

Future Markets in China and the U.S.: History, Current Situation and Improvement

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Abstract: Given so much research on future markets in both America and China and their relationships, especially in commodities, such as oil and agricultural products, it was noticed that the researchers have done excellent research, which is, however, incomplete. This research is done in the belief that there is a lack of research on the comparison between Chinese and American future markets. This paper mainly focuses on three aspects of the two markets: (i) history and social factors (ii) types, duration, and transaction mechanism (iii) nature of regulatory structure study, and reach conclusions that after over a hundred years of development, the future markets in the United States have gone through much more challenges and more perfect. While learning from the experiences of the American future markets, China may need to pay more attention to improving the newly established laws on future markets, while considering the technological progress, as the future markets become more and more mature.

Keywords: future markets, history, transaction mechanism, regulatory structure

1. Introduction

During the last 11 years of the 20th century, in stock markets fuel commodities were relied on by investors, for example, crude oil, for hedging against undesired fluctuations; and commodities financializing has played a more significant role since the start of the 21st century. And nowadays, people consider gold as a hedge that is particularly helpful against unfavorable variations in stock markets [1]. Then according to research, there are differences in details and a lead-lag relationship between the Chinese and US agriculture futures returns and price volatilities. A group of researchers found a lead-lag relationship in commodity futures markets in agriculture between China and the United States, influenced separately by the national situations. Soybean, as an example of relatively mature future types, are linked strongly to international markets. Therefore, some kinds of impact on the prices of commodity futures in the world exist. Policy-dominant species have to put up with complex regulations from the governments, making their market prices at home less connected with the international markets [2]. The results of the research imply that, in the oil market, either shocks or volatility can possibly be transmitted to the stock market in China. In the findings, the authors highlight that currently stock market in China is more integrated with the markets around the world, which is still not as efficient in information transmission. They believe that a uni-directional shock spillover which is powerful from the stock market to many commodity markets and volatility

spillover effect from the stock market to some commodities (e.g. gold, copper, etc.). They note that in metal future markets, there are more sensitive futures to the fluctuation that happened in the local stock market. However, the commodities in agriculture make more reaction to the oil market shocks. So, the different levels of integration between these and stock or oil markets are revealed by the volatility spillover effects in the whole commodity markets [3]. So, the research on the circumstances of Chinese and American future markets and the relationship between the two markets have already existed, especially in agriculture and oil future markets. However less research was done on the history and maturity of future and derivative markets in the two countries. Therefore, this research aims at supplementing more content in this field and hopefully revealing some helpful enlightenments in the development of Chinese future markets. The remainder of this paper is organized as follows. Section 2 presents history, current situation and the nature of regulatory structures. Section 3 describes some enlightenments in developing future markets in China. The conclusions follow in section 4.

2. Analysis

To make clear comparisons between the future markets in China and the United States, I mainly focused on 3 aspects: the history, mechanism, and regulatory structure.

2.1. History & Social Factors

In the mid-19th century, the United States began to develop the Midwest, and Chicago became an important grain distribution center. After World War I and depression in 1929, facing the agricultural depression, the United States adopted the fiscal policy of protecting transactions and high tariffs, whereas this policy did not provide solutions to the long-term agricultural depression. Because of the lack of transportation and unpredictable weather, grain prices float largely every autumn. Farmers can't get a good price for their food, and when the spring is dry, there will be a shortage in the grain market, so the prices soar. Even city people are distressed by the surging price. Later, farmers found a way to sign an autumn supply agreement with the seller each spring, and the seller paid a certain deposit as a guarantee, which gradually developed into the current futures trading.

The origin of the development of the Eastern countries led by China is the farming culture, in other words, a small-scale peasant economy. People plant fields and weave cloth, emphasizing the family concept and interpersonal communication by individuals.

During the development process of Westerners, they combined different cultures. The German cultures were particularly distinctive, compared with the farming cultures in the East, which were originally nomadic. People there were more willing to extend their territory and more likely to make adventure. While nobles usually pursued fulfilling their desires, they were not willing to explore outside of their territory in person, because it was too dangerous for them to do so. For example, the techniques and equipment might be not mature enough, bringing too much risk of non-human-caused disasters. So they would send some men under themselves with strength to do the exploring for them and hopefully, find out some opportunities to gain more resources. In general, the adventures were strongly supported, with a large sum of reward, and always attracted a large number of poor but young "sailors" to participate. But this money is not for nothing, but all the things on the way to explore, whether it is valuable things: pearls and agates, gold and silver, or invaluable things like sand and stones, copper and iron. But it doesn't matter if it's valuable or not, all of them, will be owned by the nobility.

These are the most primitive signs of the future - the great age of navigation, spending money in advance, and buying products with uncertain future returns. Either losing or winning will be left to chance. However, hiring people to sail, was very risky, not only would they face the risk of mishaps,

but also the probability of sailors escaping halfway and hiding items, but the income would usually be a large sum of money, and the things brought back from each voyage are often rare treasures, basically can be worth the money, and even exceed the value. Therefore, in order to be able to get the items for sure, the aristocrats will draft an agreement for the sailors to sign, and some even promise them to be engaged in more appointments in the future. In the contracts, many components were quite similar to the features of futures today. In this way, future-like contracts appeared in the world.

Nowadays, with a hundred years of development, the future has been quite completed. The first domestic futures in China were signed in the Zhengzhou agricultural market in 1990. So it will take time for future and related systems to be as mature as those in the West. This is one of the reasons why futures are not as popular in China as in the United States.

2.2. Types, Duration & Transaction Mechanism

There are enormous types of commodities in the future markets in both China and the United States. Only 2 kinds of financial futures are found in China, which are treasury futures and share price index futures, while a person can find almost all types of financial futures [4-6].

There are many kinds of commodity futures in the US as well, and almost all kinds of financial futures, such as interest rate futures, stock futures, and share price index futures.

In mainland China, people trade in 3 periods a day: 9:00 a.m. – 11:30 a.m., 1:30 p.m. – 3:00 p.m., and 9:00 p.m. – 2:30 a.m. The trading lasted for 9 and a half hours in total. The situation is different in Hong Kong. In general, the trades start at 9:15 a.m. and end at 11:00 p.m., with a break between 1:00 p.m. and 2:30 p.m. So it somehow reveals future market plays a more important role in Hong Kong than in the mainland. In CBOT, people trade from 9:30 a.m. to 1:15 p.m. from Monday to Friday in open outcry, and from 8:30 p.m. – 6:00 a.m. from Sunday to Friday in e-platform. In COMEX, the according statistics are 8:10 a.m. – 1:00 p.m. from Monday to Friday for open outcry, and 3:15 p.m. – 8:00 a.m. for access [7-9].

The circuit breaker mechanism is an impressive symbol of the American future market. When the intraday rise or fall reaches a certain threshold in the market, the trades are forced to suspend. Then after a while, the market resumed trading. This is to keep the market from going to extremes or irrational panic. It offers everyone chances to cool down. This mechanism is very common in the United States, for example, stock index futures have 7%, 13%, and 23% circuit breakers. But in 2016, when China introduced the system into the market in the mainland, such a situation happened: when stock index futures fell sharply in a short period, circuit breakers were triggered. It seemed that this mechanism not only failed to relieve the panic in the market but actually increased it. The circuit breaker was removed the next day.

There are limits that exist in both China and the United States, and the threshold set by the United States is larger than that of China [10]. In terms of the number of withdrawals, there are restrictions on the number of withdrawals in China, and each futures variety is only withdrawn 500 times a day. There are no such certain restrictions in the United States, but they charge penalties for withdrawing too frequently.

China sometimes carries out trading volume control on some varieties, and monitors, warns, and restricts accounts with excessive trading volume. That doesn't happen in the United States. The larger the volume of customers, the more welcome the exchange. At the same time, there are position limits in both China and the US.

There are more retail participants and it's harder to see corporate and institutional customers in Chinese future markets. But in America, there is a higher proportion of institutions and enterprises, and have a high correlation with economic activities.

2.3. Nature of Regulatory Structure

The futures market is an advanced development stage of the commodity economy, which is related to the maturity of the market economy. The market economic system in America is relatively more mature and developed, and the futures market is also relatively standardized and efficient, and many commodities are priced with reference to the price of the futures market.

Western countries boast well-developed and standardized market economic systems, with efficient futures markets that play a crucial role in commodity pricing. While listed varieties in China are less, with coverage being not so large. Among the Western countries, the United States holds the most mature future in the world. The futures companies there are coveted targets for other nations seeking to catch up in reform and development. The graphs below are aimed at showing some of the reasons for the leading position of the US futures industry in the world.

The United States has developed a relatively complete regulatory legal system for the risk characteristics of futures. The current legal provisions on futures in the United States, such as the Futures Trading Act, the Commodity Futures Trading Commission Act, and the Commodity Futures Modernization Act, have made detailed provisions on futures trading. The Dodd-Frank Act, released on January 11, 2012, brought the swaps market under full regulation.

The United States implements multi-level supervision on the futures market. The Federal Commodity Futures Trading Regulatory Commission (CFTC) and the Federal Securities and Exchange Commission (SEC) are the main market regulators, responsible for supervision from the macro level, while the National Futures Industry Association (NFA) is responsible for self-regulation of the futures market, and multi-level supervision improves the self-discipline of futures market participants.

After mergers and acquisitions, American futures companies have become the world's leading futures companies with strong professionalism and high competitiveness.

The staff of American futures companies have high professional quality and global strategic vision, which are better than the futures practitioners in the same industry. Considering various factors such as legislation, regulation, futures companies, commodity exchanges, and futures practitioners, the US futures industry has become the benchmark of the global futures industry.

In China, however, many prices are determined by monopolies and "guidance" instead of by the future markets. The graphs below discuss the necessity of globalization for China's future business.

Globalization is conducive to strengthening the right to speak in commodity pricing. As a country with large demand for raw materials, a manufacturing country, and a foreign trade import and export country, China's rapid economic development makes the consumption of resources increasingly increasing, and constantly increasing imports to meet the needs of economic growth has become a must. Any change in commodity prices on the international market is likely to have a significant impact on our economy. Yet the pricing power of commodities is in the hands of Western countries. To master the pricing power of commodities, it is necessary to participate in the global business of futures and use the rules of the global futures market to obtain benefits for China's economic development and enjoy the dividends of the economic development of emerging countries. This also shows that emerging countries like China need to realize the globalization of the futures business, establish a global futures market, attract futures traders from other countries to trade, and gradually enable international enterprises to use the price of the futures market as the pricing standard of commodity prices so that the futures market has become the pricing center of bulk commodities closely related to the development of the national economy.

It also helps to improve the efficiency of market resource allocation. An efficient futures price reflects the current price of all known information, and the more participants in the market, the more valid information is brought in, and the more the resulting price reflects the true price. The use of this

price to guide the production of enterprises, pricing, stocking, and hedging will be more able to achieve good results. The more efficient the market, the more it can attract the attention of corporate customers and speculative customers, the size of the market will gradually expand, and the more efficient the market will be. The globalization of futures business enables idle funds and resources to be effectively used on a global scale and promotes the optimal allocation of global resources.

Meanwhile, it facilitates enterprises to participate in hedging. With the development of marketization and internationalization, the production and operation activities of enterprises increasingly need to rely on the futures market for risk hedging and cost locking. In the practice of futures trading, more and more enterprises have a profound understanding of the two basic functions of price discovery and hedging in the futures market. Through the hedging of futures, the business risk that may be caused by the price fluctuation of the spot market can be avoided, and the future price forecast of the futures market can be used to arrange production and management better. In 2008, the US subprime mortgage crisis triggered sharp fluctuations in the world economy, and the prices of commodities such as oil, copper, and aluminum rose to the highest point in history in the middle of the year and fell to the lowest point in nearly five years at the end of the year. According to FIA statistics, in 2008, the global exchange-traded a total of 1.11 billion commodity futures products, an increase of 41.7% over 2007, of which agricultural products, energy products, and metal products were traded 614 million, 215 million, and 281 million, respectively, an increase of 52.9%, 16.7% and 42.2% over 2007. From the data, we can see that more and more enterprises, funds, and speculators participate in futures trading when the financial crisis is coming. Because most of China's enterprises could not participate in overseas futures trading, in October 2008, when the global commodity prices in a large area of rapid dive, domestic coal enterprises, steel enterprises, etc. due to the lack of corresponding derivatives tools to hedge, inventory shrank sharply, enterprises suffered huge losses. In the modern society of global economic linkage, the economic crisis in a certain country is likely to endanger the whole world, so enterprises need to hedge in the futures market to ensure the healthy development of enterprises.

Globalization is conducive to the establishment of a globally competitive future company. As the main force of China's futures market, the intrinsic quality and competitiveness of futures companies show such importance to the development of the market and for the pricing power of bulk commodities. In order for China to make a voice in the international commodity market, futures companies must go out, take the initiative to use the overseas futures market to serve domestic enterprises, accumulate experience in acting for overseas businesses, train talents for overseas agency businesses, take the initiative to learn from the companies of the competitive future in Europe and the United States and enhance their own strength in the competition with European and American futures companies. In the classification supervision of futures companies, we should create conditions for those high-quality futures companies with potential competitiveness to expand and strengthen, so as to enhance the international competitiveness of our futures companies.

3. Conclusion

After the above analysis, some enlightenments in the future markets of China come into being. First of all, make more improvements to the laws on China's futures and derivatives markets, which were newly established in April 2022, indicating that the laws have not gone through enough challenges in a long time. After that, it is important to bring over-the-counter transactions into the monitoring mechanism. And then, pay much attention to the development of technologies and their monitoring.

Originating in the mid-19th century, the futures and derivatives markets in the United States have been so mature, taking the lead in the world. The younger future markets in China are exploring building their own custom and styles, fitting into the Chinese trading environment and culture. However, there is a long way for China to go in developing the future and derivatives markets. For

example, more types and larger numbers of financial futures such as stock futures may be introduced in China. People in China may have to learn the experiences of the development and evolution of American future markets and the related regulatory structures, as they have gone through such a long history and so many adjustments. China may need to pay more attention to improving the newly established laws on future markets while considering the technological progress.

In the future, more quantitative analyses of futures and predictions of prices in both China and America are being made. The outcomes can provide more reliable evidence and indications of the logic of the markets.

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