### **Original Research Article**

**Open Access** 



# Effective Identification of Financial Risks in Financial Management

You-Ze Xing\*

Qingdao University, Qingdao, Shandong, 266000, China

\*Correspondence to: You-Ze Xing, Qingdao University, Qingdao, Shandong, 266000, China, E-mail: 2646033352@qq.com

**Abstract:** In the face of the sweeping wave of financial globalization, the accurate identification and efficient management of financial risk have become top priorities for financial institutions and regulatory agencies. This paper delves deeply into the critical role of risk identification in financial management, outlines the types of financial risks commonly encountered in corporate management, and proposes a comprehensive set of effective identification strategies. By utilizing both quantitative and qualitative analysis, developing risk warning systems, enhancing internal control and auditing, integrating financial technology, and cultivating a risk-aware culture, financial institutions can precisely capture risks, strengthen the financial security defenses, and steer towards stability.

Keywords: Financial management; effective identification; financial risk

#### Introduction

In the fast-changing financial markets and the surging wave of financial innovation, the complexity and volatility of financial risks have become more prominent. Accurately identifying and effectively managing financial risk play crucial roles in ensuring the steady operation of financial institutions, the smooth functioning of financial markets, and the overall health of the economic system. This paper aims to deeply analyze the importance of identifying financial risks, list the types of financial risks in corporate management, and explore efficient identification methods, with the goal of providing valuable insights for financial institutions and regulators.

### 1. Importance of Identifying Financial Risk

The identification of financial risk serves as the foundation and prerequisite for financial management. Only by accurately identifying potential risks can financial institutions develop targeted risk management strategies and take effective preventive measures to avoid or reduce losses caused by risk. Additionally, identifying financial risks helps improve risk awareness, enhance risk management, and increase market competitiveness for financial institutions. For regulatory agencies, the accurate identification of financial risk is also the basis for formulating regulatory policies and implementing supervisory measures. Under the context of financial globalization, the transmission effect of financial risk is becoming

© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, sharing, adaptation, distribution and reproduction in any medium or format, for any purpose, even commercially, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

increasingly significant, with regional financial risks potentially spreading rapidly and even triggering global financial crises. Therefore, effectively identifying financial risks is vital to maintaining global financial stability and promoting economic development.

# 2. Types and Identification of Financial Risks in Corporate Management

### 2.1 Market Risk

Market risk arises from adverse changes in market prices and poses a direct threat to a company's financial situation. Fluctuations in interest rates, exchange rates, and stock prices can all affect a company's operations. To effectively identify market risks, companies need to establish an efficient market risk monitoring system. This requires close attention to market dynamics and in-depth analysis of the causes and trends behind price changes. For instance, rising interest rates may increase a company's financing costs, while exchange rate fluctuations can impact export revenues and import costs. By regularly assessing market risk levels, companies can adjust their strategies promptly, such as altering asset-liability structures or using financial derivatives for hedging to mitigate the negative impact of market risk on their financial standing<sup>[1]</sup>.

### 2.2 Credit Risk

Credit risk is another significant financial risk and mainly stems from the default or credit downgrade of counterparties. To identify this risk, companies must conduct comprehensive and in-depth evaluations of their counterparties' credit statuses, including analyzing their financial health, operational capacity, and payment records. By establishing a credit risk management system, companies can formulate more scientific credit policies and exercise caution when granting credit authorizations. Meanwhile, strengthening the management and collection of accounts receivable is also an effective means to reduce credit risk. Enterprises should establish a comprehensive accounts receivable management system to ensure the timely recovery of accounts receivable and avoid the occurrence of bad debt losses.

### 2.3 Liquidity Risk

Liquidity risk concerns the enterprise's capital flow status; when the enterprise faces a lack of liquidity, debt repayment or capital demand may not be able to be met in time, and then it may fall into financial difficulties. To identify liquidity risks, companies must closely monitor their cash flow and asset-liability matching; this includes the analysis of cash inflow and outflow, asset-liability matching degree, and other aspects. By formulating a reasonable capital plan, the enterprise can ensure the reasonable scheduling and use of funds. Meanwhile, maintaining a moderate cash reserve is also an effective strategy to cope with liquidity risk, which requires enterprises to have a high degree of flexibility and adaptability in fund management and scheduling.

### 2.4 Operational Risk

Operational risk is also a financial risk that should not be ignored in enterprise management. Operational risk arises from internal processes, personnel, systems, or external events. To identify operational risks, companies need to thoroughly assess their business processes, internal controls, and personnel management. By enhancing risk prevention and response measures, companies can reduce the likelihood and severity of operational risks. For example, establishing sound internal control systems ensures standardized business processes, while regular training for staff can improve their risk awareness and operational skills. It is also important to establish an emergency response mechanism to handle external events efficiently.

# 3. Methods for Effective Financial Risk Identification

## 3.1 Combining Quantitative and Qualitative Analysis

(1) Operational risk is also a financial risk that should not be ignored in enterprise management. Quantitative analysis is essential for risk identification, using mathematical models and statistical methods to quantify risks. This method provides precise measurements of risk magnitude and likelihood, offering scientific support for risk management. For instance, the Value at Risk (VaR) model estimates the maximum potential loss over a given period under normal market conditions. Stress testing, which simulates extreme market conditions, assesses how financial institutions can withstand unfavorable scenarios. (2) Quantitative analysis also has certain limitations. Factors such as the assumptions of the model and the completeness and accuracy of the data may affect the accuracy of the

25 of 36 Vol 2 Issue 2 2024

analysis results; quantitative analysis tends to focus on the analysis of historical data, while it is difficult to predict future market changes; thus, it is also necessary to combine the methods of qualitative analysis when identifying financial risks. (3) Qualitative analysis relies mainly on the experience and judgment of experts to make subjective assessments of financial risks. This method can make up for the shortcomings of quantitative analysis and provide more comprehensive and in-depth risk information; experts can identify potential market and credit risks by analyzing market trends, policy changes, industry competition and other aspects. Qualitative analysis can also be combined with the actual situation and risk preferences of the enterprise to develop a more targeted risk management strategy; for example, experts can assess the future profitability of the enterprise through the prognosis of the industry outlook, so as to identify the potential credit risk[2].

### 3.2 Establishing a Risk Warning System

(1) The establishment of a risk early warning system requires the clarification of early warning indicators and thresholds. Early warning indicators should be set according to the business characteristics and risk preferences of the financial institution, including market risk indicators, credit risk indicators, liquidity risk indicators, etc. For example, market risk indicators can include the volatility of the stock price index, changes in interest rates, etc.; credit risk indicators can include the credit rating of the customer, the default rate, etc.; liquidity risk indicators can include the ratio of cash inflows and outflows, the degree of matching between assets and liabilities, etc. liquidity risk indicators can include cash inflow and outflow ratio, asset-liability matching degree, etc. The setting of thresholds should be reasonably adjusted based on historical data and risk tolerance to ensure the accuracy and sensitivity of the early warning system. (2) Choosing appropriate monitoring and analyzing methods is the key to establishing a risk early warning system. Financial institutions can adopt statistical analysis, data mining and other technical means to process and analyze massive data to discover potential risks; for example, abnormal fluctuations in market data can be statistically analyzed to discover the beginnings of market risks in a timely manner; potential credit risks and fraudulent behaviors can be mined out of transaction data through data mining technology. (3) The establishment of an effective information transmission and feedback mechanism is an important guarantee to ensure the effective operation of the risk early warning system. Early warning signals should be able to be transmitted to relevant departments and personnel in a timely and accurate manner so that corresponding measures can be taken; financial institutions should also establish a feedback mechanism to assess and improve the accuracy and effectiveness of the early warning system; for example, the early warning effect of the early warning system can be regularly statistically and analytically analyzed, and early warning indicators and thresholds can be reasonably adjusted in order to improve the accuracy and sensitivity of the early warning system.

#### 3.3 Strengthening Internal Controls and Audits

(1) Internal control is the first line of defense for financial institutions to prevent risks. Strengthening the construction of internal control and improving the risk management process can improve the risk identification and management ability of financial institutions; internal control should cover all departments and business processes of financial institutions, including risk management, financial management, compliance management and other aspects. (2) Financial institutions should establish sound internal control systems and processes to ensure that all business operations comply with laws, regulations and internal rules. For example, they can formulate a strict risk management system to clarify the responsibilities and processes of risk management; establish a sound financial management system to ensure the authenticity and accuracy of financial information; and strengthen compliance management to ensure that business operations comply with regulatory requirements. (3) Strengthening internal audit is an important means to ensure the effectiveness of internal control. Financial institutions should establish a sound internal audit mechanism to regularly assess and audit the effectiveness of internal control; internal audit should cover all departments and business processes of financial institutions, including risk management, financial management, compliance management, etc.; through internal audit, problems can be found and corrected, internal control mechanisms can be improved, and the level of risk management can be enhanced. (4) In the process of strengthening internal control and auditing, financial institutions should focus on the following points: first, clarifying the objectives and principles of internal control and ensuring the consistency of internal control and risk management strategies; second, strengthening the implementation of the internal control system to ensure that all business operations comply with the requirements of internal control; third, strengthening the independence and objectivity of internal auditing to ensure that the results of the audits are true and accurate; fourth, the Timely rectification of the problems found by the audit, improving the internal control mechanism and raising the level of risk management.

### 3.4 Leveraging Financial Technology

(1) The application of big data technology in financial risk identification is mainly reflected in data mining and predictive analysis. Financial institutions can collect and analyze market data, enterprise financial data, transaction data and other information, and discover potential market risk, credit risk and liquidity risk through data mining technology; for example, by analyzing the abnormal fluctuations of market data, the seedling of market risk can be discovered in time; by analyzing the abnormal changes in the financial data of an enterprise, the profitability and solvency of an enterprise can be assessed, thus identifying the potential credit risk; the use of big data technology can also predict and analyze market trends, customer behavior, etc., providing decision support for risk management. (2) The application of artificial intelligence technology in financial risk identification is mainly reflected in intelligent risk control and automated monitoring. Financial institutions can build intelligent risk control models, conduct real-time monitoring and analysis of customers' credit status, transaction behavior and other real-time monitoring and analysis, and discover abnormal situations and potential risks in a timely manner; for example, the intelligent risk control model can monitor the transaction behavior of customers in real time, and discover abnormal transactions in a timely manner to provide early warnings; through the intelligent risk control model, it can also evaluate the credit status of customers and provide a basis for credit decision-making; the use of artificial intelligence technology can also realize automation and intelligence of risk management and improve the efficiency and accuracy of risk management. (3) The application of blockchain technology in financial risk identification is mainly reflected in improving data transparency and security. Financial institutions can use blockchain technology to realize the decentralized storage and transmission of data to ensure the authenticity and integrity of data; for example, all the information in the transaction process can be recorded through blockchain technology to prevent the data from being tampered with or deleted; real-time monitoring and tracing of the transaction process can also be realized through blockchain technology to prevent the occurrence of fraud and money laundering and other illegal acts<sup>[3]</sup>.

### 3.5 Fostering a Risk Culture

In the process of building a risk culture, financial institutions should focus on the following points: first. strengthen risk management training and education, and improve the risk awareness and risk management ability of all staff. Financial institutions can organize risk management training courses on a regular basis to teach employees risk management knowledge and skills; at the same time, they can also establish a risk management knowledge base, which is convenient for employees to learn and inquire at any time. Second, establish a sound risk management system and process to ensure that all business operations comply with laws, regulations and internal rules. Financial institutions should formulate strict risk management systems and processes, and clarify the responsibilities of risk management and operational processes; at the same time, they should also strengthen the implementation of the system to ensure that all business operations comply with risk management requirements. Third, strengthen internal communication and collaboration to form a common risk management concept and behavioral norms. Financial institutions should establish an effective internal communication mechanism to ensure that risk information can be transmitted in a timely manner between departments and employees; at the same time, they should also strengthen collaboration and cooperation between departments to jointly address risk challenges. Fourthly, incentive and constraint mechanisms should be established to encourage employees to actively participate in risk management activities and improve the enthusiasm and initiative of risk management. Financial institutions can establish a risk management performance appraisal system to link risk management results with employee compensation and promotion; at the same time, they can also set up a risk management incentive fund to recognize and reward employees with outstanding performance in risk management.

### Conclusion

In the vast and dynamic financial markets, accurately identifying and managing financial risks is paramount for financial institutions and regulators alike. By combining quantitative and qualitative analysis, establishing effective risk warning systems, strengthening internal controls and audits, embracing financial technology, and fostering a robust risk culture,

financial institutions can swiftly detect potential risks and build defensive measures. Regulatory bodies must also strengthen oversight, guiding institutions to improve risk management systems, thus ensuring financial security and economic development.

### References

- [1] Li Xiaoyue. How to Effectively Identify Financial Risks in Financial Management[J]. China Business Review, 2021(4): 71-72.
- [2] Xiao Yajie. How to Effectively Identify Financial Risks in Financial Management [J]. National Circulation Economy, 2020(21): 140-141.
- [3] Lian Anli. Analysis on How to Effectively Identify Financial Risks in Financial Management [J]. Wealth Management (Audit Edition), 2021(10): 85-86.