

The Impact of Conversion to Bank Holding Company During the Financial Crisis Case of Morgan Stanley and Goldman Sachs

Jingru Li^{1(⋈)}, Yuhan Liu², and Xiaoran Yang³

Abstract. The main purpose of this study is to identify the risk capital banks hold during the financial crisis. Through the comparative analysis above, becoming a bank holding company during a financial crisis has its advantages and disadvantages, but the benefits go beyond that, including more capital, deposits and higher trust. As an important subject of the financial market, investment banks are born in the initial stage of capital investment demand in economic development, grow in the development stage of joint-stock company system, and mature in the developed stage of the securities market. Investment banks play an important role in economic development, such as communicating capital supply and demand, constructing securities market, promoting enterprise merger and acquisition, promoting industrial concentration and the formation of scale economy, and optimizing resource allocation. This paper also found that growth in non-interest income and loans or deposits played an important role, especially for companies during the financial crisis.

Keywords: Financial crisis · Bank holding company · Goldman Sachs

1 Introduction

In the early 21st century, the most famous event related to finance is the 2008 subprime mortgage crisis in the United States. Studying the risk of bank holding investment banks during the financial crisis is the specific aim of this research. After the subprime home loan crisis arose, investors started to lose faith in the value of mortgage-backed assets, leading to a liquidity crisis. The financial crisis could not be avoided, even if the central bank regularly poured large sums of money into the financial system. By September 2008, the financial crisis was out of control and had resulted in the closure or bankruptcy of a sizable number of financial institutions, which in turn had caused an economic downturn. The business of the entire financial industry was greatly reduced, and many companies were on the verge of bankruptcy or on the brink of bankruptcy. At the same time, it is more and more difficult for companies to issue public shares, and mergers

Western Michigan University, Michigan, MI 49008, USA jdy0021@wmich.edu

² Shenyang No. 35 Middle School, Shenyang 110000, China ³ Beijing No. 12 Middle School, Beijing 100000, China

J. Li, Y. Liu and X. Yang—These authors contributed equally.

and acquisitions of enterprises are not active. The circulation and transactions of the secondary market of equity stocks are also greatly reduced (2020.4.4 *Markchen Bank stocks under the 2008 financial crisis*) [1]. The benefit of a bank holding company system is that it may effectively increase total capital, strengthen bank strength and risk resistance, and compensate for the drawbacks of a single banking system. In order to solve the mistakes made by these investment banks in the financial crisis, we propose the bank holding company. From the financial crisis, we can also see a series of problems such as the imperfect management system of investment banks and the serious homogenization of investment banks.

2 Method

This paper mainly adopts the method of case analysis to analyze the impact of bank holding on investment banks during the financial crisis. Goldman Sachs and Morgan Stanley are the main ones to illustrate, since both chose to become bank holding companies after Lehman's collapse, which is helpful for the following analysis. In addition, Lehman will also be used for analysis, because during the financial crisis, Lehman went bankrupt. Lehman's experience further shaped the inevitable trend for Goldman Sachs and Morgan Stanley to become bank holding companies (2018, *Brunetti C, Harris J H, Mankad S*) [2]. Becoming a bank holding company has different advantages and disadvantages for investment banks, such as more sources of capital and more strict regulation. After analysis, the advantages of becoming a bank holding company outweigh the disadvantages, especially during the financial crisis. So, in particular period, investment banks can choose this way to survive, which is one of the lessons of Lehman Brothers. The following case study focuses on JPMORGAN, Goldman Sachs and Lehman Brothers. According to their development and economic conditions, the impact of bank holding on investment banks can be more clearly analyzed.

3 Case Study: Morgan Stanley and Goldman Sachs

3.1 Reasons for Choosing

After Lehman's collapse, Goldman Sachs chose to become a bank holding company. In 2008, the US subprime mortgage crisis swept the world. The five famous investment banks also fell one after another: Merrill Lynch was acquired by Bank of America, Bear Stearns was acquired by JPMORGAN, and Lehman Brothers declared bankruptcy. The only remaining Goldman Sachs and Morgan Stanley were also approved to transform into bank holding companies by the Federal Reserve on September 21, 2008. As a bank holding company, Goldman would have to be regulated by the Fed, but it would also have many benefits, including greater market confidence in its financial health and access to funding. Goldman Sachs also could borrow more from the Fed with guaranteed deposits [2]. When Goldman transforms into a bank holding company, it can take deposits just like a traditional commercial bank. It no longer must rely entirely on borrowing from the interbank market, which means it has a new source of capital [2]. Lehman did not become a bank holding company, while Morgan Stanley and Goldman Sachs became bank holding companies. Such three companies can more effectively analyze and compare the advantages and disadvantages of becoming a bank holding company.

3.2 Analysis of Non-conversion to Bank Holding Company: Case of Lehman for Choosing

3.2.1 Lay the Groundwork

About the process that Lehman Brothers went bankrupt step by step after it did not become a bank holding company. Before the financial crisis, Lehman Brothers lost control over the issuance of bonds such as real estate mortgage due to its excessive access to and development of the real estate market and failed to take necessary measures to deal with huge systemic risks. Then, in the first quarter of 2007, cracks in the US housing market became apparent. Defaults on subprime mortgages are rising to their highest levels in seven years (2021, *Nick Iioudis*) [3].

3.2.2 The Beginning of the Real End of Lehman

In August 2007, the credit crisis broke out and Lehman's share price plummeted. Then some jobs and departments related to mortgage loans were closed. Then, in the fourth quarter of 2007, with the global stock market peaking, the price of fixed income assets rebounded temporarily (2021, Nick Iioudis) [3]. This led to a rebound in Lehman Brothers' shares. However, Lehman did not seize this last opportunity to weaken its large mortgage portfolio.

3.2.3 Go to Failure

In 2007, because Lehman's net capital was insufficient, too much leverage is being used, and there are too many non-performing assets that have recently had a severe decline in value. The market panic surrounding Lehman Brothers, which caused a high volume of capital transfers by clients quickly and counterparties to quit trading and doing business with Lehman Brothers, was the immediate cause of its failure. On march17,2008, the stock plummeted by 48% due to panic. Then, in April, it continued to decline after the turnaround. On June 7, 2008, Lehman lost \$2.8 billion in the second quarter. Secondly, in September 2018, the possibility of taking a stake in Lehman was dashed due to the suspension of negotiations by the Korean Development Bank. This news caused Lehman's share price to continue to plummet by 45%, and on September 11, the share price continued to fall by 42% [3]. Finally, on September 15, Lehman could not continue to support, and finally declared bankruptcy (See Tables 1, 2 and 3).

Date	share price changes
2008.3.17	Decrease48%
2008.9.9	Decrease45%
2008.9.11	Decrease42%
2008.9.15	Decrease93%

Table 1. Share price changes

 Date
 Leverage change

 2007
 31

 2008
 25

Table 2. Leverage change

Table 3. Amount of loss

Date	Amount of loss	
2008.6.7	\$2.8bn	
2008.9.10	\$3.9bn	

Table 4. Deposits of Morgan Stanley from 2007 to 2008

	November 30, 2008	November 30, 2007	
	(Dollars in millions)		
Savings and demand deposits	\$36673	\$27186	
Time deposits	6082	3993	
Total	\$42755	\$31179	

3.3 Analysis of Conversion to Bank Holding Company: Case of Morgan Stanley

3.3.1 Impact of Becoming Bank Holding Company on Bank Deposits

The Company's bank subsidiaries' primary source of funding includes bank deposit sweeps, federal funds purchased, certificates of deposit, money market deposit accounts, commercial paper and Federal Home Loan Bank advances.

As a bank holding company, Morgan Stanley gained flexibility and stability and continued to seek new business opportunities at a time when financial markets were undergoing rapid change. The company expands its offering of retail banking services and retail customers and builds a stable core deposit base. On Aug. 31, 2008, Morgan Stanley had more than 3 million retail accounts and \$36 billion in bank deposits (September 22, 2008, NS BANKING) [4]. As can be seen from Table 4, bank deposits increased significantly from 2007 to 2008, which is consistent with the company's strategy of continuously improving its stability. Morgan Stanley can use deposits to lend, and corporate lending has become a bigger focus for Morgan Stanley because it has enough low-cost deposits available (November 30,2008, UNITED STATES SECURITIES AND EXCHANGE COMMISSION) [5]. As a bank holding company, Morgan Stanley also has access to the Federal Reserve Bank Discount Window to expand financing opportunities. The new structure also allows Morgan Stanley to take advantage of changing financial markets (September 22, 2008, NS BANKING) [4].

	TTM	2021	2020	2019	2018
Total Revenue (1000\$)	55524	56414	45269	38926	37714
Net Interest Income (1000\$)	8233	8045	6313	4694	3806
Non-Interest Income (1000\$)	47291	48369	38956	34232	33908

Table 5. Total revenue of Morgan Stanley from 2018 to 2021

Table 6. Summary of cash payments made by the company in relation to contractual obligations

Cash payment items	Payments Due in				
	Fiscal 2009	Fiscal 2010–2011	Fiscal 2012–2013	Thereafter	Total
	(Dollars in millions)				
Long-term borrowing	\$21971	\$33323	\$42596	\$65547	\$163437
Operating leases-office facilities	568	991	775	2651	4985
Operating leases-equipment	452	440	173	74	1139
Purchase obligations	399	247	2	_	648
Total	\$23390	\$35001	\$43546	\$68272	\$170209

3.3.2 Impact of Becoming Bank Holding Company on Net Interest Income

It is important for Morgan Stanley's survival to focus on deposit-taking and lending. Morgan Stanley focuses on loans from retail brokerage clients, which keeps increasing Morgan Stanley's net interest income. For example, as shown in Table 5, Morgan Stanley's net interest continues to grow from \$3,806,000 in 2018 to \$8,045,000 in 2021. That growth helped Morgan Stanley meet its wealth management division's return on equity targets.

3.3.3 Impact of Becoming Bank Holding Company on Company's Cash Payments

In general, cash flow is also important. Bank holding companies allow financial institutions to attract FDIC-insured deposits, which can provide a low-cost and stable source of funding (November 30,2008, UNITED STATES SECURITIES AND EXCHANGE COMMISSION) [5]. Goldman Sachs and Morgan Stanley, for example, have both made acquisitions to boost their deposit base. Table 6 shows the increasing cash payments of Morgan Stanley, which almost doubled from \$233,900,000,000 in 2009 to \$43,546,000,000 in 2013.

3.3.4 Impact of Becoming Bank Holding Company on Capital Investment

Morgan Stanley increased its deposits by buying Citi's Smith Barney unit, while Goldman Sachs bought General Electric Co.'s deposit platform. But bank holding companies

are only allowed to use the money for specific businesses (November 30,2008, UNITED STATES SECURITIES AND EXCHANGE COMMISSION) [4]. Therefore, the use of funds is limited.

3.4 Analysis of Conversion to Bank Holding Company: Case of Goldman Sachs

By contrast, there is a positive example about become a bank holding company. This example is about Goldman. And there were some advantages and disadvantage can be seen after it became bank holding company there were some advantages and disadvantage can be seen.

3.4.1 Advantages

For Goldman Sacha, there are three aspects advantages. It is about financial, capital and market level.

- (1) For Goldman Sachs at that time, the biggest advantage was that they could get a financial aid from the Federal Reserve (2018, Brunetti C, Harris J H, Mankad S) [2]. This will help them through the difficulties.
- (2) In terms of capital, becoming a bank holding company can effectively expand the total capital. Realize business diversification. Goldman Sachs can have many subsidiaries. Then we can establish economies of scale (2022, Advantages and Disadvantages of Holding Company) [6]. Its business can also be limited to a single business, or it can diversify its business, so that each subsidiary has its own business characteristics. And Goldman can have new sources of capital [2]. After becoming a bank holding company. It does not need to rely on the original inter-bank market loans, it can be like a commercial bank to accept deposits [2].
- (3) From the market level, Goldman Sachs' move will make the market tend to it. Because after Goldman Sachs becomes a controlling bank, the market will increase confidence in its financial situation and financing channels [2]. Because Goldman Sachs is regulated by the Federal Reserve, its financial status and information about its financing are open and transparent. And its information is credible because the Fed has given them a pass. The market will also place great trust in it.

3.4.2 Disadvantages

For Goldman Sacha, there are two aspects disadvantages. It is about threats and management mode.

- (1) First of all, in terms of threats. It will lead to excessive concentration of financial power, that is, there will be a threat of monopoly [6]. When a company is constantly acquiring companies of other organizational types, it may appear and form a monopoly structure. After that, the competition among these holding companies will be reduced.
- (2) Second, in terms of management mode. The challenge of the new management model. After becoming a bank holding company, Goldman Sachs will change its

own structure and will have more business than ever before. Moreover, with the change of the market, Goldman Sachs cannot fully refer to the operation mode of some companies that have changed into bank holding companies [6]. Goldman Sachs also needs to constantly change and find out a suitable operation mode. Then the management structure of the company will change a lot. No one knows whether it is right. This is a challenge for Goldman Sachs.

4 Conclusion

In 2008, the U.S. and other governments responded to the financial crisis with extraordinary bailouts, such as the conversion of Morgan Stanley and Goldman Sachs into bank holding companies. The one-bank holding company is simply a holding company for one bank, but it has a shorter history as a more flexible arrangement for an independent bank. (23,2020, JULIA KAGAN, ERIKA RASURE) [7].

According to the above comparison and analysis, becoming a bank holding company during the financial crisis has advantages and disadvantages, but the benefits are more than that, including more capital, deposits and higher trust. This paper finds that growth in non-interest income and loans or deposits play an important role, especially for companies during a financial crisis (2007, CW Calomiris, Nissim D) [8].

However, there are still limitations in this paper. This paper lacks the analysis and comparison of the development of existing non-bank holding companies after the financial crisis. The Lehman Brothers bankruptcy is the only example in the paper to be compared with Morgan Stanley and Goldman Sachs. Specifically, we examine the impact of becoming a bank holding company during the financial crisis on the operations of investment banks, including deposits, net interest income and cash flows (2020, Chen K) [9].

The main objective of the current study is to identify the bank holdings of venture capital banks during the financial crisis. Through the comparative analysis above, becoming a bank holding company during the financial crisis has its advantages and disadvantages, but the benefits go beyond that, including more capital, deposits and higher trust (2008.12.5, Sheng huojinrong, Analysis of the impact of American financial crisis on investment banks) [10]. We also found that growth in non-interest income and loans or deposits played an important role, especially for companies during the financial crisis. The main limitation of this study is the lack of development of existing non-bank holding companies after the financial crisis.

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