthly mortgage payment / income represents the free money the borrowers can dominate is very limited, thus, the ability to fight against risks is so weak.

2.3 High default rate and rate of foreclosure

The default rate and the rate of foreclosure in subprime mortgage are extremely high. Because of the default risks in subprime mortgage is 7 times bigger than the normal mortgage loan. Thus, the interest rate for subprime mortgage is 350 basic points higher than the normal mortgage loan, and 80 percent of them are floating interest rate. During the period of lending, if the interest rate is descending, the afford for the borrowers paying their money back is lightened. But if the interest rate during the process is ascending, the afford for the borrowers could be much heavier, therefore, the risk of default and foreclosure could be increased. Basically, the appearance of the subprime lending crisis inevitably has the relations to American macro-monetary policies. Though the whole duration is not short, the market of American subprime mortgage developed in a very slow pace in the 20th century, and the scale is not big. Nevertheless, enter into the 21st century; Federal Reserve has carried out the extremely loosely monetary policies. From the year 2000 to 2004, the central bank continually decreases the interest rate for 25 times in order to treat the bubble burst of global economy and the pessimistic feeling of 9.11 incidence for example. But to later time, when the Federal Reserve done the operations of open market selling, the interest rate has been increased. The interest rate of subprime mortgage is according to floating rate, thus, the cost for subprime clients do the repayment became much bigger. At the mean time, the bubble of real-estate was bursting, the house price falling down; the borrowers gradually lose their motives to keep the contracts with the commercial banks. Therefore, the default rate and the rate of foreclosure became much higher.

2.4 Leverage effect

The change of the macro-economic environment leads the risks of American subprime mortgage be erupted, the default rate increasing a lot. But, only refer to the subprime mortgage itself, the world financial market could not be affected so profoundly. In the time the damage prevailing, the total volume of the American subprime mortgage is between $1.1\sim1.2$ trillion dollars, even under the estimation of upper limit of the damage rate of 40 percent, the total losses could be calculated in about 400 billion dollars, has the proportion of only 2 percent in GDP of that time. But the authentic losses and influences, as we know, are much bigger and serious. For this, we can't forget the large series of financial derivative products have contributed a lot. For instance, the different kinds of the bond based on the subprime mortgage bought by a large group of the organizations, like the immense commercial banks, stock jobbers, insurance companies, hedge fund companies, even the retirement fund etc. and all of them have got great losses.

3. Influences of the financial crisis

3.1 General influences

To the influences of this subprime lending crisis, there are three direct parts:

First of all, after the crisis, the people most seriously destroyed are those who earn a low income, because of lack the ability to give repayment, they are facing the bad situation that their houses or apartments be withdrawn by the banks.

Later, with the time passing, there must be lots of the organizations who have the direct transactions with the subprime mortgage gain damages, even will be obliged to send the applications for bankruptcy.

Lastly, the large quantities of the American and European investment fund can also be the great losers because they have bought so many derivative bond which associated with the subprime mortgage.

3.2 Particular effects to China

Exactly speaking, the influences of the subprime lending crisis are extremely big and profound, and perhaps be different to the countries who have the different economic backgrounds. But, the above three are basic. It must be the normal problems facing by any democratic markets, bien sur, North Korea, Cuba etc. aren't include in this realm. The US. is the centre of this financial crisis, and inevitably suffered the most in the world. The immediate follower, Great Britain, who has quite the similar financial systems, financial institutions and financial laws with America. All of the western developed countries have trapped in with on exception. And to China, that will be a little bit more to considerate: China is a country who largely depend on exporting the immense number of low priced merchandise in the international market, the object countries for China to export is the developed rich countries. The special characteristic of Chinese economy is that "miraculously" big trade surplus for nearly 30 years under the special attend of our dear Party, but not based on the rules of economic principals. Easy to understand, the exchange rate of RMB in the international currency market is controlled. Facing the big demand of RMB because of the large quantities of Chinese goods be purchased, but the exchange rate is fixed, that is the key to the secret of Chinese trade surplus in such an incredible long time. My dear readers, please be patient, give the Chinese economic background is not my aim, but it's independently necessary for doing the later part of explanation. As we have already known, China is such a country relied on export. But, what is the situation for the countries who afford the big responsibility to buy Chinese merchandise? Unfortunately, America, European Union, Japan have all trapped into the subprime lending crisis. For quite a long time, China play the role of trade surplus, America, for example, play the role of trade deficit. But how can the country who has the trade deficit sustain such an extremely long time? The bond of national debt! Yes, Chinese government using the foreign deposit gained from the international trade market to circulate into the international capital market under the form of buying the bond of American national debt. Don't forget the famous equilibrium formula:

Trade balance = Net capital outflow

US take the advantage of the outflow capital to do the things he willing to do. Directly speaking, America is making debts to by Chinese goods! The terrible thing is that once the economic chain of America is broken, American people not willing or loose the ability to buy Chinese goods, the problem of over-productivity in China will explode at once! But why this hasn't been erupted before? That is because America continually has the resources of debt at high quality. But today everything has changed. The chain of debt has been polluted. The problem of Chinese over-productivity always disguised behind the high volume of debt worldwide. If the western countries give up to buy Chinese products, that must be the time for the terrible explosion in the part of our entity economy, I'm afraid we can no longer keep such a speedy developing pace, we have got to face the horrible enterprise downsizing, high unemployment rate and even greater umber of bankruptcy. Once the international economic system gets failure, we will inevitably pay out tremendous expenses.

4. The lifeboats

Surely speaking, the subprime lending crisis has no good for any country; all of the important economic entities in the world take the actual lifeboat promptly. America accepts the method of nationalization in a big scale. From the effective nationalization of Fannie Mae and Freddie Mac to the strategy of the "temporary nationalization" for using 700 billion dollars to afford the dead accounts of the financial organizations. All of the plans give American government enough authorities to buy any of the dead accounts in American financial organizations within 2 years. This will also make American national bond from 10.6 trillion to 11.3 trillion dollars. The biggest part of this plan is for the government buying Wall Street's bad mortgage in order to help to improve the balance sheets relied on the capital by issuing the national bond. Later, Treasury even prepared 2 trillion dollars in the monetary market fund for the sake of guarantee the reactions' feasibility. On the other side, the actions taken by United Kingdom might be different. Today's problem is almost every financial organization facing the shortage of capital because of the bubble burst of real-estate. If we say America only concentrate in the dead accounts, England, possibly take the actions more directive to the centre of the problems. The government of Great Britain chooses to directly circulate the capital to the commercial banks that trapped a lot into the subprime mortgage loan for better solving the problem of capital shortage, but not keep eyes in the dead account. There will be 50 billion pounds used for buying the stocks of the big financial organizations to realize

partly nationalization. At the mean time, British government promised to supply about 250 billion pounds guaranteeing the system of banks go smoothly and healthy, for the same purpose, Bank of England decide to supply an extra 200 billion pounds for short term credit. Apart from this, there is another extremely important meaning for this, If the government circulating the capital into financial organizations, as the stock holder ou il se pass des choses, the government can obtain the droit de propriete. Thus, if the plans of the lifeboat effective, the benefits might not be wholly gained for the people who made the things bad at the beginning.

5. Directions go ahead

After the terrible worldwide financial crisis during the year 1929~1931, unfortunately we are facing another big one today, nevertheless, it is fortunate for us to have such a chance as our grandfathers' to get a serious and impressed lesson from it. Our free market of capitalism today bien sur is much stronger and better than several decades ago, but perhaps it's hard to reach perfect. Although subprime lending crisis might be a sharp and negative shadow that could not escape in people's mind for a long time, it is not important. The most significant thing for us to do is we must ask ourselves what we have learned in such a precious lesson.

5.1 Pay attention to macro-economic policies and economic fluctuations

It is extremely necessary to highlight the analysis of the ongoing macro-economics and pay high attention to the risks could possibly brought by the economic fluctuations. For governments and central banks, adequately using the fiscal policies and monetary policies at the right time is important. Also, the alerting systems should be improved in order to predict and control the scale of the risks. Neglect of the potential risks in the step of speedy developing might be the cause of the recessions later, and even crisis.

5.2 Change of today's financial system

It is reasonable for some new policies enter into today's over structured financial system. Normally speaking, during the transactions of the mortgage bond, the commercial banks and the stock jobbers can always gain the benefits as follows: Put the eggs into different baskets, achieve the aim of decreasing and separating the risks by selling and reforming its assets. Acquire the different sorts of the commission charges and service expenses in the process of create and sell the mortgage bond. Earn benefits directly from each of the transactions. Under the observation, the transactions of the mortgage bond become one of the important resources of the income for the financial organizations. That means, to some extent, the usage of the structured finance is much over to its basic functions, and under the economic circumstances that lack of supervise, the potential risks buried this time.

5.3 Strengthen the quality of credit evaluation

Because of the different kinds of the financial derivative products are too complicated, most of the investments participators who find the risks and benefits are difficult to be estimated prefer to rely on the evaluations given by the financial evaluation firms. But largely speaking, the credit levels of the mortgage bond decided by the evaluation firms are not justice. The trait of opacity for the mortgage bonds and the possible beneficial links between the creators and the financial evaluation firms could be the cause for unfair estimation. The fast developing economic momentum demand a brand new system of evaluation who can well afford the responsibilities for cooperation.

5.4 Keep the important role of supervise

Also, we can't forget the importance of supervise. Under perfect preparation even exist potential risks. The task for the supervisory organizations to do is foresee the threatens to our financial systems as early as possible, so as to gain enough time to take the reactions.

6. Conclusion

At the end of the article, I hope I have given a clear description of the subprime lending crisis. To finish my work, I'd prefer to recommend all of the citizens to advance the basic financial knowledge, for it is penetrating into our daily lives. To do investments and decide the plan of portfolios are the common things for everybody to do, but think about the individual who even don't know the calculation of the compound interest rate and cost of mortgage loan, and excitedly join into the mortgage loan for the apartments which he could not afford the repayment at all, so terrible it will be!. Unfortunately, there are so many people in this group today. We must remember that people's crazy has little chance to conquer the market rules, the bubble burst will inevitably bring the deep tragedy and hurt to the economic society, and the people who suffered the most always be the feeble groups wrongly trapped in.

References

Hu, Jiarong. (2007). On Optimizing the Soft Environment for Foreign Investment. *Journal of Beijing Institute of Graphic Communication*, 10, pp. 44-48.

LEUNG Wai Kin and FUNG Hung-gay. (2001). Financial Liberalization and Corporate Governance in China. *International Journal of Business*, Vol. 6, No. 2, pp. 3-32.

LUI Man Ching Gladie and SHUM Connie. (2002). The Evolution of Chinese Business Tax A Historical Account. *Management and Accounting Research July-Dec. pp.27-40*