Financial Innovation and Financial Risk Management

Yulang Wei
Hankou University, Wuhan 430212, China.

Abstract: Innovation is the foundation and guarantee of the development of things, for financial development, innovation is the internal driving force to promote healthy and sustainable economic development, and it is one of the important characteristics of economic development in the new era. Since the reform and opening up, China has continuously innovated its financial development model, and in a sense, the history of China's modern development is the history of financial innovation and development. The three financial crises in the world in the 21st century have sounded the alarm for China's financial industry, especially since the outbreak of the new crown epidemic, the global economy has continued to be sluggish, how to do a good job in financial innovation while doing a good job in financial risk management, has become an urgent problem for the financial industry.
Keywords: Financial Development; Financial Innovation; Financial Crisis; Financial Risk Management

Introduction

With the continuous advancement of economic globalization, the global economy has long been tied together, and with it, the degree of financial liberalization has been increasing, so the importance of financial innovation ability has become more and more important. Only with good financial innovation ability can we effectively deal with various potential risks in financial activities. Only by strictly controlling financial risks can we effectively promote the coordinated development of financial assets and industrial assets and ensure the integrity of economic sovereignty.

1. The concept of financial innovation

Looking back at the history of China's financial technology development, innovation is the source of inseparable power for the development of financial technology, and the development of financial technology is accompanied by financial technology innovation. Therefore, when the original financial system conflicts with China's social and economic reform and development, it will seriously hinder the reform and development of China's financial economy, and then restrict the development of society.

Financial innovation refers to the international financial industry regulatory authorities or other financial institutions to protect and realize the economic liquidity, safety and economic profitability of their financial assets as the goal, relying on new financial management concepts, methods and new financial technology means to achieve the combination of various basic elements in the financial system, introduce new financial instruments, financial services, international financial markets and new financial management systems and methods, and improve the efficiency of the capital market operation management system. In a broad sense, financial innovation refers to a series of new things that may appear in the international financial system or international financial market, such as new financial instruments, new international financial service management methods, and new international financial markets. From a narrow perspective, the main body of financial innovation is all kinds of professional financial institutions, including commercial banks and non-bank financial institutions, the emergence of credit deposit money, the birth of commercial deposit banks, and the establishment and improvement of the check deposit financial system, which is widely regarded as the most important socialist financial innovation in China's financial history.

2. Financial risk management

2.1 Financial risk

Financial risk refers to uncertainties that may lead to deviations between the actual income generated by financial investment operations and the expected income. During the financing process, it is difficult to guarantee that unexpected circumstances will not cause the loss of funds or the receipt of additional income. With the development of financial markets, the management of financial risks is not affected by human will.

2.2 Financial risk management

The essence of financial risk management is that financial enterprises identify, measure, predict and analyze various possible financial risk factors in the process of excessive financing and production and operation, and effectively control and disperse various financial risks within a certain limit. Use the most economical and reasonable means and methods to minimize financial risks. Financial risk identification and management is one of the main contents and goals of modern financial industry, relying on modern technical means to accurately identify and predict financial risks, effectively prevent and reduce economic losses, and provide guarantee for the smooth progress of monetary and financial activities such as limited monetary fund raising and production and operation.

2.3 Financial innovation risks

Financial innovation risk, as the name implies, refers to the fact that when China's financial enterprises implement innovation, the financial innovation measures proposed cannot be realized, resulting in a decline in income and serious losses. The main factors are as follows: On the one hand, various potential uncertainties in the design process of financial innovation. That is, due to various uncertainties in the process of financial innovation design and implementation, the financial innovation measures were not successfully implemented and introduced as scheduled, and even led to the abortion of the innovation measures. On the other hand, it affects the financial environment and risks arising from the implementation of innovation. That is, because of the various uncertainties and risk factors generated in the implementation process of financial innovation, the implementation process of financial innovation is hindered, or the effect of implementation is seriously deviated from the expectations of financial enterprises. The sum of these two factors is the total risk affecting the financial environment and innovation. Financial environment and innovation risk is a specific manifestation of financial risk in financial innovation. Specifically, immaterial changes affecting the degree, scope and duration of financial risks will directly affect the overall environment and implementation effect of China's financial environment and innovation, and thus directly restrict the implementation of innovation risks by financial enterprises in China to a large extent. Especially in today's global financial innovation derivative investment instrument product range continues to increase, financial innovation derivative investment instruments have an increasing impact on the operation and development of finance, the interaction between financial derivative investment innovation risk and other financial risks is becoming more and more obvious.

3. The relationship between financial technology innovation and financial risk prevention and control management

With the development of the financial market, financial risks are increasing, posing a serious threat to the healthy survival and long-term stable development of economic entities in various fields, especially financial institutions. Therefore, the role of financial risk prediction and management is becoming more and more important, and people's awareness and demand for risk management tools are becoming more and more urgent. With the development of the financial industry, people's demand for financial risk aversion is increasing, and various new financial risk prediction and management tools have emerged in the market, such as financial commodity futures, financial commodity options, financial interest rate swaps and forward fixed rate swaps.

3.1 Provide ways to avoid risks

Innovations in financial technology offer new ways for people to avoid risk. As a major participant in financial risk avoidance activities, through various transfer, diversification and offset risk avoidance methods, it can effectively reduce the maximum possibility of interest rate risk loss or reduce the severity of interest rate risk loss. For example, in order to effectively avoid the risk of floating interest rates, banks and other financial institutions can effectively use debt asset swaps to float fixed interest rate or floating rate or fixed rate assets when international interest rates rise sharply, and convert floating rate debts into fixed-rate debts, so as to effectively realize the main purpose of interest rate risk transfer. In addition, as the main bearer of technology implementation, personnel's own understanding and mastery of financial technology will also affect the effectiveness of financial risk prevention and control management. This means that the good application of technology also puts forward higher requirements for the technical level of financial industry personnel. Technical personnel should start from themselves and combine the actual work to actively learn the available financial innovation technologies, and timely summarize the problems encountered in the application of technology in the work, so as to provide support for further improving and improving technology and improving the effect of technology application.

3.2 Improve awareness and ability to avoid risks

Financial innovation has greatly improved the awareness and ability of investors of liquidity financial institutions to resist liquidity risks. The development of financial technology innovation enables financial institutions to fundamentally ensure the safety and liquidity of assets while improving the actual profitability of assets. On the one hand, financial innovations such as financial business diversification, asset allocation, and securitization have further improved the profitability of financial institutions and the actual liquidity of assets. On the other hand, by vigorously developing financial intermediary business, the security and profitability of financial institutions will be further improved without reducing the actual liquidity of financial institutions' assets. When the richness of the financial business itself is improved and the intermediary business is developed simultaneously, the overall quality of the financial industry can be optimized, and the macro stability of the industry can be comprehensively improved.

3.3 Propose new financial management methods and financial risks

Although the innovation and development of financial investment methods have facilitated investors, they have brought new financial management risks. However, the innovation of financial derivatives can often only achieve risk diversification and transfer of individual risks at the same time, but cannot completely eliminate the overall risk of derivatives. The innovation of financial derivatives only greatly reduces institutional risk at the micro level, and the macro level is that the risk is directly transferred from institutional risk aversion to the risk appetite of the salary system, and under the new risk management method, the stability of the financial system and the overall risk management have not been reduced. Financial innovation has increased the stability and institutional management risks of China's financial industry, because after the innovation of financial derivatives, the exchanges between financial institutions have become more and more close, forming a partnership based on business and capital ties with business, and also showing a strong interest correlation. Any problem in the financial field will quickly produce a chain reaction through partners, forming a domino effect, which directly affects the security and stability of the entire capital market financial system. In addition, fierce market competition has forced all kinds of financial institutions in the market to constantly get involved in some financial business areas that they are not familiar with and are good at. They compete with each other to carry out high-risk, high-fixed income financial business, which greatly increases the stability and operational risks of financial institutions in the capital market.

References

[1] Wei JY. Financial Innovation Way of Avoiding Risk of Climate Disasters in Food Production:Weather Index Insurance[J].Meteorological and Environmental Research,2015,6(Z1):24-26.

[2] Yu BW.T., Pang WK. How does innovation's tail risk determine marginal tail risk of a stationary financial time series? [J]. Science in China,Ser.A,2004(03):321-338.

[3] Egorov A. Financial Innovation and Financial Risks[J]. Procedia Computer Science, 2022, 214: 441-447.