# Financial Innovation and Financial Risk

## Zhengzhao Jian<sup>1,a,\*</sup>

<sup>1</sup>University Of Leeds, Woodhouse Lane, Leeds LS2 9JT a. bn213zj@leeds.ac.uk \*corresponding author

Abstract: The market economy has made new progress and development, and the development of the financial industry has gradually become internationalized. To occupy an important position in the fierce competition of the financial market and win more voice, Reform, and innovation are the development direction of financial enterprises in the future Financial innovation is a continuous reform of the financial system and its connotation, with innovations in financial technology and institutional innovation. Innovation represents a break from the norm, a change in the previous mode of financial supervision, the scope of financial activities, and the structure of financial products, but this inevitably. Although Financial innovation can eliminate some of the hidden financial risks, financial risks have not completely disappeared, so financial innovation is not omnipotent and still has great limitations. This article analyses the relationship between financial innovation and financial risk, as well as the characteristics of financial innovation, and provides feasible suggestions from various perspectives.

**Keywords:** financial innovation, financial risk, financial market

#### 1. Introduction

The market economy continues to make new advances and developments, and the financial sector is becoming increasingly international. To gain a significant position and a greater voice in the highly competitive financial market, reform, and innovation are the keys to the future. and gain a greater voice in the financial markets, reform, and innovation are the way forward for financial firms. Although financial innovation can eliminate some hidden financial risks, these risks have not completely disappeared, so financial innovation is not a panacea and still has significant limitations. After completing financial innovation, firms only play a good role in preventing individual risks.

The financial industry has only played a good role in preventing individual risks after completing financial innovation, so it is still necessary to pay more attention to the management of financial risks. The practice has shown that the way to effectively avoid financial risks is to restructure the financial structure. As financial innovation is now moving towards internationalization, it has increased the efficiency of regulation and made financial operations more efficient. The internationalization of financial innovation has increased the efficiency of regulation and the diversification of financial services. The rapidly changing market environment requires an enhanced understanding of financial innovation and financial risk management. The rapidly changing market environment necessitates a stronger investigation of financial innovation and financial risk management to lay a sound

<sup>© 2023</sup> The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

foundation for stable and sustainable business development. The market environment is ever-changing.

#### 1.1. Financial Innovation

Financial innovation is a way of reforming financial markets, taking the integration of various factors of production as an opportunity to construct new production functions to obtain more profit opportunities. In a broad sense, market and systemic innovations present new ways of financing, means of payment, and forms of organization and management. In a narrower sense, the core element of financial innovation is the innovation of instruments [1]. In a narrow sense, the core of financial innovation is the innovation of instruments [1]. In the process of upgrading the industrial structure, knowledge innovation is the driving force, while financial innovation is supported by financial innovation. In the process of upgrading the industrial structure, knowledge innovation is the driving force, while financial innovation provides financial support to help knowledge innovation.

#### 1.2. Financial Risk

Instability arising from unpredictable events in the course of money operations or capital flows can be classified as financial risk. As a result of financial risks, the actual return to the operator or operator may not reach the expected target or even lose the opportunity to make a profit. Financial risk management is the process of risk identification, risk measurement, risk forecasting, risk response and other activities carried out by enterprises in the process of using funds, which can effectively control or It is the process of risk identification, risk measurement, risk prediction, and risk response, which can effectively control or dissipate sources of risk and ensure financial security by economic means.

### 2. The Relationship Between Financial Innovation and Financial Risk

### 2.1. The Need for Financial Risk Management Drives Financial Innovation

On the one hand, financial innovation provides more ways to avoid financial risks, maximize risk avoidance and minimize losses. Participants in financial activities Participants in financial activities reduce their risk by risk transfer, risk dissipation, and risk offsetting. For example, when a banking institution raises interest rates, it can shift from fixed-rate assets to floating-rate assets with the assistance of swap transactions. The shift from fixed-rate assets to floating-rate assets and from floating-rate debt to fixed-rate debt is a way to hedge interest rate risk through risk transfer [2]. Risk Dissipation Risk dissipation is the use of asset portfolio theory and correlation models in the selection of assets to identify the most favorable portfolio based on risk-return characteristics and correlations. The most favorable portfolio. The securitization of assets, negotiable certificates of deposit, and electronic trading methods are innovative forms of financial derivatives that allow investors to adjust their portfolios at any time. The portfolio can be adjusted at any time to achieve a portfolio that is satisfactory to the investor, thereby achieving the desired benefits and reducing the risk index. While risk offsetting and Exploring risk hedging involves the same risks but in opposite directions so that the expected benefits or damages are offset. On the other hand, advances in financial innovation have led financial institutions to become more risk-averse, and through innovation financial institutions can fully deploy available assets while ensuring asset liquidity and safety Boosting revenue

#### 2.2. Financial Innovation Can Create New Financial Risks

Financial innovation can dissipate and transfer individual risks, but it cannot achieve the complete elimination of overall risk. Reducing financial risk is It is a transfer of risk from risk-averse to

risk-averse individuals, restructured in a new way, without actually reducing the amount of risk. First, financial Firstly, systemic risk has increased as a result of financial innovation, which has resulted in financial institutions being closely linked to each other, linked by capital, and having a strong correlation.

The advancement of financial innovation has led to the close interaction between financial institutions, which are linked by capital and are highly correlated. A problem with any one of these modules would have an impact on the stability of the financial system as a whole. Secondly, financial innovation increases cyber security risks, such as cyber security. Secondly, financial innovation increases cyber security risks, such as those arising from vulnerabilities in network protocols and insufficient levels of encryption of digital information. Thirdly, financial innovation has created financial instruments and financial trading activities with high returns and high risks [3]. In addition, financial innovation has led to industrial business risks. In addition, financial innovation has increased the risk of industrial operations.

In addition, financial innovation has increased the risk of industrial operations, and homogenization among financial institutions has become more evident, leading to more intense competition among them and narrowing the traditional deposit and lending spreads. In addition, financial innovation has increased the risk of industrial operations, and homogenization among financial institutions has become more evident. In the context of fierce market competition, financial institutions need to develop high-risk and high-return businesses if they want to improve their core competitiveness. This has created a potential risk for their operations. Finally, financial innovation has created more possibilities for financial speculation. Financial innovation has both advantages and disadvantages.

The introduction of new financial products and greater market liquidity has also increased the potential for speculation.

# 3. Measures to Improve the Quality of Financial Innovation and Financial Risk Management

## 3.1. Improving the Quality of Supervision and Management

The main task of financial regulation is to impose financial transaction behavior restrictions, which as a regulatory action with specific connotations, can have a significant impact. Financial regulation helps to achieve macroeconomic development objectives and has a positive impact on the stability of economic development. macroeconomic development objectives, and can also have a positive impact on the stability of economic development. It is also of great importance for the stability of economic development. At this stage, it is important to look at the actual development of the financial markets. It is also the responsibility of the regulatory authorities to be involved in financial innovation. In addition, when regulating the innovative activities carried out by financial institutions addition, when regulating the innovative activities carried out by financial institutions should be paid both to improving the level of supervisory capacity and to improving laws and regulations.

In addition, when regulating the innovative activities carried out by financial institutions, attention should be paid not only to improving the level of regulatory capacity but also to improving laws and regulations, to create a favorable environment for the stable development of financial innovation activities. In addition, when regulating the innovative activities carried out by financial institutions, attention should be paid not only to improving the level of regulatory capacity but also to improving laws and regulations, creating a favorable environment for the stable development of financial innovation activities, in which the binding and supporting power of the law plays a major role. The binding and supportive force of the law plays a major role in this. First of all, the government should study and analyze the regulatory system and find a suitable regulatory framework. Firstly,

government departments should study and analyze the regulatory system to find the right focus for their regulatory work. At the same time, it is important not to neglect to support the implementation of financial innovation activities and to translate risk management measures into concrete actions. The government should also support the implementation of financial innovations, translate risk management measures into concrete actions, and provide an environment in which innovation can be carried out with fewer restrictions. The financial sector should be given sufficient space to develop while at the same time reducing restrictions on innovative activities. Secondly, it is important to improve the efficiency of the management of companies and to ensure that if there are violations of the financial If a company is in breach of the financial system, they should be promptly regulated and, if necessary, punished. If a company is in breach of the financial system, it should be managed promptly and, if necessary, punished, so that the bank can play its leading role to the full. The bank's leading role will improve the efficiency of the management of the company and guide the financial sector to expand its business areas, laying a good foundation for its diversified development goals. A good basis for diversification.

## 3.2. Strengthening Technology Risk Management

The rapid development of information technology has also had a boost, and banks can maintain their development in a stable and secure environment, all banks can maintain their development in a stable and secure environment by relying on the security of information technology to provide protection. When financial institutions innovate their financial products, they should take the soundness of information technology as a prerequisite, for For example, in the area of electronic banking. Although this work places great importance on the risk financial institutions should take into account the soundness of information technology when innovating financial products, for example in the area of electronic banking. The involvement of several departments in technology prevention is required. Therefore, to improve the scientific performance of risk management information technology should be given greater importance to improving the scientific performance of risk management. The financial sector has a strong focus on IT risk management, so that it can provide good IT support for the stable and long-term development of the financial sector. The information technology risk management process should therefore be given greater attention to improve the scientific performance of risk management and to provide good IT support for the stable and long-term development of the financial sector.

## 3.3. Improvements to the Management System

To improve the quality of financial innovation development, financial risk management measures should be improved, combined with the actual development of the enterprise, develop A practical risk management system should be developed. A clear definition of responsibilities and rights between financial institutions is the basis of a risk management system, and rights between financial institutions is the basis for a risk management system that provides a healthy and stable environment for the efficient development of financial activities. The risk management system is based on a clear understanding of the responsibilities and rights of financial institutions. In addition, the management and approval system must be improved. The system of management and approval must be improved and any excesses must be severely punished. The management and approval system must be improved, any excesses must be severely punished, and measures must be taken to achieve the objectives of internal control, which will help to improve the efficiency of financial risk management. Finally, it is important to develop a system of information disclosure so that the financial risk management process is more efficient. The construction of an information disclosure system is very important to ensure that internal information is transparently managed. This will ensure that internal

information is transparently managed and that the accounting system is further improved to achieve a comprehensive record of financial operations. The system of information disclosure is important to ensure that internal information is transparently managed. This will ensure that internal information is transparently managed and that the accounting system is further improved so that financial operations can be carried out more smoothly while keeping a comprehensive record of financial operations. Therefore, in the process of financial innovation and development Of the process of financial innovation, the management system should be improved under the actual development situation. The information should be handled well, the value of the information should be carefully explored and the information should be made public without affecting commercial interests.

## 4. The Integration of Financial Innovation and Financial Risk Management

## **4.1. Focus on Financial Regulation**

The development of financial innovation activities for the financial industry is a combination of benefits and risks, and to achieve sound development, financial innovation should improve To achieve sound development, financial innovation should improve its risk identification and risk management capabilities.

On the one hand, government departments need to strengthen financial regulation. Financial supervision is the process of organizing, inspecting, coordinating, and dealing with financial institutions and financial markets. It is a government-led process, with the financial authorities as the executors and relevant laws and regulations as the basis, to ensure the smooth operation of the macroeconomy and achieve macroeconomic goals. It is the process of organizing, inspecting, coordinating, and dealing with financial institutions and financial markets, led by the government and carried out by the financial authorities by relevant laws and regulations, to ensure the stable operation of the macroeconomy and achieve macroeconomic goals. Through international practice, there is a need for strong regulation in the market entry, operation, and exit stages.

Under international practice, there is a need for strong regulation in market entry, operation, and exit. As China's financial sector is now fully open to the outside world, Chinese banks should pay more attention to financial innovation, and the regulatory authorities should encourage and support innovation, summarise and regulate financial innovation activities so that risk supervision can be based on evidence and thus improve overall market competitiveness. To strengthen financial supervision, relevant regulations and statutes should also be improved to create a favorable environment for financial innovation. For financial innovation activities that are currently underway and have not yet formed a mature system, the approval process for entry should be simplified, with risk control as a prerequisite [4]. Follow the principles of identifying risks, exploring risks, strengthening coordination, and gradually rationalizing implementation, i.e. identify and distinguish the risk status of financial products, actively encourage commercial banks to explore new businesses and areas, and allow certain opportunities for trial and error. When carrying out financial risk supervision, we should go deeper into new business development, reveal risky business in the process of communication and coordination, and make timely corrections so that new businesses can achieve healthy development while avoiding risks.

On the other hand, to improve the market risk management control ability of the banking industry as an entry point. Under the influence of the exchange rate formation mechanism and interest rate market reform, the risks faced by the banking industry will mainly be reflected in market risks. Today, China's banking industry still needs to improve its ability to price derivative risks and lacks effective risk transfer and risk hedging. Some banking institutions even lack management models to deal with market risk and are not able to take advantage of their experience and awareness of more

complex financial derivatives. Therefore, it is crucial to pay attention to financial regulation and improve the market risk management capabilities of financial institutions.

In addition, information technology risk management is used as a grip to improve the level of financial risk management. Information technology plays a powerful role in the development of financial institutions. However, information technology tools can exhibit a certain degree of virtuality, and whether they are safe and reliable will determine the stability of banking institutions. The stability of a banking institution is determined by its security and reliability. In the current financial business innovation work, e-banking and mobile banking are all aimed at improving information technology, and in this environment

In this environment, IT risk management should be given high priority to avoid damaging the fundamental benefits for financial institutions or investors [5]. Information technology risk prevention. The level is linked to a larger number of departments, such as audit, risk management, technical services, etc. Therefore, the level of attention given to IT risk should be comparable to market risk and credit risk.

## 4.2. Strengthening International Cooperation

The current international financial environment is becoming increasingly complex, and it is not enough for one country to control financial risks. In the context of the internationalization of financial markets and the development of the financial derivatives business development, it is necessary to strengthen international cooperation. For example, it is necessary to draw up and sign regulatory cooperation agreements with other countries, actively participate in activities organized by international regulators and strengthen international cooperation. international regulatory bodies, and develop financial derivative business guidelines that are in line with China's national conditions, to achieve effective management of financial risks. Effective management of financial risks.

#### 4.3. Sound Internal Control Mechanisms

For banks and other financial institutions, a sound risk management system should be established, which should include a board of directors, senior management, and a risk management department. The system should include a board of directors, senior management, and a risk management department. The organizational structure should also be improved and responsibilities within the organization clarified. The organization of business activities and executive bodies The system of authorization and approval should be improved to avoid overstepping authority. By improving the internal structure of the banking sector as described above, a strong internal control system will be established to monitor financial innovation activities and implement management guidelines. At the same time, a comprehensive information disclosure system has been established to make internal information transparent and open to external scrutiny and correction. Separate accounting system A separate accounting system is set up to keep accurate records of business activities and to ensure that accounting statements are not tampered with. As far as possible, the accounting information compiled is shared and made public while safeguarding business interests. The accounting information is shared and made public as far as possible in the interests of the business and to avoid monopolization of information

#### 5. Conclusion

This paper discusses the relationship between financial innovation and financial risk Measures to improve the quality of financial innovation and financial risk management and the integration of financial innovation and financial risk management. From this paper it can be concluded that financial innovation offers more possibilities for the development of the financial sector, accelerating

the diversification of financial services, the internationalization of activities, and the electronification of transactions. Better and more personalized services are offered to investors. To achieve the integration and development of financial innovation and financial risk management, financial supervision is the focus, and the entry point is to strengthen international cooperation and improve internal control mechanisms to promote the healthy development of China's financial industry.

#### References

- [1] Li Ruiyan. Introduction to financial innovation and financial risk management [J]. Bohai Economic Outlook, 2021(1): 12-13.
- [2] Li Ying. An introduction to financial innovation and financial risk management measures [J]. China Business Theory, 2019(22): 45-46.
- [3] Zhang Wei. An introduction to innovative financial management and service measures based on financial risks [J]. Market Week, 2018 (6): 127-128.
- [4] Guo Liying. A brief discussion on financial risk management of financial investment enterprises and its response measures [J]. Modern Business, 2020 (13): 156-158.
- [5] WANG Zhenjie. A study on the impact of financial instrument innovation on enterprise financial management [J]. New Business Weekly, 2019 (4): 92.