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A Comparative Study Between Chinese and US Derivatives Regulations

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Abstract: As a financial instrument that can both hedge risks and make speculative profits, derivatives are developing rapidly in the financial market. In order to ensure the stability of the financial market and the safety of investors, different countries have formulated different laws and regulations for supervision according to the actual national conditions. Taking China and the United States as the research objects, this paper studies the differences between their derivatives regulations. It is found that the regulation of both countries has gone from a loose history to a strict one and then with fine-adjustment according to the actual situation. However, because the United States has a relatively mature and developed financial market, it can better absorb certain external shocks. In the face of the derivatives generated by some emerging technologies, the regulatory strategy of the United States is more relaxed. For China, due to historical reasons, the development time and maturity of the financial market is far less than that of the United States, so the Chinese government will be more conservative and cautious in the formulation of statutory regulations. This is conducive to reducing systemic risk, protecting investors, and maintaining the stability of the financial system.

Keywords: derivatives, derivatives regulation, OTC, virtual currency

1. Introduction

Derivatives are financial instruments based on specific assets, and their value changes as the price of the asset price fluctuates. It includes futures, forwards, options, and swaps, which are all common derivatives in the financial market. Traders in the market usually use these tools to hedge the risk of their asset value or earn a profit from speculation. Additionally, derivatives have the nature of the leverage, and traders can hold a large amount of assets with a relatively small amount of investing. In this way, derivatives amplify the gain and loss of the investors.

On the one hand, derivatives are widely used to reduce or eliminate the risk of price fluctuation. With the help of these tools, corporations and individuals can secure their assets more efficiently, such as the currencies for international trade companies and crop commodities for farmers. On the other hand, derivatives are often used for speculation by some investors. Based on the expectations of the future price trend, investors can take proper positions in derivatives (e.g. long/short call options). When the price goes with their predictions, they will gain profit, and vice versa. Additionally, in some immature financial markets, derivatives are used for free-risk arbitrage.

For derivatives, because the design and valuation of some structured derivatives are very complex, they may not be transparent enough for investors, resulting in some risks that cannot be considered.

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Due to the interconnected and highly leveraged nature of derivatives, if a company defaults or a major economic event occurs, it may affect other market participants through the counterparties of its direct transactions, thus triggering more credit events and losses, resulting in the withdrawal of funds, the decline in asset prices, and the decrease in market liquidity. A typical example is the global financial crisis in 2008, after Lehman Brothers Holdings Inc. declared bankruptcy, many financial institutions were under pressure, and a large number of defaults began to occur, which led to the collapse of the entire financial system.

Derivatives trading can generally be divided into two categories according to the location of the transaction: exchange trading and over-the-counter (OTC) trading. Exchange trading has the characteristics of centralized trading, standardized contracts, and strict supervision. For over-the-counter trading, traders are freer in transactions, but they need to find matching traders by themselves. Traders can agree on prices by themselves. However, since there is no prior deposit system of securities and funds, the risks of securities and funds delivery are relatively large. Because there is no need for public trading information and no settlement through central clearing houses, many risks are not seen by the regulatory authorities, thus increasing the systemic risk of the entire financial market, and the possibility of chain reactions is greater.

This paper mainly studies the OTC market systems of China and the United States, analyzes their differences, and compares the coping methods and attitudes of the two countries towards the new products brought by the emerging technologies in the derivatives market. Through comparison, the maturity of the national financial market, the development prospect, and the attitude towards the derivatives market can be deeply understood. It is conducive for national regulators to formulate regulatory strategies according to the actual national conditions, stabilize the financial market, and protect investors.

2. The Development of American Derivatives Regulation

In the past century, the United States has experienced a series of financial regulatory developments and changes, among which the regulation of the derivatives market is particularly striking. The Futures Trading Act of 1921 marked the first time that the United States had intervened in the futures market. This law attempted to discourage investor speculation by taxing the sale of grain for future delivery, but only a year later, the Grain Futures Act of 1922 was amended to specify that futures must be traded on a designated exchange.

With the development of the times, the legal system has adjusted accordingly. The Commodity Exchange Act of 1936 provided an exemption for OTC derivatives trading, but it also strengthened the regulation. In 1974, in response to the growth and complexity of the derivatives market, the United States enacted the Commodity Futures Trading Commission Act, formally establishing the Commodity Futures Trading Commission (CFTC), which has since become the supreme authority to regulate the commodity futures and options markets. In 1990 and 2000, with the innovation of financial instruments and the rapid development of the OTC market, the United States carried out two amendments to the Commodity Futures Modernization Act, making supervision stricter and clarifying the regulatory framework for OTC derivatives [1].

However, the global financial crisis of 2008 completely changed the landscape of financial regulation. Because complex derivatives, such as mortgage-backed securities (MBS) and credit default swaps (CDS), played a key role in the crisis, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 enacted sweeping regulatory reforms in response, particularly strengthening oversight of the derivatives market [2]. However, with the policy change, in 2017 the new US administration began to consider easing financial regulation, introducing the Finance Act to Create Hope and Opportunity for Investors, Consumers, and Entrepreneurs. By 2018, while the

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Economic Growth, Regulatory Relief, and Consumer Protection Act showed a loosening of financial regulation in the United States, the regulation of OTC derivatives remained a central focus.

During this century-long period, the United States has continuously adjusted and refined its financial regulatory strategy to balance financial market stability, transparency, and innovation to ensure the health and continued growth of the financial system.

3. The Development of Chinese Derivatives Regulation

Early 1990s: Two commodity futures exchanges were established in Shanghai and Dalian, China. This marks the initial establishment of China's derivatives market. However, after 1995, due to excessive speculation and risk exposure in the futures market, the regulatory authorities implemented a series of restrictive policies and suspended the trading of some commodity futures. In the early days of development, China did not have clear national regulations to guide it, but local governments and exchanges set their own regulations.

1998: The China Securities Regulatory Commission (CSRC) became the national regulator for futures markets, responsible for supervising futures exchanges and related trading activities. This marks China's formal and professional regulation of the derivatives market.

2006: China allows companies to trade foreign exchange forwards, swaps, and options, marking a further opening of the country's financial derivatives market.

2009: The Shanghai Stock Exchange launched stock index futures, a major milestone in China's financial derivatives market. After that, with the market demand and the demand for risk management tools, the varieties of financial derivatives gradually increased.

2014: The China Financial Futures Exchange launched Treasury bond futures, providing an effective risk management tool for fixed income products.

2015 and beyond: As the stock market wobbled and the economy transitioned, China stepped up regulation of the derivatives market. The risk management function of the market, rather than just the investment function, is emphasized. Regulatory policies also put more emphasis on the close connection between the real economy and the derivatives market, encouraging real economy enterprises to participate in derivatives transactions for risk management.

2017: The China Securities Regulatory Commission tightened regulation of over-the-counter derivatives, especially those complex derivatives transactions that are decoupled from the real economy.

In recent years, with the process of financial opening up, China has also gradually relaxed restrictions on foreign investors' participation in the domestic derivatives market, such as allowing foreign investors to participate in domestic iron ore futures trading [3-5].

4. Comparative Analysis of Derivatives Regulations in the US and China

At the macro level, because of the occurrence of the financial crisis, both China and the United States have experienced a process of loose derivatives regulation to tight derivatives regulation, and then to some adjustments according to the actual situation, showing that no supervision or too loose supervision will lead to serious excessive speculation and potential systemic risks.

However, in terms of risk control, China's regulatory framework is significantly more prudent, and China has clear rules on which entities can participate in the derivatives market, how to participate, and how to exit. While U.S. regulations encourage volatile, innovative products, they also require transparency in transactions and products to reduce systemic risk, and Chinese regulations may place more restrictions.

In the United States, the Uniform Regulation of Virtual Currency Business Act allows the issuance of virtual currencies through Initial Coin Offerings (ICOs), subject to federal and state anti-money

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laundering and customer identification regulations. For China, the Announcement of the People's Bank of China and other seven departments on Preventing the Financing Risks of token Issuance expressly prohibits the financing of token issuance, while strictly controlling its OTC market. These two very different strategies reflect the two countries' attitudes toward emerging technologies and markets, as well as different strategies for balancing financial innovation with financial system stability [1].

5. A Case Study of Virtual Currency Regulations in the US and China

5.1. USA'S Regulation

In the United States, the Uniform Regulation of Virtual Currency Business Act allows the issuance of virtual currencies through ICOs, subject to federal and state anti-money laundering and customer identification regulations.

The bill consists of seven chapters, which mainly include strict provisions on the licensing of virtual currency services and products, consumer rights protection, anti-money laundering, and supervision. In the process of definition and generalization, the bill mainly emphasizes the use and transaction of virtual currency, ignoring the formation and development of virtual currency, so that the original definition will not be flawed due to the different forms of virtual currency formation caused by technological progress in the future.

The Act stipulates that the operation of virtual currency mainly includes three aspects: 1. Virtual currency management: traders trading, transferring, and keeping virtual currency; 2. Virtual currency exchange: converting some virtual items transactions in online games into virtual currency; 3. Hold electronic precious metal or precious metal e-certificates, etc. It can be seen that the US bill intends to include, as far as possible, the virtual currency activities that can be achieved at the technical level. However, regulating the scope of the normal operation of the Act cannot completely eliminate the risks of virtual currency. In order to protect investors and maintain the stability of the financial system, in addition to stipulating that anyone operating virtual currency needs to obtain a license or exemption conditions, the Act also grants temporary registration to operators with small annual operating quotas, which is very important for start-ups and small practitioners. This has not only reduced the economic and time cost of complete licensing but also encouraged innovation in the market, given more people confidence to enter the virtual currency market, and promoted the development of technology and the market. Besides, it also protects consumers in the market since even small trading enterprises are subject to regulations so that market operators can follow the law.

5.2. China'S Regulation

In China, the Notice issued by five ministries and commissions including the People's Bank of China on Preventing Bitcoin Risks and the Announcement by seven departments including the People's Bank of China on Preventing the Financing Risks of Token Issuance expressly prohibit the financing of token issuance and prohibit financial institutions and payment institutions from conducting business transactions in the form of virtual currency, but they allow ordinary people to participate in trading at their own risk. At the same time, its OTC market is strictly controlled.

China's regulations reflect the Chinese government's cautious attitude toward virtual currencies, mainly for the following reasons: First, because virtual currency has no centralized issuer, limited total amount, anonymity, and other characteristics, this currency does not have legal or mandatory compensation. If the virtual currency is allowed to circulate in the market, it may challenge the status of the renminbi. Second, if virtual currencies circulate in the market and are unregulated or less regulated, there may be a bubble in the money market, which increases the systemic risk of the entire financial market. Third, due to the anonymity of virtual currency, it is likely to become a tool for

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money laundering or other illegal activities, and its large circulation may promote the increase of domestic financial crimes, which is not conducive to the asset safety of investors.

In general, China's laws and regulations reflect that the Chinese government attaches great importance to the stability of the financial market and has made great efforts to protect investors, maintain financial order, and reduce systemic risks [6-8].

5.3. Discussions on the Two Different Regulations of Virtual Currencies

These two very different strategies reflect the two countries' attitudes toward emerging technologies and markets, as well as different strategies for balancing financial innovation with financial system stability.

From the perspective of national conditions and policy motives, China's approach is more suitable for the national conditions of developing countries. In the case that some financial markets are still developing or immature, investor education and investor protection mechanisms are not complete, and investors may be more susceptible to the influence of market trends, leading to excessive speculation or panic selling, resulting in excessive losses. At the same time, in immature markets, small external shocks may be accompanied by large price fluctuations. For a mature market with a large trading volume, a large number of traders, and strong capital liquidity, small external shocks will often be absorbed by large capital flows. Therefore, for some innovative financial products caused by technological progress, mature markets are more efficient to integrate and adopt and can better absorb the instability and risks brought by them. On the contrary, immature markets may not be able to cope effectively with the external shocks brought about by these innovative technologies, and therefore, more stringent laws and regulations are required to standardize or restrict them in order to maintain the stability of the financial system.

Although in the process of the comparison between China and the United States, the US bill reflects a higher degree of acceptance and freedom, and it has a relatively more complete and mature system of supervision. In this case, the US regulatory bill also has some shortcomings. As stipulated in the Uniform Regulation of Virtual Currency Business Act, temporary registration can be obtained for operators with small operating quotas. However, while protecting domestic investors and financial market stability, this has also led to many start-up corporations choosing to operate in countries or regions with more relaxed regulations due to relatively high compliance costs and legal uncertainties.

6. Conclusion

This article makes a brief introduction to the nature, importance, and OTC transactions of derivatives, and it also makes an in-depth discussion on the supervision of derivatives in China and the United States. From the comparison of laws and regulations between China and the United States, it can be seen that China and the United States choose different regulatory strategies according to their own national conditions and the maturity of financial markets. The US financial market is mature and stable, so it can cope with a certain degree of impact, and the supervision of virtual currencies can be relatively relaxed. In contrast, China's financial market is still in the developing stage and requires strict regulation to ensure financial stability and investor protection, so the products of emerging technologies such as virtual currencies are subject to more restrictions.

However, there are still shortcomings in this study, firstly, in the context of the development of blockchain technology, the way of financial transactions and payments are gradually changing, and the study does not further explore their future challenges to different regulatory policies. Second, considering the differences in the transaction volume between the Chinese and American derivatives markets, this study does not discuss the relationship between these data differences and the virtual currency market in depth. Therefore, more data information can be collected in future studies to

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conduct more in-depth research and explore the influencing factors of the differences in the transaction volume.

References

[1] *Markham, J. W. (2002). Super regulator: a comparative analysis of securities and derivatives regulation in the United States, the United Kingdom, and Japan. Brook. J. Int'l L., 28, 319.*

[2] *Latysheva, D. S. (2011). Taming the Hydra of Derivatives Regulation: Examining new regulatory approaches to OTC derivatives in the United States and Europe. Cardozo J. Int'l & Comp. L., 20, 465.*

[3] *Zhu, H. C. (2023). Derivatives trading has entered a new regulatory phase. Economic Daily, 007.*

[4] *He, Y. L., Chen, X. and Jiang, Y. L. (2023). Development and challenge of Chinese derivatives market from the perspective of open economy. Shanghai Economy (03), 83-93.*

[5] *Yang, Y. (2023). Rules will be set to be followed by the regulation in the derivatives trading market. The Financial Times, 007.*

[6] *Hsiao, M. W. (2014). OTC Derivatives Regulation in China: how far across the river?*

[7] *A notice issued by five ministries and commissions including the People's Bank of China on preventing bitcoin risks. (2013). www.gov.cn. https://www.gov.cn/gzdt/2013-12/05/content_2542751.htm.*

[8] *An announcement by seven departments including the People's Bank of China on preventing the financing risks of token issuance. (2017). www.gov.cn. https://www.gov.cn/xinwen/2017-09/05/content_5222657.htm.*