

Research on the Influence of Foreign Capital Introduction on Financial Risk in Banking Industry

Regression Analysis Based on Panel Data of 16 Banks

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ABSTRACT

Building a new open economic system at a higher level requires opening up to the outside world in a wider range, wider fields and deeper levels. The opening up of the financial industry is one of the key links. CBRC's cancellation of foreign ownership limit can effectively coordinate with the implementation of the financial industry's opening-up strategy, and has a very important incentive effect on the development of China's banking industry. But at the same time, the financial risks it may bring can't be ignored. By selecting panel data of 16 banks from 2016 to 2021, a regression model is established to analyze the impact of foreign capital introduction on financial risks of banking institutions. It is found that the relationship between foreign capital introduction and risk of commercial banks presents nonlinear curve characteristics and there is a critical point. Based on this, the relevant policy suggestions are as follows. Firstly, when the restriction of introducing foreign capital is relaxed, the proportion of foreign ownership should be set as the maximum limit. Secondly, the host country should firmly grasp the actual control of the financial industry. Thirdly, the quality of foreign investment should be strictly controlled. Fourthly, the proportion of foreign investment should be adjusted accordingly.

Keywords: Banking industry, Introduction of foreign capital, Financial risk, Financial security.

1. INTRODUCTION

Since China's accession to the World Trade Organization (WTO) in 2001, China has gradually lifted the restrictions on foreign investment in Chinese financial institutions, and Chinese commercial banks have begun to introduce foreign strategic investors. In recent years, the opening up of China's financial industry is accelerating. Especially on April 10, 2018, Xi Jinping in Boao Forum for Asia, chairman of the 2018 annual meeting, announced that China's decision to take a series of major new steps to open up to the outside world, including ensuring that limits on foreign ownership in banking, securities and insurance are eased. Therefore, the speed of opening up of China's banking industry and other financial sectors has significantly increased. Since then, to ensure the smooth implementation of these major measures, China's financial regulators have launched a series of opening-up policies, including

15 opening-up measures for the banking and insurance industries announced by the CBRC in 2018, and a total of 19 opening-up measures in 2019. The measures call for the lifting of the cap on the shareholding of a single Chinese bank and a single foreign bank in a Chinese commercial bank, under the principle of equal ownership by both domestic and foreign banks. In this context, the scale of foreign investment introduced into China's banking industry keeps expanding. By the end of 2020, a total of 27 Chinese banks contain foreign ownership.

The China's "14th Five-Year Plan" clearly points out that "adhere to the implementation of a wider range, wider areas, deeper opening-up" and "build a new system of higher level of open economy", which fully shows that China's banking industry will continue to accelerate the pace of opening-up in the future. The introduction of foreign capital in the banking industry is an important part of the opening up of the banking

industry. The introduction of foreign capital in China's banking industry is conducive to the formation of a new development pattern dominated by the "domestic great cycle". In particular, with the rapid recovery of China's economy from the impact of COVID-19, the financing needs of Chinese enterprises will further expand, and the appropriate introduction of foreign investment in the banking industry will undoubtedly have a positive impact on the development of the banking industry. Studies have shown that foreign equity participation in Chinese commercial banks is conducive to optimizing the ownership structure of Chinese banks, improving capital adequacy ratio and operating efficiency. Under the background of financial globalization and low level of financial opening in China, proper introduction of foreign capital is helpful to improve financial efficiency and maintain financial stability. But at the same time, government should see from the banking opening experience of some emerging countries. If the introduction of foreign capital into the banking industry is not restricted, it may lead to foreign capital seize control of the bank, thus threatening the national financial security.

From the theoretical perspective, on the one hand, the introduction of foreign capital in the banking industry can enhance the macro stability of the banking industry by improving the ownership structure and improving the operation efficiency. On the other hand, it may lead to the loss of state control over the bank, thus threatening the national financial security. Therefore, the key issue to study the introduction of foreign capital in the banking industry is to recognize the dynamic changes of these two aspects, combined with the opening stage of China's banking industry, on the premise of resolutely maintaining the bottom line of national financial security, theoretically explain whether the introduction of foreign capital in the banking industry should be further relaxed. Therefore, the theoretical significance of this paper's research on the influence of foreign investment in banking on China's financial security is to build a research framework of foreign investment in banking and China's financial security, and expand the theoretical research on the "introduction" and financial security of the financial industry based on modern finance of socialism with Chinese characteristics in the new era. Finally, this paper discusses the proportion of foreign investment in banking and its influence on financial security. The practical significance of the study lies in the comprehensive analysis of the impact of opening to

the outside world on financial risks from the two dimensions of institutions and markets. This provides experience support and decision-making reference for China's financial industry to keep the bottom line of avoiding systemic financial risks in the process of opening up, especially the introduction of foreign investment. That is, on the basis of ensuring the state control of the banking industry, the proportion of foreign ownership in the banking industry should be appropriately relaxed to improve financial efficiency, maintain financial stability and ensure financial security.

2. LITERATURE REVIEW

Some scholars believe that the introduction of foreign capital in the banking industry may have positive effects. These views can be roughly divided into the following five aspects. First, the increase of foreign ownership can improve the capital adequacy ratio, asset quality and liquidity of the attracting bank.(Wang Shuguang, Zhang Yixin, 2018) Second, the introduction of foreign capital can optimize the equity structure of domestic banks and improve their capital operation ability to a certain extent.(Liu Yuanliang, Ge Hejun, 2011;Zeng Lingling, Zhang Zhe, 2018) Third, the introduction of foreign capital can improve the incentive and constraint mechanism of domestic banks, improve the governance level and innovation capacity.(Li Chunran, 2020) Fourthly, the introduction of foreign capital can improve the operation efficiency of domestic banks.(Bao Xuebo, Pu Yong-jian, 2010;Dong Yan, Cao Zhipeng, 2018) Fifth, according to different types of commercial banks, foreign ownership can have different degrees of positive impact on total factor productivity of investment banks.(An Congmei, 2019)

However, some scholars believe that there are limitations in introducing foreign capital into the banking industry. Liu Jiasong, Zhang Bo and Luo Qi (2019) believe that the introduction of foreign capital has little effect on the improvement of the governance performance of the foreign capital banks. Zhang Guoquan (2019) believes that foreign equity participation has a significant negative impact on the performance of banks in host countries. Zhang Bo et al. (2018) believe that foreign equity participation strengthens the restraining effect of equity balance on banks' risk taking.

Some scholars believe that the introduction of foreign capital in the banking industry will threaten

the host country's control over the banking industry to a certain extent, and discuss the potential risks of national financial security caused by it. Ma Li et al. (2020), based on the micro data of 392 commercial banks in China, tested the impact of "bringing in" and "going out" on risk taking behavior of commercial banks. For small and medium-sized commercial banks, excessive foreign ownership ratio will bring risks. For large commercial banks, there is a threshold range for the scale of overseas investment, within which risks may rise. Shu Xiangchu (2019) conducted empirical analysis on the basis of theoretical analysis and investigation of the current situation, and the results showed that the participation of foreign shareholders was positively correlated with risk taking. Some scholars even believe that the introduction of foreign capital in the banking industry not only cannot play a positive role as expected, but also may lead to the loss of bank control and endanger the national financial security. (Zhao Liang, 2018) On the one hand, the increase of foreign ownership will reduce the profit efficiency of Chinese banks (Shi Jianping, 2005); On the other hand, foreign investors' equity changes, transfer of bad debts and arbitrage may bring uncertainty to bank operations and increase financial risks. (Cao Huan, 2013)

Through systematic review of literature on foreign equity participation in banking industry, there are gaps and deficiencies in the following three aspects. First of all, the consistency of empirical research results on the impact of foreign capital introduction on bank efficiency is not high, which indicates that different sample countries, different time periods, and different measurement index construction will have an impact on the research results. Therefore, there is no universally applicable conclusion about the influence of foreign capital introduction on bank efficiency. The difference of economic status and development stage among countries determines that different countries should adopt different attitudes towards the introduction of foreign capital in banking in different development stages. Neither should the Chinese government blindly expand the foreign ownership of banking without restrictions, nor should government deny the introduction of foreign capital. Therefore, the research on this issue should be based on the international comparison, starting from the actual economic status of China make clear the current stage of China and get the most suitable foreign investment introduction plan for country. Secondly, although existing studies have comprehensively discussed the effect of the

introduction of foreign capital in the banking industry on the improvement of banking efficiency and the effect of risk accumulation, these two aspects have always been separated from each other and have not been combined for dynamic research. In reality, the introduction of foreign capital in banking will have both effects on the host country's financial system. Therefore, it is very important to choose the most appropriate scale and strategy of introducing foreign capital into the banking industry based on the actual situation of the country. In addition, most of these existing studies focus on simple qualitative discussions, there are few systematic studies on actual typical cases, and the combination of theoretical and empirical studies is even rarer. Therefore, empirical research on such issues is more convincing.

3. THEORETICAL HYPOTHESIS

Introduction of foreign capital into the banking industry may lead to the transmission mechanism of financial risks as follows: for the host country banks, foreign shareholder investment preferences vary, which does not exclude the financial speculators, they pursue short-term benefits rather than the long-term development of the host country bank and steady gains. Therefore, these foreign shareholders may have higher risk appetite and pursue higher risk investment activities. Due to differences in national development, ideology and management philosophy, foreign shareholders' participation in the daily operation and management of banks in the host country may lead to failure of the operation philosophy and decision-making mechanism in accordance with the actual development of the host country. There may even be friction due to differences of opinion, which is detrimental to the development of banks in host countries. Combined with the most foreign shareholder for capital is relatively abundant in developed countries, and the host country is very may be relatively weak strength of developing countries, this may make investment shareholders have expectation gap, thus resulting in a decline in foreign shareholders to participate in the quality of the internationalization strategy, eventually lead to foreign ownership on the performance of the host country banking innovation promoting effect weakens.

Banks to introduce foreign investment may reduce financial risk conduction mechanism is as follows: for the host country bank, foreign capital can provide additional financing, reduce the risk of

write-downs. Unlike domestic investors, foreign shareholders typically hold diversified portfolios. It has a stronger ability to bear the risk of project failure, which is beneficial to disperse the financial risk borne by the host country banks. At the same time, the knowledge spillover effect brought by foreign shareholders is not only conducive to the improvement of operation and management concept, efficiency and technology of host banks, but also conducive to the improvement of capital allocation efficiency. This is conducive to the development of host banks and to reducing their operational risks. In addition, foreign shareholders may bring advanced technology and scarce innovation resources to host banks, or help host banks build bridges and channels of communication with advanced technology owners through their global international relationship network. Through this technology spillover effect, foreign shareholders will effectively promote the improvement of host country banks' innovation performance, thus reducing financial risks.

According to the above analysis, the changes of financial risks in the process of introducing foreign capital into the banking industry are uncertain. Based on this, the author proposes the following research hypothesis:

H1a: There is a positive correlation between the introduction of foreign capital into the banking industry and financial risks. That is, the higher the degree of introduction of foreign capital into the banking industry, the greater the financial risks will be.

H1b: There is a negative correlation between the introduction of foreign capital in the banking industry and financial risk. That is, the higher the degree of foreign capital in the banking industry, the lower the financial risk.

H1c: There is a "degree" in the introduction of foreign capital in the banking industry. On both sides of the critical point of "degree", the influence of foreign capital introduction in the banking industry on financial risks is heterogeneous.[1]

4. EMPIRICAL MODEL AND VARIABLE SELECTION

4.1 Research Ideas and Empirical Model

The influence of banking opening to the outside world on banking institutional risk: When analyzing the impact of the opening up of the banking industry on the risk of banking institutions

from the institutional dimension, daily data with high frequency are adopted, which may lead to a lag in the impact of the opening up of the banking industry on the risk of banking institutions. In this regard, the explanatory variables in this paper are all delayed by one stage. On the one hand, endogeneity caused by bidirectional causality in the model can be avoided. On the other hand, the asynchronous relationship between the opening up of the banking industry and the risks of banking institutions can be captured.

First, it tests whether there is a linear relationship between the opening of banking industry and the risk of banking institutions. Based on the research of Ma Li and He Yun (2021) [2], this paper analyzes whether there is a u-shaped curve relationship between the opening up of the banking industry and the risk of securities institutions without considering the impact of the opening up of the banking industry on the entire financial market. The panel model is set as follows:

$$\Delta \text{Covar} = \alpha + \beta_1 \text{Foreign} + \beta_2 \text{Foreign}^2_{t-1} + \sum_j \gamma_j \text{Control}_{ijt-1} + \delta_i + \varepsilon_{it}$$

Where, i represents the individual, t represents the time, Control is the vector set of control variables, that is, Control=[Roe, VaR], the corresponding j values are 1 and 2 respectively, α is the intercept term, β_i is the core parameter to be estimated, δ_i is the individual effect, and ε_{it} is the random disturbance term.

4.2 Risk Measurement and Variable Determination of Securities Institutions

4.2.1 Risk Measurement

According to the return rate time series of each bank and the banking sector, the state variable is introduced. The return rate is regarded as a function of the state variable, and the quantile regression model is used to obtain the VaR and CoVaR series of the bank. Considering the lag of risk transmission, the state variable also lags one stage behind.

According to the effectiveness comparison and application of CoVaR calculation methods based on the correlation characteristics of risk spillovers by Wang Zhouwei et al. (2014) [3] and the calculation methods provided by Deng Zhougui (2017) [4] based on static and dynamic CoVaR methods in the institute of systemic risk in banks:

$$X_t^i = \alpha_q^i + \gamma_q^i M_{t-1} + \varepsilon_q^i$$

$$X_t^{system|i} = \alpha_q^{system|i} + \beta_q^{system|i} X_t^i + \gamma_q^{system|i} M_{t-1} + \varepsilon_q^{system|i}$$

VaR and CoVaR can be calculated by using the parameter estimation of the above quantile regression equation:

$$VaR_{q,t}^i = \hat{\alpha}_q^i + \hat{\gamma}_q^i M_{t-1}$$

$$CoVaR_{q,i}^{system|i} = \hat{\alpha}_q^{system|i} + \hat{\beta}_q^{system|i} VaR_{q,t}^i + \hat{\gamma}_q^{system|i} M_{t-1}$$

There are many methods to measure CoVaR. In order to better reflect the dynamic changes of systemic risk of banking institutions, this paper adopts quantile regression method to measure. Among them, the return rate of the securities

industry is shenwan brokerage secondary industry index calculated. For q, this paper calculates the extreme risk in three cases, 5%, 1% and 0.5% respectively[5][6], to reflect the risk spillover to the banking industry when extreme risk or more extreme risk occurs in banking institutions. Daily data are used to measure CoVaR data.

4.2.2 State Variables

The data comes from Choice database, and the calculation method of state variables is shown in "Table 1"[7]:

Table 1. Calculation method of state variables

| coding | variable | describe |
|--------|-------------------|---|
| M1 | Market volatility | The conditional variance of CSI 300 index return series estimated by GARCH (1,1) model |
| M2 | Liquidity spread | 3 month SHIBOR rate — 3 month Treasury bond yield to maturity |
| M3 | Term spread | Yield to maturity on the 10-year Treasury bond — yield to maturity on the 1-month Treasury bond |
| M4 | Credit spreads | Yield to maturity of 1-year ordinary bonds of AAA commercial banks - Yield to maturity of 1-year Treasury bonds |

4.2.3 Foreign Equity Participation

Measure the "Introduction" of the securities industry from the institutional dimension. "Introduction" mainly refers to the opening of overseas institutions. This paper mainly studies the foreign investment in Chinese banking institutions. Based on this, this paper uses the proportion of foreign shares to represent the level of "introduction" of banking institutions, and specifically uses the proportion of foreign shares among the top ten shareholders to measure, and the symbol is "F".

4.2.4 Control Variables

Control variable selection in this paper, the banking institutions: combination Zhang Xiaoming and Li Zeguang (2017) [8] study, we joined the securities assets and net assets yield as control variable. On the one hand, large securities institutions are more systemically important, which may exacerbate risk spillover, hedge systemic financial risks and act as financial stabilizers. According to Bai Xuemei and Shi Dalong (2014)[9], VaR added to securities institutions represents the market risk of securities institutions. The greater its absolute value is, the higher the VaR of securities institutions is, and the greater the risk spillover may be to the securities industry.

4.2.5 Data Sources and Descriptive Statistics

Data of some state variables in earlier periods cannot be obtained, so the sample period of risk analysis of banking institutions is selected from January 2016 to July 2021. The source data of control variables in securities institutions came from Choice data. After screening, sample data of 16 banking institutions were finally collected, with a total of 1620 valid samples. The descriptive statistical results of variables are shown in "Table 2" and "Table 3" below. As can be seen from "Table 2" below, the return rates of all banks and financial systems do not follow normal distribution. The yield skew of most banks is to the left, and the kurtosis value is greater than 3. The tail of return rates of all banks is thicker than that of normal distribution, and the distribution shows the characteristics of sharp peak and thick tail.

Table 2. Descriptive statistical results

| | variable | Mean | Skewness | Kurtosis | Jarque-Bera |
|---|----------|-----------|-----------|----------|-------------|
| Shen Wan Bank | S | 0.000704 | 0.258959 | 7.790113 | 1310.591 |
| Ping An Bank | V1 | 0.04564 | 0.130971 | 5.807043 | 448.7365 |
| Shanghai Pudong Development Bank | V2 | -0.020708 | 0.332522 | 11.40245 | 4010.993 |
| Minsheng Bank | V3 | -0.039837 | -0.092348 | 12.34305 | 4930.316 |
| China Merchants Bank | V4 | 0.078713 | 0.237662 | 5.173183 | 279.3929 |
| HuaXia Bank | V5 | -0.036879 | 0.025983 | 10.47245 | 3152.641 |
| Bank Of China | V6 | -0.007744 | -0.274669 | 11.05278 | 3678.202 |
| Industrial and Commercial Bank of China | V7 | 0.013169 | 0.348194 | 8.957631 | 2031.276 |
| Industrial Bank | V8 | 0.013316 | 0.292506 | 7.612466 | 1220.464 |
| China Citic bank | V9 | -0.024355 | 0.228949 | 10.68541 | 3346.583 |
| Bank of Communications | V10 | -0.016262 | -0.684964 | 12.70051 | 5418.68 |
| Bank of Nanjing | V11 | 0.025308 | -0.013163 | 6.83302 | 829.5276 |
| Bank of Ningbo | V12 | 0.079141 | 0.148375 | 4.75648 | 179.1582 |
| Bank of Beijing | V13 | -0.029178 | -0.12868 | 11.64453 | 4222.749 |
| Construction Bank | V14 | 0.01336 | 0.146538 | 9.153186 | 2142.458 |
| Agricultural Bank | V15 | 0.007265 | -0.031188 | 11.85653 | 4428.704 |
| Everbright Bank | V16 | -0.006716 | 0.575035 | 9.243813 | 2275.715 |

Table 3. Descriptive statistical results

| | N | The mean | The standard deviation | The median | The minimum | The maximum | p25 | p75 |
|----------------|------|--------------|------------------------|--------------|--------------|--------------|--------------|--------------|
| F | 1620 | 0.051631929 | 0.040739494 | 0.025 | 0 | 0.109 | 0.022 | 0.101 |
| F ² | 1620 | 0.004325562 | 0.004583692 | 0.000625 | 0 | 0.011881 | 0.000484 | 0.010201 |
| CoVaR (5%) | 1620 | -2.330629436 | 0.241095313 | -2.281684813 | -4.57774922 | -1.226300563 | -2.399441693 | -2.204276917 |
| CoVaR (1%) | 1620 | -4.314995103 | 0.687840656 | -4.248424284 | -15.77590832 | -4.365767258 | -4.541498307 | -3.927891454 |
| CoVaR (0.5%) | 1620 | -5.27169767 | 0.804271382 | -5.217488367 | -17.09585404 | -0.46299684 | -5.596025951 | -4.79803606 |
| Roe | 1620 | 0.047501592 | 1.963723513 | 0 | -10.50745563 | 9.562910821 | -0.929374719 | 0.966774902 |
| VaR (5%) | 1620 | -2.946749918 | 0.321971989 | -2.894198832 | -5.934183815 | -1.51475547 | -3.042733005 | -2.770208475 |
| VaR (1%) | 1620 | -3.751955525 | 1.089841166 | -3.531014109 | -17.84152453 | 0.659632072 | -4.464889433 | -3.036812427 |
| VaR (0.5%) | | -4.524993868 | 1.052479074 | -4.298408066 | -17.16628337 | 0.233372335 | -5.155651803 | -3.802574036 |
| m1 | 1620 | 0.000380969 | 1.102894718 | 0.002451963 | -8.21 | 5.78 | -0.33 | 0.39 |
| m2 | 1620 | 0.666709831 | 0.938153066 | 0.7576 | -8.063696199 | 5.966958409 | 0.529425 | 1.180446256 |
| m3 | 1620 | 0.74757378 | 1.135401863 | 0.84555 | -7.164460814 | 7.646725807 | 0.628637531 | 1.15955 |
| m4 | 1620 | 0.642757326 | 0.688632404 | 0.6348 | -7.934592065 | 7.057319735 | 0.455125 | 1.0671 |

5. RESULTS OF EMPIRICAL ANALYSIS (THE NONLINEAR RELATIONSHIP BETWEEN FOREIGN OWNERSHIP AND BANK RISK AND ITS CRITICAL POINT)

This paper explores the influence of foreign capital introduction on the control rights of China's banking industry and draws conclusions through empirical analysis of the data of China's foreign capital introduction banks from 2016 to 2021. "Table 4" shows the test results of the influence of foreign ownership on the control right of China's banking industry. When the risk of banking institutions is at 5%, 1% and 0.5%, the quadratic term regression coefficient and the primary term regression coefficient are significant and pass the significance test. When the risk of banking institutions is 5%, the quadratic term regression coefficient of foreign ownership ratio in item (2) is -43.390. It can be seen that there is an inverted u-shaped curve relationship between the proportion of foreign ownership and extreme risk spillover of banking institutions at 5% quantile. By taking the first derivative, the critical point is 9.96%. Since the CoVaR of the banking risk measure is usually negative, the smaller the value, the greater the systemic risk [10]. "Figure 1" roughly fits the inverted "U" curve. Therefore, when the proportion of foreign ownership in the banking sector is lower than 9.96%, the larger the proportion of foreign

ownership is, the more conducive it is to reduce the extreme risk spill over of the 5% quantile of banking institutions. However, when the proportion of foreign ownership exceeds 9.96%, the proportion of foreign ownership may increase the extreme risk spill over of 5% quantile of securities institutions. That is to say, when the proportion of foreign ownership is excessive, extreme risk spillovers of 5% quantile of banking institutions may increase significantly. When the risk of banking institutions is at 1% quantile, the quadratic term regression coefficient of foreign ownership ratio in item(4) is -69.179. It can be seen that the relationship between foreign ownership ratio and risk spillover of 1% fractional points of banking institutions also presents an inverted u-shaped curve. Similar to the above, the critical point is 9.67% by taking the derivative. It indicates that when the foreign ownership ratio is lower than 9.67%, the increase of foreign ownership is helpful to reduce the extreme risk spillover of 1% fractional points of banking institutions. When foreign ownership exceeds 9.67%, foreign equity participation may increase the extreme risk spillover of 1% fractional points of securities institutions. It also indicates that foreign ownership should not be excessive, otherwise extreme risk spillover of 1% fractional points of banking institutions will increase significantly. Similarly, when the risk of banking institutions is 0.5%, the relationship between foreign ownership ratio and risk spillover of banking institutions also presents an inverted u-shaped curve, and the degree of the number of foreign ownership is 8.89%.

Table 4. Empirical test results

| variable | CoVaR(5%) | | CoVaR(1%) | | CoVaR(0.5%) | |
|-------------|-------------------|--------------------|-------------------|--------------------|-------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| F_{t-1} | -0.452 (0.054) | 4.323 (0.253) | -0.917 (0.096) | 6.694 (0.457) | -2.201 (0.122) | 9.293 (0.578) |
| F_{t-1}^2 | | -43.390 (2.246) | | -69.179 (4.061) | | -104.583 (5.140) |
| Roe | 0.009 (0.002) | 0.008 (0.002) | 0.016 (0.003) | 0.015 (0.003) | 0.017 (0.004) | 0.016 (0.004) |
| VaR | 0.417 (0.003) | 0.414 (0.003) | 0.340 (0.004) | 0.337 (0.004) | 0.300 (0.005) | 0.292 (0.005) |

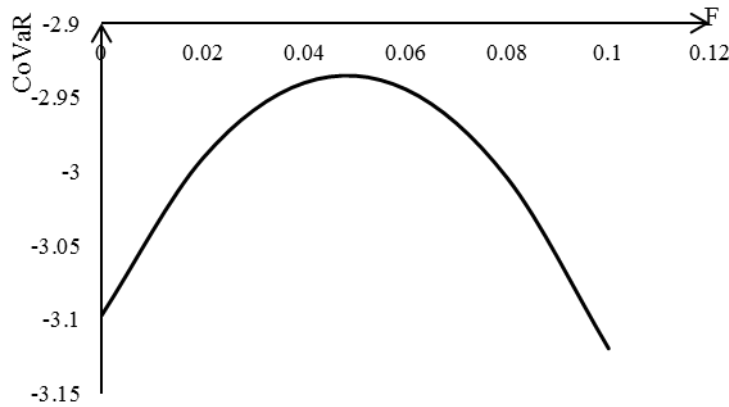


Figure 1 Fitting relationship between foreign ownership ratio and risk of banking institutions.

6. CONCLUSIONS AND POLICY RECOMMENDATIONS

6.1 Conclusions

In fact, the introduction of foreign capital has both advantages and disadvantages on China's banking industry. On the one hand, it is beneficial to optimize the ownership structure of Chinese banks, improve the level of management and operation, promote financial innovation and force financial supervision. On the other hand, it may increase China's financial risks.

Through empirical analysis, this paper finds that there is an "inverted U-shaped non-linear relationship" between the introduction of foreign capital in the banking industry and the stability of the country's macro market. There is heterogeneity in the degree of financial risk brought by foreign capital introduction to the banking industry when it does not reach the extreme point. Based on this, the author puts forward the following policy recommendations.

6.2 Policy Recommendations

6.2.1 The Banking Sector Cannot Be Separated from State Control

As a modern socialist country, it is essential for China to control the banking industry. In particular, under the premise of ensuring China's financial security and the introduction of foreign capital to enhance the vitality of banks, the state's control of the banking industry can't be relaxed. China can improve relevant laws and regulations, strengthen the role of institutionalization in financial opening,

and pay attention to the legal supervision of banks with equity participation.

6.2.2 Relax Restrictions on the Introduction of Foreign Investment and Setting a Ceiling on Foreign Ownership

Today, the introduction of foreign capital has a positive impact on the development of China's banking industry. It is particularly important to expand the proportion of foreign ownership. Relaxing the restrictions on the introduction of foreign capital is conducive to expanding the amount of foreign investment. However, the large amount of foreign investment is still not conducive to the control of the host country's banking industry. Therefore, the highest proportion of foreign ownership should be set according to China's development stage and the development of China's banking industry, so as to maintain China's financial security and consolidate the actual control rights

6.2.3 Taking Physical Control

From the point of view of the host country, the purpose of introducing foreign capital is to obtain its possible positive influence on the whole financial industry and even the whole economy. However, capital is profit-seeking, so the essential purpose of foreign capital entering other countries is to obtain maximum economic benefits. The purpose of foreign investment in domestic banks is to make money. Although foreign financial institutions' investing in Chinese banks shows a "win-win" prospect, there are still some problems worthy of great attention of Chinese regulatory authorities and domestic banking industry. For

example, the loss of control rights of banks, the damage of financial hegemony of Chinese commercial banks in economic interests, the aggravation of regional imbalance in the development of China's financial industry, the determination of equity transfer price of banks and the loss of high-quality customers of Chinese banks and other problems. At present, the proportion of foreign banks' shares is small, but the motives and intentions of foreign shareholders are not completely consistent with the starting point of the Chinese government's introduction of strategic investors. Therefore, there exists the possibility of potential threat to China's financial security objectively. The government must not ignore the possibility that it may impact or threaten China's financial security on the macro level. So, it is necessary to fully consider the possible adverse effects of foreign equity participation, not only to see that foreign equity participation can promote the reform of domestic banks and other positive effects, the Chinese government must take necessary measures to ensure national financial security, firmly grasp the actual control of China's banking industry.

6.2.4 Strictly Controlling the Quality of Foreign Investment and Adjusting the Proportion of Foreign Investment

Against the background of the opening up of China's financial industry, the management should control the pace of foreign equity participation and strictly check the foreign qualified investors. The entry of foreign capital increases the instability of the financial market, so to grasp the entry of foreign qualified investors. Foreign qualified investors should have at least the following conditions: financial institutions have strong capital, excellent international reputation, strong external financing ability, and advanced management mechanism. Compared with Chinese banks, it has complementary competitive advantages with Chinese banks. In the introduction of foreign capital, it is necessary to evaluate and inspect the capital strength, asset scale and reputation degree of overseas financial institutions, and strictly check the pass before introducing foreign capital.

AUTHORS' CONTRIBUTIONS

Han Qiao constructed the framework of the paper and designed the experiment, Wanying Zhang analyzed the data and participated in the

compilation, and Yanan Liu revised and edited the paper.

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