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Investigating the Financial Crisis in 2008 from the Perspective of Banking Systems

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ABSTRACT

The financial crisis of 2008 precipitated by credit issues in the US housing market is probably one of the most profound financial events in recorded history. Its shockwaves have significantly affected almost every market centre as well as country in the world. The aim of this report is accordingly to investigate major reasons behind the crisis from a special angle of banking systems. In particular, problems hidden in regulations, mechanisms and systems in the wake of the financial crisis are focused specifically in this report.

1. Brief Introduction

The financial crisis occurred in 2008 resulted in a far-reaching influence on the global economy, and its economic losses were incalculable. At that moment, Andrew W. Lo described this crisis in his research paper as "the worst economic recession so far" [1]. In order to prevent the recurrence of such crisis, numerous researches have been carried out to study the underlying causes of this tragedy since the outbreak of the financial crisis, aiming to find out solutions to improve financial systems as well as regulation mechanisms [2-5]. According to the results given by these researches, one of the primary causes that led to financial crisis was related to the flaws existing in the banking system [6]. The purpose of this report is then to examine the main causes of 2008 financial crisis from a perspective of banking system. Especially, it focuses on studying banking systems of the US, given that the place is where the 2008 financial crisis started to ferment. The report also attempts to analyse the occurrence of incident from four individual aspects which include *Relaxation of Bank Regulation*, *Shadow Banking System*, *Improper Incentive Mechanism under the Banking Systems*, and *Change of Operation Model*. Meanwhile, this report also discusses different functions performed by various financial institutions briefly, so that a clearer understanding of how flaws of banking systems might lead to a global financial crisis could be established.

2. How Failure of Banking System Leads to Financial Crisis

2.1 Relaxation of Bank Regulation

Before 1999, activities and functions provided by

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commercial banks in the US were largely restrained due to the implementation of *1933 Glass-Steagall Act*. To reinforce the public's confidence toward these commercial banks, they were then not allowed to use any their deposits to make risky investment at that time [7]. However, with the introduction of *Gramm-Leach-Bliley Act*, the circumstance started to change in 1999. This act not only released the restriction on the commercial banks but also extended their functions [8]. Commercial banks were encouraged to perform some functions of investment banks since then. To take a simple example, commercial banks are able to make investments by using deposits [9].

The implementation of *Gramm-Leach-Bliley Act* indeed provides a series of benefits to the whole banking industry in the US. It brings many developing opportunities for different types of banks. First of all, it enables banks to compete in an international financial market, so that they are able to explore more investment opportunities and maximise their interest [10]. Besides, a much more open investment environment created by the Act gives strong support for banks to carry out risky business activities. For example, investment companies are permitted to make risk assessments by themselves through using computer models [8]. Apart from the introduction of the Act, more loose tax rules and new accounting policies provided further motivation for banks to take risky activities and seek for financial innovations [8]. Followed by the Act and the loosening of financial regulation, an increasing number of banks have been observed to start to make high risk, high return investment in order to achieve maximum benefits.

The loosening of financial market regulations provided conditions and legal support for the commercial banks to undertake the investment activities which motivated them to pursue maximum benefits by lending money to lenders and charging higher level of interests. As a result, in order to pursue higher benefits, a large amount of loans was issued by the banks, yet the banks did not carefully measure the lender's credits and qualifications [11,12]. In addition, the belief of "too big to fail" by banks and policy makers also resulted in an increasing number of risk-taking activities [3,11]. The deregulation of financial markets has accelerated the development of financial market and economic prosperity in the US. However, banks have become increasingly greedy driven by enormous benefits which encouraged banks to take more speculative excess activities and ultimately contributed to the meltdown of financial market in 2008 [5,12].

Despite negative influences brought by the deregulation, it does not mean that the deregulation of the financial market is totally wrong. To prevent a recurrence of financial crisis, some academic scholars argued that it seemed necessary to re-execute the previous strict regulations on the financial markets [13]. However, in fact, over-strict regulation on the financial market is unlikely to lead a good result either, since it may restrict the economic development to a certain extent. Therefore, an appropriate supervision and reform should be carried out to maintain the balance of regulatory structure [13].

2.2 Shadow Banking System

The deregulation of the financial market has contributed to the development of the shadow banking system. Lehman Brothers is a typical example of the financial institutions under such system. These financial institutions, headed by Lehman Brothers, are not quite similar to the traditional banks [14]. They performed more like an intermediate between borrowers and lenders. They held non-traditional activities and offered more innovative financial products such as options, futures and swaps. They often supply risky financial products but with high return. Compared with the traditional financial institutions, these financial institutions are subject to fewer regulations [2,15]. In the past, some economists have claimed that free market environment enables these institutions to make optimal decisions. However, some economists indicated that the activities conducted by these financial institutions are too risky and are less likely to be performed successfully. This argument is later retorted, and supporters stated that the risky activities can be managed by professionals [15]. Surprisingly, the 2008 financial crisis proved that this argument is too idealistic.

Except for the deregulation, inherent flaws associated with the financial institutions under shadow banking system were another important inducement. These financial institutions are lack of stability and are vulnerable to the fluctuation of the market compared with traditional financial institutions [14,15]. As they did not hold the deposits, a sudden pullback by investors or assets depressions would cause a huge impact on them. With the significant growth of these financial institutions in 2007, some of the internal problems became increasingly clear. Combined with less financial regulations, the global financial system eventually collapsed with a growing number of the default of the borrowers on their mortgages [14].

However, the prevalence of shadow bank system was not only due to a lack of enough regulations and expansion of financial institutions' desires, expectation of investors for seeking high return securities, but also was created by a lot of pressures on financial institutions which contributed to the expansion of such phenomena [15]. Those financial products with high return supplied

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by the financial institutions under shadow bank system are still in high demand in the market, despite the fact that these investments are associated with high risks [15]. To change and lead the circumstance to the right path, it is not enough to depend on regulations only. Some innovative reforms and measures are also needed to further standardise the activities of financial market.

2.3 Improper Incentive Mechanism Under the Banking Systems

The improper incentive mechanism designed for the industry insiders is also perceived as a key inducement for the financial crisis [16]. The chairman of Financial Service Authorities revealed in an interview that the improper incentive mechanism induced a series of inappropriate activities and ultimately led to the tragedy [17]. This statement is also consistent with the investigation conducted by the US Financial Crisis Inquiry Commission (FCIC). According to the results of investigation, the collapse of Lehman partially was attributed to the flaws of its inside governance system [18]. The incentive mechanism of the company toward the executives was primarily focused on the short term, which further encouraged the speculative behaviour. To make matters worse, the composition of these executives was not reasonable and appropriate. They are found to come from a variety of financial institutions, like, futures company, insurance company and securities company etc., apart from commercial banks and investment banks [18,19].

To take an example of service fee charged by the financial institutions, Lehman, these fees are the result of mortgage securitisation. In mortgage securitisation, mortgage brokers sell loans to investment bankers, and then the investment banks packaged these loans into securities. Ultimately, these securities need an approval by rating agencies. Since these fees are less likely to be reclaimed in any case, even if these securities may cause huge losses in the future. As a consequence, individuals working inside the financial institutions have strong incentives to increase the number of loans supplied by the banks. However, the loans are issued easily without strict examination, and some key approval processes and requirements are deliberately omitted [4,16].

The report published by Financial Times has showed that the amount of mortgage has experienced significant growth from 2003 to 2008 [20]. During this period of time, nearly all large-scale financial institutions have set a series of generous incentives for top executives and employees. To give an example of Merrill Lynch, as a famous wealth management corporation in the US, the company set up a bounds pool which was worth up to $3.6 billion, and around 700 executives earned over one million bonuses from the bounds pool. However, the company has actually made a huge loss with around $27 billions in 2008. The phenomena appeared in Merrill Lynch was not a single case. The similar things also occurred in other famous financial institutions such as Goldman Sach and AIF [21,22].

2.4 The Change of Operation Model

In the US, banks finance themselves mainly through deposits. This model is known as “the originate to hold model”. Yet, this traditional model has gradually transformed. Banks have started to issue loans, and they either distribute or securitise them as they are made [23]. The new distribution model considerably helps banks to reduce credit and maturity risks associated with the old operation model. For example, an individual obtains a mortgage to buy a house from a bank; and then, this lending bank sells all of its mortgages to an investment bank; this investment bank eventually securitises mortgage portfolios and sells them back to investors in the financial market [24,25].

Securitisation of credit assets enable banks to attract more global investors by offering much cheaper funding, which accelerates the expansion of banks at the beginning of the 2000s. Since then, components of a security have become more complex, normally involving both low risky loans and high risky loans at the same time [12]. Mortgage-related financial products collateralising debit obligation, for instance, have become popular among individuals and institutional investors. This has led to a circumstance in which banks become a seller and buyer of the financial market simultaneously. In 2007, numerous amounts of mortgage bonds were issued, and these bonds were not guaranteed by the government. As a result, the default of mortgages of borrowers caused the collapse of the financial system [12,26].

Securitisation is more popular in the US than in the UK. The relevant data show that the US issued asset-backed securities up to $10,000,000 million in 2018, and 85% of them were residential mortgages [12]. Many financial institutions in the US, like, banks, securities and insurance companies all had involved in mortgage investment. However, there was only $2,000,000 million in the UK, and residential mortgages accounted for 18% [12]. Therefore, when 2008 financial crisis hit, the default of mortgage attacked the majority of the financial institutions in the US, yet it primarily attacked mortgage banks in the UK [12,22].

3. Conclusions

To sum up, the report examines how the flaws of banking systems may result in the 2008 financial crisis in the US. The report analyses the failure of the banking system from four aspects, including the deregulation of the financial market, the development of shadow banking system, the change of operation model of banking system, and improper incentives mechanism. These identified factors are not mutually exclusive. However, they did interact with each other and together cause the 2008 financial crisis in the US. The deregulation of the financial market promoted the development of shadow banking system; additionally, a new distribution model as well as an incentive mechanism further stimulated the expansion of mortgage loans. Those four factors combined together, which influenced and re-built the formal order and form in the financial market, thus leading to the collapse of the financial system at the end.

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