PIONEER
ACADEMIC PUBLISHING LIMITED

Journal of World Economy
ISSN 2709-3999
www.pioneerpublisher.com/jwe
Volume 4 Number 4 August 2025

Research on Optimizing Risk Management of Securities Institutions Under Financial Cycle Fluctuations

Xie Cheng[1]

[1] Postdoctoral Research Station, Southwest Securities Co., Ltd., China
Correspondence: Xie Cheng, Postdoctoral Research Station, Southwest Securities Co., Ltd., China.

doi:10.56397/JWE.2025.08.08

Abstract

Financial cycle fluctuations, as a significant feature of macroeconomic and financial market operations, exert profound impacts on the business models and risk profiles of securities institutions. During expansion phases, securities firms often benefit from rising asset prices and abundant liquidity, yet simultaneously accumulate potential risks of high leverage and concentration. In contraction phases, however, they may face multiple challenges such as asset value depreciation, frequent credit defaults, and tightened liquidity. This paper systematically analyzes the transmission mechanisms through which financial cycle fluctuations affect market risk, credit risk, and liquidity risk in securities institutions. It further proposes optimization pathways including the establishment of a dynamic risk appetite management system, the strengthening of full-cycle risk identification and measurement capabilities, the improvement of cross-cycle risk management coordination mechanisms, and the innovation of adaptive risk management tools. These strategies aim to provide both theoretical and practical guidance for enhancing securities institutions' capacity for steady operation and risk prevention across financial cycles.

Keywords: financial cycle, securities institutions, risk management, liquidity risk, stress testing

1. The Impact of Financial Cycle Fluctuations on Securities Institutions

1.1 Characteristics of Financial Cycle Fluctuations

Financial cycle fluctuations are manifested as alternating expansions and contractions of financial variables such as interest rates, asset prices, and credit scale. During the expansion phase, market interest rates decline, asset prices rise, credit expands, and investors' risk appetite increases. Conversely, during the contraction phase, interest rates rise, asset prices fall, credit tightens, and investors become more conservative.

1.2 Direct Impact on the Business of Securities Institutions

Taking proprietary trading as an example, in the expansion phase, asset prices generally rise, driving up the value of securities firms' portfolios of stocks, bonds, and derivatives, thereby significantly increasing proprietary trading income. For instance, in a bull market, if securities firms can accurately grasp market

trends and allocate stock assets reasonably, their proprietary trading returns may far exceed the market average. Meanwhile, during an interest rate downcycle, bond prices increase, enabling firms holding bonds to gain capital appreciation. However, during the contraction phase, falling asset prices expose portfolios to substantial loss risks. For example, during a financial crisis, a plunge in stock markets can cause the value of brokers' equity holdings to shrink dramatically, resulting in massive losses. Furthermore, tight market liquidity makes it difficult to liquidate assets, amplifying proprietary trading risks. Even relatively conservative bond allocations may suffer losses as rising credit risks lead to bond defaults.

1.3 Impact on the Risk Profile of Securities Institutions

Financial cycle fluctuations have a significant effect on the risk profile of securities institutions. During contraction phases, market risk is intensified as stock prices decline, bond yields fluctuate sharply, and exchange rates become unstable, all of which create great uncertainty for investment portfolios. For example, quantitative investment strategies that generate stable returns in calm markets may fail abruptly in rapidly contracting phases, resulting in huge losses. Credit risk also rises, as companies in bond underwriting may default due to poor economic conditions, and margin financing clients may be unable to repay loans after suffering losses, exposing brokers to further risk. In addition, liquidity risk becomes more pronounced. When panic spreads through the market, large-scale redemptions of asset management products can severely strain liquidity. At the same time, weak market activity makes it difficult to liquidate assets at reasonable prices, potentially creating cash flow shortages that, if unresolved, may trigger a chain reaction affecting the normal operations of securities institutions.

2. Optimization Strategies for Risk Management of Securities Institutions Based on Financial Cycles

2.1 Building a Dynamic Risk Appetite Management System

The first priority is to achieve precise identification of the financial cycle phase and adapt strategies accordingly. A financial cycle monitoring model should be established based on macroeconomic indicators and financial market data, allowing for accurate judgments about the cycle position. During boom periods, the proportion of high-risk assets should be reduced, the leverage ratio in proprietary trading should be strictly controlled to remain below regulatory ceilings, and exposure to volatile assets should be minimized. In periods of recession, liquidity reserves should be increased by raising the share of cash and cash equivalents in portfolios, high-risk businesses should be scaled back, and certain risky derivatives trading should be suspended. During neutral periods, a risk-neutral strategy should be maintained, optimizing the asset allocation structure by balancing equities, bonds, and cash to achieve an appropriate trade-off between risk and return.

A dynamic risk appetite adjustment mechanism can also be constructed to link risk preferences directly with financial cycles. Different risk limits can be set for different phases of the cycle. For example, during boom periods, the maximum exposure to any single industry or stock in proprietary trading can be lowered, and the concentration of pledged financing business should be reduced to avoid over-reliance on a single client or sector. Stress testing should be conducted to verify risk tolerance, with scenarios covering extreme events that may occur in various phases, such as sudden market collapses during booms or severe liquidity shortages during recessions. The results of these stress tests should guide timely adjustments to risk appetite and limits, ensuring that the institution's risk tolerance is aligned with both its capital strength and the risk profile of the financial cycle.

2.2 Strengthening Risk Identification and Measurement Across the Entire Cycle

To enhance early warning and monitoring capacity, cycle-sensitive risk models should be developed. By incorporating macroeconomic variables and market sentiment indicators, and applying machine learning algorithms, risk forecasting models can be built that dynamically capture shifts in the financial cycle. For instance, during early warning stages of recession, such models can analyze data from pledged financing businesses to identify rising default probabilities, allowing institutions to strengthen risk controls in advance, such as raising collateral requirements or demanding additional pledged assets.

At the same time, the risk measurement and stress testing system should be improved by designing differentiated scenarios for different phases of the cycle. Stress testing should not only evaluate the impact of single risk factors but also assess the interaction of multiple factors under extreme conditions. The evaluation results provide a data-driven basis for risk decision-making, such as adjusting portfolio structures or increasing capital reserves to improve resilience.

2.3 Optimizing Cross-Cycle Risk Management Coordination Mechanisms

Internal coordination must be reinforced through the establishment of a full-cycle risk management committee. The firm should hold regular meetings to formulate cross-cycle risk management strategies. During recessions, the committee can coordinate the disposal of high-risk assets to avoid uncoordinated actions that may trigger liquidity spirals. For example, when the proprietary trading department disposes of certain stock holdings, the asset management department can coordinate its activities in line with market conditions to prevent steep price declines caused by concentrated selling. To further improve efficiency, an internal information-sharing platform should be established, allowing departments to upload business updates and risk data in real time for timely cross-departmental monitoring and joint risk responses.

External coordination is also critical, requiring deeper cooperation with industry peers and regulators. Securities institutions should promote the establishment of risk information-sharing platforms with banks and insurance companies, strengthening monitoring of inter-industry risks during stable periods. Through such platforms, institutions can exchange information on client creditworthiness, trading activity, and other risk signals to detect hidden threats in a timely manner. During boom periods, securities firms should actively cooperate with regulators in implementing macro-prudential measures, such as complying with countercyclical capital buffer requirements, thereby increasing capital reserves and improving risk resilience. Maintaining close communication with regulators ensures that institutions remain informed of policy trends and can prepare responses in advance, raising the overall capacity of the industry to withstand systemic shocks.

2.4 Innovating Risk Management Tools Adaptive to the Financial Cycle

Derivative instruments can be applied to hedge cyclical risks. In boom phases, brokers holding large stock positions may sell stock index futures contracts so that gains on the futures can partly offset losses when the stock market declines. In recessions, interest rate swaps may be used to lock in financing costs and mitigate liquidity risks. If rising financing costs are expected, the broker can convert floating rates into fixed rates through swaps, thereby stabilizing funding costs. In addition, selling put option combinations during downturns allows brokers to purchase stocks at pre-agreed prices when exercised, thereby limiting losses in proprietary stock portfolios.

Digital technologies can also be leveraged to enhance risk management across cycles. Big data analytics and blockchain technology can be integrated to create real-time risk monitoring platforms. Big data enables the analysis of massive volumes of market, transaction, and client information to identify potential risks promptly, while blockchain technology ensures transparency and reliability with its decentralized and tamper-proof features. Through such platforms, institutions can dynamically track portfolio valuations and changes in counterparty credit ratings. For example, blockchain records of pledged financing can include collateral valuations, pledge terms, and repayment details, enabling all parties to access real-time information and reducing the risk of cross-cycle defaults through enhanced transparency.

3. Conclusion

The impacts of financial cycle fluctuations on securities institutions are comprehensive and profound, simultaneously offering profit opportunities while accumulating potential risks. To achieve stable development across cycles, securities institutions must reinforce dynamic risk appetite management, enhance cycle-sensitive risk identification, improve cross-departmental and cross-industry coordination mechanisms, and actively explore the application of financial derivatives and digital technologies. Only by doing so can they effectively mitigate market, credit, and liquidity risks, strengthen their resilience to cyclical

shocks, and ensure sustainable operations and sound development in a complex and volatile financial environment.

References

Li Wenhua. (2013). Analysis of the Innovation Development Path of Securities Companies. *Securities Market Herald*, (02), 43-47 + 53.

Lin Huihui. (2022). Research on the Optimization of Risk Management of S Securities Company under the Net Capital Regulatory System. Southwest University. DOI: 10.27684/d.cnki.gxndx.2022.002562.

Luo Qingzhong. (2004). Research on the Development and Innovation of Securities Companies in China. Tianjin University.

Yao Dengbao, Shi Teng, Liu Zhirong. (2021) Research on the State Transition Effect of Systemic Financial Risk in China from the Perspective of Financial Cycles. *Journal of Financial Economics, 36*(2), 15.