

The Chinese Path of Financial Derivatives Regulatory Legislation: Based on a Comparative Research

Longfei Zhang*

School of Economics and Finance, Queen Mary University of London, London, United Kingdom

*Corresponding author: longfei.zhang@hss21.qmul.ac.uk

Abstract. In the international derivatives market, the proportion of the OTC derivatives market is much higher than that of the OTC derivatives market. After the subprime mortgage crisis triggered by the lack of regulation of OTC financial derivatives, a series of financial control schemes were discussed after the G20 summit. There are still many problems with the regulation of OTC derivatives in China. The U.S. financial derivatives are of great reference value to the regulation of China. This paper analyzes the regulatory system of financial derivatives regulation in the United States. It discusses how China can effectively carry out financial regulation of OTC derivatives after the subprime crisis.

Keywords: Financial Derivatives, Financial Derivatives, Regulation, OTC Derivative Risk Management, Central Counterparty Clearing Mechanism.

1. Introduction

A broader space has been created for the development of the financial industry with the emergence of financial derivatives, and a positive significance is embodied in the continuous innovation of the financial industry. While from another perspective, under the lack of reasonable and effective supervision, the disadvantages of its inherent leverage and high-risk characteristics will be shown, so a series of huge loss events shocking the world and the international financial crisis will be triggered. According to the Commodity Futures Trading Modernization Act of 2000 of the United States, the legal status of the over-the-counter (OTC) derivatives market has been established and what is clarified is that the supervision will be implemented. Before the appearance of the financial crisis, it is found that countries all over the world generally had insufficient supervision or regulatory gaps in this field. With the outbreak of the subprime mortgage crisis, the alarm of the accumulation of OTC financial derivatives and the contagion of financial risks has been triggered. After the G20 Pittsburgh Summit in 2009, it launched a global wave of financial regulatory reform, which had the intention to enhance the supervision of OTC financial derivatives, increase market transparency and reduce systemic risks. In this thesis, the impact of over-the-counter (OTC) trading in financial derivatives markets on financial stability after the global financial crisis was analyzed. In this case, the attention of regulatory authority has been attracted, so most of them were concentrated in the newly opened centralized market infrastructure under the reform of regulatory authority, (ccp), while the concentration of business and risk among a few major participants had been forced to change. Because the financial derivatives market in China is still in its infancy, the current financial derivatives regulatory system of our country takes various departmental regulations as the main regulatory basis, which takes government departments, exchanges, and self-discipline organizations as the main regulatory body, including two types such as government regulation and self-discipline regulation. In terms of the regulatory concept of financial derivatives, it is excessively conservative, and some problems also exist such as the low efficiency of regulatory institutions, and the imperfect regulatory legal system, which causes the existence of certain risks in the trading of the financial derivatives market. In this thesis, the regulatory system of OTC derivatives in the United States and China is mainly discussed and analyzed, and their shortcomings are also analyzed.

2. History of the Legal System of Financial Derivatives Regulation in China and the United States

2.1. History of U.S. Financial Derivatives Regulatory Legal System

There have been no related laws to regulate the financial derivatives market in the United States so it is pretty chaotic in this market. Although the Cotton Futures Act that was enacted in 1916 regulated the rank of cotton, futures were still not regulated by the law. The first law, Futures Trading Act, was enacted to regulate the trade of futures until 1921. Nevertheless, this did not successfully work in the end since some regulations in Futures Trading Law were not constitutional. In 1922, the Grain Futures Act, revised from the Futures Trading Law, was proclaimed formally [1]. Hence, from then on, the first law on financial derivatives, which was mainly based on the self-management of the exchanges as well as the supervision of the Ministry of Agriculture and took charge of nine exchange services in the United States, was enacted officially. Besides, this law points out some kinds of grains that are prohibited to trade over-the-counter and requires futures to be traded on an exchange. The Commodity Exchange Act (CEA) endows the Commodity Futures Trading Commission’s right to make regulations, such as Title 1 and Title 17 of the Code of Federal Regulations (CFR). The CEA adopted in 1936 took place of the Grain Futures Act which was enacted in 1922. The early laws could not shut down the so-called bucket shop, which turned into the spectator for speculation on commodity prices. The CEA also dealt with the problem of worry about the speculative commodity market during the Great Depression and its role in the collapse in prices of major crops such as cotton, wheat as well as corn [2]. In 1974, the United States Congress promulgated the Commodity Futures Trading Commission Act and meanwhile set up the Commodities Commission, which has the right to compensate and impose a civil penalty for violations, better-protecting investors’ interests. However, it did not clear the supervisory responsibility of CFTC for the OTC financial derivatives market. The CFTC scrambled for management of stock index futures and other derivatives with the SEC in the long term because “securities” and “futures” belonged to different legal scopes, but were not defined clearly. In 1982, the United States Congress enacted the Johnson-Shad Accord to respectively further regulate the areas of CFTC and SEC under judicial coordination. In 2000, the United States Congress enacted the Commodity Futures Trading Act 2000, which made CFTC lose its regulation power of OTC derivatives and SEC lost its power to supervise some derivatives at the same time, leading to the subprime mortgage crisis in 2008 indirectly [3]. After the subprime mortgage crisis in 2008, the Ministry of Finance promulgated the OTC Derivatives Market Act of 2009, which was the first time to give legislative proposal comprehensively for OTC derivatives in the United States, also bringing the OTC derivatives market into the regulatory scope for the first time. It clarifies CFTC’s regulatory right over swap products and SEC’s regulatory powers over securities swaps. In 2010, the content in Title 7 of the Dodd-Frank Wall Street Reform and Consumer Protection Act mentioned that OTC derivatives must be traded on exchanges, but in 2017, the Republican Party believed that this thought inhibited the economic development of the United States and thus the Financial CHOICE Act was issued, reducing the regulatory scope of the financial derivatives regulatory agencies SEC as well as CFTC for OTC derivatives [4]. The following table illustrates the U.S. agencies and their corresponding regulatory responsibilities.

Table. 1. US financial regulators and their functions

SEC	Derivatives traded on national stock exchanges Currency options, stock options, stock index options
CFTC	Derivatives listed by CFMA, Commodity (futures) exchanges, National Futures Association (NFA), all futures standard contract transactions, and options standard contract transactions However, CFMA excludes a great number of OTC derivatives transactions from the CFTC’s regulatory scope.

2.2. China's financial derivatives regulatory regime

Derivatives supervision in China existed later than in other countries to some extent, so it refers to the financial derivatives supervision system of the United States largely. China's derivatives supervision is mainly controlled by the government together with self-regulation due to different social systems [5]. And different types of financial derivatives are regulated by different government departments such as the People's Bank of China, Banking Regulatory Commission, and Securities Regulatory Commission. Self-regulation is mainly regulated by exchanges and various associations, such as futures associations, securities associations, insurance associations as well as banking associations [6]. The following table illustrates the Chinese agencies and their corresponding regulatory responsibilities.

Table 2. China's financial regulators and their functions

The People's Bank of China	Interest rate swap, forward rate agreements, foreign exchange swap, bond forward transactions, and other OTC derivatives transactions.
Securities Regulatory Commission	Convertible bonds, stock index futures, and other financial derivatives transactions as well as financial derivatives transactions involved in securities investment funds.
Banking Regulatory Commission	The regulation of banking, including commercial banks, credit unions, policy banks, financial asset management companies, trust companies, etc.
Insurance Regulatory Commission	Financial derivatives transactions are involved in the insurance industry.
Ministry of Finance	Financial derivative transactions are involved in financial accounting.
State Asset Supervision and Administration Commission	Institutions going through the responsibilities of investors to central enterprises involved in the business activities of financial derivatives.

3. Legislative reform/changes in U.S. financial derivatives regulation after the subprime crisis

3.1. Background Information

The risks can be avoided by the existence of financial derivatives. However, defects exist in the supervision of financial derivatives. Since the financial derivatives are new financial instruments, it is found that the financial derivatives often produce the supervision content matching the supervision content after innovation. In terms of the new financial instrument, it often breaks through the regulatory cage and forms new financial portfolio instruments. The three parts are divided into the supervision of financial derivatives in the United States at the current stage. As for the first part, the regulation at the government level is embodied. The federal reserve regulates the banking industry. The financial derivatives related to the securities industry are regulated by the Securities and Exchange Commission. The Commodity Futures Trading Commission makes the supervision on the futures industry, which has been the main financial derivatives supervision institution. As the chairman of the Securities and Exchange Commission (SEC), Christopher Nixon Cox holds the opinion that "a large number of unregulated CDS like derivatives are the main cause of the financial crisis. The performance crisis of the CDS contract itself has been triggered by the huge scale of the CDS market [7]. By the end of 2007, the global market value of CDs was estimated to be \$45 trillion to \$62 trillion, which was higher than the total amount of bonds circulating in the market. Therefore, the credit risk is unable to protect the subjects of the market.

3.2. The Impact of the G20 Summit on Legislative Changes in U.S. Financial Derivatives Regulation

The regulatory requirements for major commercial banks and investment banks have been greatly changed by the proposal and the enacted legislation in recent times, and the solutions are proposed to the OTC derivatives market that is regarded as the key causal factor of the crisis. After the G20 summit, the discussion has been carried out in many countries, and a series of policies have been issued to regulate financial derivatives. Taking the central clearing into account, it is the main focus of Group of 20. The central clearing can be applied in most derivatives, which hopes to reduce counterparty risk by guaranteeing the performance of derivative contracts. More specifically derivatives with the greatest risk-CDS contracts with systemic risk will be used by the above regulatory approach to strengthening central clearing.

The G20 summit also made the planning of two other proposals in addition to central clearing. Firstly, it needs to pay a minimum deposit to conduct non-centrally cleared derivatives transactions. Secondly, the data of OTC financial derivatives authorized by the government need to be provided to the government. Therefore, being listed in the important agenda of the G20 to promote financial regulatory reform, the central counterparty clearing system has become an effective measure to prevent systemic risks caused by derivatives transactions in the world. By the end of 2012, including the Ophthalmic Doppler Sonogram (ODSG), the Basel Committee on Banking Supervision (BCBS), the Committee on Payment and Settlement Systems (CPSS), the International Organization of Securities Commissions (IOSCO), the Financial Stability Board (FSB) and the Committee on the Global Financial System (CGFS), the international organizations have completed the rule guidance and standard formulation of the standardized electronic platform of products and exchange transactions, clearing of central counterparties, transaction information database, etc. Only a few fields are needing to be finally determined, and countries need to follow these international rules, guidelines, and standards to make the formulation of their own implementation rules [8].

3.3. Relevant legislative changes in the United States since 2017

A document that said the decree had nothing to do with the law and was mostly about financial regulators was signed by the Trump administration in 2017 [9]. The description is mainly made in three aspects, in which the first is the rationalization of the US financial structure. The current financial regulators that are required to be rationalized include SEC, CFTC, OCC (U.S. Securities and Exchange Commission) (Federal Deposit Insurance Corporation), FDIC, etc. To put it simply, it is a potential relaxation of regulatory power. In the second aspect, the financial aspects of the strict supervision organization are analyzed, such as information asymmetry. This statement is the relaxing of the current supervision and the analysis of the advantages and disadvantages of the current supervision. In terms of the last aspect, to promote the interests of the United States in the world, in the context that the financial derivatives develop at a high speed in the world, it can be seen that the innovation speed of financial derivatives is accelerating, in which its trading activities have also developed to Europe, Asia, and other countries and regions. This enables American companies to compete with international companies in the international market. Participation in the trading market of financial derivatives can be found in large commercial banks, investment banks, and well-known hedge fund companies all over the world. According to the Trump administration, it is believed that the scheme has reduced the competitiveness of American companies in international markets. The rapid development of financial derivatives in the world has not only accelerated the innovation speed of financial derivatives but also promoted the development of its trading activities in Europe, Asia, and other countries and regions.

4. Problems arising from financial derivatives in China and suggestions for solutions

4.1. Overlapping agency functions cause regulatory inefficiencies

In contrast with the regulation of financial derivatives in the United States, it is found that the legislation in China covers foreign exchange derivative transactions and financial futures. Because the financial derivatives in China started relatively late, the market scale is limited, in which the stock index futures, warrants, bond forwards, RMB interest rate swaps, inter-bank foreign exchange forwards, RMB foreign exchange swaps, and other businesses are the main financial derivatives instruments used in China. For the relatively complicated financial supervision, it can be seen that China's financial derivatives are regulated by 6 departments in different directions according to Table 2. In the regulation of financial derivatives, the duplication of powers often occurs. For instance, the People's Bank of China, the Ministry of Finance, and the China Securities Regulatory Commission all have the power to supervise the treasury bond futures, so the problems may appear, such as shirking responsibility, lack of efficiency in market supervision, the existence of obvious overlapping of powers and responsibilities, etc... In contrast, although the United States has only two law enforcement agencies according to the stipulation in the Johnson-Shad Jurisdiction Agreement passed by the US Congress through judicial coordination in 1982, its powers and responsibilities are relatively clear, and there is less prevarication. China must establish an independent department as soon as possible or strengthen the position of the central bank in financial derivatives.[10]so all the supervision functions of financial derivatives can be coordinated, the efficiency of market supervision can be improved, and the basic system of futures trading and other derivatives trading can be stipulated. To guarantee the realization of regulatory objectives and reduce the overlapping of functions between regulatory agencies, the corresponding regulatory agencies should take the form of legislation to be granted regulatory powers, and the regulatory efficiency should be enhanced by centralizing the power.

4.2. Application of Central Clearing Mechanism in OTC Derivatives Regulation

In terms of China, centralized clearing should be implemented according to a series of problems exposed in the subprime mortgage crisis. In addition, the risk of over-the-counter derivatives can be effectively controlled by the central counter-party through its clearing membership, margin, daily price, and other systems. In the history of the development of derivatives in the United States, it can be found that the early Chicago Exchange took the way of canceling membership to control the market credit. However, this method can only restrain buyers and sellers with good credit, since this penalty has little effect when the credit is on the verge of bankruptcy. Since it can only inspire members with good credit, the state has strengthened supervision on this basis. The Chicago Mercantile Exchange and the Chicago Board of Trade established clearing groups in 1919 and 1925 respectively, and a central counter-party clearing mechanism was introduced by them. This mechanism has the following functions, such as redistributing contract counter-party risk, preventing multilateral netting failures, reducing the risk of settlement participants, improving settlement efficiency and capital use efficiency, and improving market liquidity. China can refer to the introduction of the central counter-party clearing mechanism in the over-the-counter derivatives supervision, which can be conducted mainly through 1. The margin system. That is, a certain amount of margin for credit guarantee should be paid by futures buyers and sellers. 2. Position limit system. Then market manipulation can be prevented. In the meantime, the risks can be dispersed to prevent a large number of risks from existing in a few people. The suggestions are proposed. For example, after the official release of the Financial Derivatives Law, China has to establish an integrated mixed-ownership clearing institution in the whole country to conduct unified supervision of China's credit risk market. The financial derivatives market of America has not shrunk after it adopted the central clearing system and other risk controls in exchange-traded derivatives, which has been growing instead. Therefore, over-the-counter derivatives can learn from the risk management scheme of on-exchange derivatives.

4.3. Current International Financial Derivatives Regulatory Strategies

The regulatory framework of on-exchange derivatives is used by the current international regulation on over-the-counter derivatives. Firstly, the registered trade reporting repository has to record all over-the-counter derivatives contracts. Secondly, the transactions of over-the-counter derivatives need to be made through exchanges or electronic exchanges. Thirdly, the central clearing should be conducted if it is necessary, and a higher proportion of margin is required for credit guarantee. China should learn from it and regulate over-the-counter derivatives on this basis. Under the strong, comprehensive, and detailed China's government supervision, a certain advantage is embodied in supervising in this regard.

5. Conclusions

Because of the important impact of OTC derivatives on the country's financial stability, the 2008 subprime mortgage crisis has demonstrated the consequences of the lack of regulation of OTC derivatives, whose higher credit risk occupies a certain place in the risk management of financial markets. However, China does not have a long history of the regulation of financial derivatives. Therefore, the regulatory policy of international OTC derivatives regulation is absorbed and used to regulate the financial market in China. The overlapping functions of regulatory authorities affect the efficiency of regulation. After the subprime crisis, the G20 summit recommended measures to central clearing mechanism for OTC derivatives regulation has a certain role. From the current situation of China's financial industry, the regulatory power arrangement of OTC financial derivatives will not change significantly soon. The country set up a mixed ownership market-based unified clearing agency to form a global unified financial market infrastructure for risk management of the OTC derivatives market.

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