

# Research on the Collapse of US Investment Banks in the Subprime Mortgage Crisis

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Abstract. The subprime mortgage crisis was a famous financial event in history, which brought a huge impact to the US and even the world economy at that time, and the five major Wall Street banks suffered serious setbacks. In this paper, the failure of investment banks in the subprime mortgage crisis is attributed to the economic background, government policies and investment banks themselves, and the reasons for the failure of investment banks are summed up by synthesizing market mechanisms and policy requirements. Taking Morgan Stanley Bank as an example, through the analysis of its financial statement data, it discusses how investment banks deal with the crisis, and puts forward suggestions for the development of modern investment banks according to their operating conditions. This paper proposes that in the operation and development of modern investment banks, the investment banking business should be expanded, the innovation and control of financial products should be strengthened. Enterprises should strengthen the remuneration mechanism of senior managers and link the remuneration of senior managers with the long-term interests of the enterprise. The government should deepen the supervision and inspection of the financial market, and improve the legal system to restrict financial institutions and financial business as soon as possible.

Keywords: Subprime mortgage crisis · Investment banks · Morgan Stanley Bank

# 1 Introduction

The subprime mortgage crisis is a typical major financial event in the history of the United States, which has brought a huge impact on the financial markets of the United States and even the whole world, and caused turmoil to the world. The economic disaster has dealt a heavy blow to the world. The US economy is in a recession, with large numbers of financial institutions going bankrupt or in financial difficulties. In the financial storm, each of the five leading investment banks suffered, some forced to transform into bank holdings such as Goldman Sachs and Morgan Stanley, acquisitions such as Merrill Lynch and Bear Stearns, and bankruptcy such as Lehman Brothers.

At present, many scholars have conducted an in-depth analysis of the causes, influencing factors and responsible objects of the collapse of investment banks in the US subprime mortgage crisis. Chen Zhou, Guo Shiyi, Chen Zhengrong in the "deep analysis of the causes of subprime crisis", " on the subprime banking crisis from the perspective of investment banks to aggressive innovation, high leverage financing and a large number of investment in subprime products lead to the crisis of investment banks; Cui Huanzhen, Luo Yanni in the "Preliminary exploration of the development ideas of investment bank-ing industry under the subprime mortgage crisis" believes that the function of investment banks in the subprime mortgage market has led to the inevitability of suffering heavy losses; Gao Lei, Han Na and Chen Gengbin proposed in the Inquiry on the Development Direction of the Independent Investment Banking Model after the subprime mortgage Crisis and the Discussion on the Relationship between Investment Banks and the Subprime mortgage Crisis, that the government's wrong decision, namely deregulation, encouraged the economic bubble, The final crisis; In the US subprime mortgage crisis and its enlightenment to China's investment banking business, Xing Porter pointed out that the credit crisis is the essence of this financial crisis, the subprime bonds with poor credit have devastated the market.

Therefore, in order to smooth the operation and control of the financial market, what should the current market control pay attention to? What did the government learn from the old financial storm? Is the relaxed economic policy really not desirable?

This paper will be based on the results of the causes of the collapse of the US subprime mortgage crisis investment banks in 2008, combined with the current situation of the financial market and the system of the governments of various countries, draw lessons from the results of the subprime mortgage crisis, take Morgan Stanley as the case, to make suggestions on the policy and development of modern investment banks.

### 2 The Reason Why Investment Banks Fail in the Subprime Crisis

#### 2.1 Economic Background

Background refers to the macro market in the US at that time. Economic globalization has brought about more flexible information transmission and brought great changes to the world's financial industry. Us investment banks took advantage of this trend to dramatically expand their financial products into global markets. But, the larger the scale, the more difficult the management is. When dangerous and inferior financial products enter the global markets, it is difficult for countries to control the situation and protect themselves from the crisis.

The complex operation mechanism of investment banks leads to the lack of transparency in financial markets. People in the market do not know the real performance of each investment bank and the real value of the securities. This situation has led to excessive market panic when the crisis erupted. In this crisis, the role of the financial market as an intermediary and pricing is difficult to play, making a large number of finance cannot price. In the excessive design of financial derivatives, the credit chain and information asymmetry gradually accumulate, and the complexity of financial derivatives makes the financial market unable to price them. Moreover, financial institutions can not obtain the true value of their products in time due to the confidentiality of information and the wide variety of financial products. Therefore, when there were crisis-related rumors in the market, people's suspicion and investment panic caused a large amount of capital withdrawal from the market, and many investment banks thus had a financial crisis and even bankruptcy.

As a result, no investment bank got rid of the huge impact of the subprime mortgage crisis in 2008.

#### 2.2 The Government Factors

Moreover, many believe that part of the responsibility is on the government. Subprime mortgages in the United States can satisfy borrowers' desire to own property, satisfy financial institutions and institutional investors to obtain high returns and expand market share, and the speculative desire of speculators. In the United States, where the financial industry is highly competitive, many small lenders use the low-interest strategy to compete with large financial institutions for customers and vigorously promote high-risk financial products, thus distorting the market pricing mechanism. In this environment, government deregulation and blindness to risk led to an eventual crisis outbreak [1]. When the economy had a downward trend, the government tried to stimulate the market only by using loose monetary policy. Low interest rates made a large number of subprime loans appear in the real estate market, and asset liquidity made the financial bubble expand rapidly. In the later period, the government adjusted the interest rates again and cancelled the expansionary economic policy, leading to the rising mortgage costs, housing prices began to fall, and the rising risk of mortgage default [2]. At the same time, the government's deregulation has also relaxed the supervision over the asset structure of investment banks, forming a highly leveraged business model of Wall Street investment banks.

### 2.3 Investment Banks Themselves

In the face of the financial crisis, the investment banks themselves have a great responsibility. Investment banks play a pivotal role in the financial markets themselves. By designing various tape securities and financial derivatives, investment banks convey the internal market information to the majority of investors, and play an important intermediary role. The fact that such a sensitive and important role was reduced to bankruptcy in the financial crisis reflects the huge shortcomings of the investment banks themselves at that time.

Initially, securitized real estate mortgages were of good quality and demanding for lenders. When quality property is fully securitised, greedy financial institutions develop lower quality real estate mortgage bonds. Subprime mortgages are loans offered to borrowers with poor credit, low income, and high debt and default rates. However, under the temptation of interests, various financial institutions want to seize the market when the high-quality loan market is saturated, to carry out the pre-loan investigation, and compete to lower the threshold of loan application. In previous lending businesses, the financial institutions that made the loans have investigated the borrowers' income and property value. By 2008, it was mortgage brokers and rating agencies, not financial institutions, that made loans. This state of separation disrupts information within markets and institutions, deepening the serious consequences of the crisis. The US Wall Street investment banks' securitization financing method has generated huge profits, allowing their assets to expand rapidly. They design low-quality loans as complex derivatives, and use securitisation to transfer risk to people in the market and make high profits for themselves. In the face of the lure of profits, Wall Street elites chose to ignore risks and rules and create a huge financial bubble with the speculative nature of subprime securities. These financial institutions tend to use higher leverage ratios to generate higher profits. This leverage feature can bring more returns when the market prospers, and also bring more risks and losses when the market is depressed. The more leveraged in the crisis, the more bankrupt the investment banks are, the earlier they face a shortage of funds to raise funds.

Another big reason why investment banks are trapped in this crisis is their lack of scientific and complete risk assessment and regulation. Long-term holdings of high leverage ratio and a large number of inferior subprime mortgage bonds will undoubtedly bring huge risks, and before the potential crisis, managers will pursue short-term interests and choose to ignore them, making this risk more and more prominent [3]. In 2006, for example, when the market was already alerted to subprime mortgage risks, Merrill Lynch still underwrote a \$31 billion CDO worth. Merrill had made significant profits at the time, but it was the deal that forced Merrill to ask for an acquisition on September 15,2008, due to huge losses.

### 3 Take Morgan Stanley as an Example

#### 3.1 Is Morgan STAnley's Choice for — Bank Holdings Really Good or Bad?

For companies with high debt-liability ratios and high financial leverage, Morgan Stanley has only three options: filing for bankruptcy, being acquired, or transforming. On September 21,2008, Morgan strengthened corporate regulation in the last way, removing high leverage. From the financial statements from one month ended 2008 to 2010, it is clearly to see that Morgan Stanley's business conditions are improving rapidly. Net income returns to an objective level, and the company's stock and earnings per share can support the company's continuing operations. And shareholders' equity returned to considerable data after fluctuations.

But can becoming a bank-holding company really completely prevent risk? In fact. Facing the strict requirements after the transition and the high profits of a wider market, investment banks are still willing to avoid regulation. Even if regulation is tighter after becoming a bank-holding company, regulators remain outside, and flaws can still slip within the entire market. New management is likely to develop high-risk business toward new weak flaws. In this way, the risk factor of the whole market will still be very high, and the possibility of a financial crisis is not reduced [3]. And as financial markets recover, investors will soon be confident again. When Morgan Stanley, a bank-holding company, has government support, instead investors will find it more reliable and more difficult to invest.

Therefore, the simple change of business model can not completely eliminate the risk factors in the subprime crisis.

#### 3.2 The Future of Morgan Stanley

Becoming a bank holding company means that Morgan should change their business center from pure banking to management control and supervision. Morgan benefits from the advantages of the holding company and undertakes more types of businesses. It can provide wholesale businesses, institutions and individuals, giving Morgan more revenue than simply banking.

But at the same time, Mr. Morgan's operations will be even more restricted. The move means that banks will for the first time become depository institutions regulated by the Federal Reserve, the Federal Deposit Insurance Corporation and state or federal bank regulators, and will have to significantly deleverage their balance sheets, giving companies some opportunities [4]. In the future, Morgan will face many challenges in achieving previous returns on equity, as the newly discovered ban on aggressive leverage and regulation reduces risk-taking.

# 4 The Subprime Mortgage Crisis Has Warned of Modern Investment Banks

# 4.1 Strengthen the Innovation and Control of Financial Products, and Expand the Banking Business

In the face of large financial storms, investment banks need to strengthen their own business level if they want to save themselves less affected. Compared with traditional banks with investment consulting and asset entrusted management services as their main businesses, modern investment banks are more mainly based on capital transactions, involving high-risk businesses such as hedge funds and financial derivatives [5].By broadening the investment banking business, it is obvious to realize multi-channels and income diversification, enhance the marketing ability of high-quality customers, but also improve the business competitiveness of investment banks [6].

Through financial innovation, Wall Street independent investment banks gradually replaced banks in order to fund the capital markets, but they were not as strictly regulated as banks were, which eventually led to an irreversible outcome. Therefore, investment banks should also be strictly supervised by the outside world, designated relevant standard indicators such as leverage ratio, and be timely regulated when innovating financial derivatives. Only in this way can their excessive use of leverage be corrected [7].

# 4.2 Strengthen the Salary Mechanism for Senior Managers and Pay Attention to Risk Assessment

During the subprime crisis, an important reason why many managers choose the immediate benefits and ignore the risk is that many managers accept the short-term salaries, that is, they only care about the short-term gains while ignoring the long-term development ability of the company. Therefore, modern investment banks need to improve the salary method of senior managers, link their salary with the long-term interests of the enterprise, and encourage managers to sign up, bonus and invest to contribute to the long-term operation of the enterprise [8]. At the same time, the risk control and internal supervision of investment banks themselves also need more attention. In the subprime crisis, the contempt of executives and boards led to a lot of wrong decisions. Investment banks can control and review the risk decisions by setting up independent directors and other additional staff, and strengthen the internal control work of the investment banks themselves [9].

# 4.3 Strengthen Supervision of the Financial Market and Attach Importance to Standardization and Legalization

With the previous experience of the subprime mortgage crisis, the modern investment banking business should pay more attention to the market supervision mechanism and supervision strength when developing. The financial market with a non-standard and imperfect system is full of potential threats, and the risks brought by it are mostly systemic, difficult to control and have a great impact. Therefore, when developing the financial products of investment banks, it is necessary to improve the laws and regulations of financial supervision as soon as possible, and to restrict and restrict the behavior decisions of financial institutions with the mandatory nature of laws [10]. At the same time, in view of the subprime mortgage crisis period, the screening of customer credit and quality is too loose, and the review of the quality screening of financial products is not deep enough, which has led to the subsequent financial crisis. Modern financial business needs to use the big data network filing system to conduct in-depth credit rating on customer quality, and investment banks adopt a scientific financial derivatives rating method to control the overall risk.

# 5 Conclusion

There are many reasons for the subprime mortgage crisis. This paper analyzes from three aspects: market environment, government decision-making and investment bank itself. Among them, in the part of investment bank, this article takes Morgan Stanley as a case to deeply analyze the investment bank's response to the subprime mortgage crisis and its impact on future operations. After becoming a bank holding company, Morgan Stanley's business conditions have improved greatly and the financial crisis has been successfully passed, but with it comes a more stringent regulatory system and financial leverage requirements. The way the crisis was handled also limited Morgan's growth. Finally, the author puts forward suggestions for the future development of investment banks based on the above-mentioned influencing factors and the characteristics of the Morgan Stanley case. Under the new market characteristics, investment banks have to improve their business types and improve their ability to deal with risks. While expanding business, the bank needs to strengthen internal control, improve the salary mechanism of senior management personnel, and motivate employees to contribute to the long-term development of the enterprise. For government departments, it is necessary to strengthen the financial market in the external environment to supervise investment banks and improve laws and regulations (Table 1).

	One Month Ended December 31,2008	fiscal 2008	2009
Net revenues:			
Institutional Securities.	(1,322)	14,768	12,853
Global Wealth Management Group.	409	7,019	9,390
Asset Management.	(9)	547	1,337
Intersegment Eliminations.	(15)	(194)	(146)
Consolidated net revenues.	(937)	22,140	23,434
Net income (loss) applicable to Morgan Stanley.	(1,288)	1,707	1,346
Institutional Securities.	(1,271)	1,358	1,393
Global Wealth Management Group.	73	714	283

 Table 1. Morgan Stanley Financial Statementst

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