MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
V.N. KARAZIN KHARKIV NATIONAL UNIVERSITY

Karazin Banking Institute

Department: **Banking Business and Financial Technologies**

Specialty: **072 Finance, banking and insurance**

Educational program: **Financial technologies and banking management**

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QUALIFYING MASTER'S THESIS

on the topic:

THE BANKING SYSTEM AS A STRUCTURAL COMPONENT OF THE ECONOMY

submitted by the applicant of higher education
Zhou Jin

The qualifying master's thesis was accepted for defense by the decision of the Department of Banking Business and Financial Technologies

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MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
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Faculty	EDUCATION AND RESEARCH INSTITUTE “KARAZIN BANKING UNIVERSITY”
Department	Banking Business and Financial Technologies
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APPROVED
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ASSIGNMENT
FOR A QUALIFYING MASTER’S THESIS
assigned to
Zhou Jin

1. The topic of the thesis: "ORGANIZATION OF BANKING ACTIVITY IN MODERN CONDITIONS".
Scientific advisor - Doctor of Economics, Professor Nataliia Pohorelenko

approved by the order of the University dated "17" September 2024, No. 4601-3k/1025
2. Deadline for submission of thesis by the student 18.11.2024
3. List of questions to be researched:
In chapter 1: to determine the relationship between the banking system and the real economy; to analyze the mechanism of the banking system's contribution to the development of the real economy; to determine the type of the Chinese banking system and its contribution to the development of the real economy.
In chapter 2: to investigate the financial activities of the Agricultural Bank of China; to investigate the relationship between the structure of the banking system and the structure of the real economy; to investigate the changes in the development of the banking system caused by the development of the real economy.
In chapter 3: to initial conditions and paths for the development of the Chinese banking system and the real economy; to present the main results of research on the relationship between the banking system and the real sector of the economy; to propose directions for the coordinated development of the banking system and the real economy of China

4. Plan of qualifying master's thesis

№	Name of work stages
1	Selection of the topic
2	Approval of the plan and tasks of thesis
3	Implementation of thesis
4	Submission of thesis to the department to check for the presence of borrowings from other documents
5	Completion of the admission procedure for the protection of thesis
6	Defence of thesis

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ABSTRACT
ON QUALIFICATION MASTER'S WORK
" THE BANKING SYSTEM
AS A STRUCTURAL COMPONENT OF THE ECONOMY" OF
ZHOU JIN

Qualification Master's Work contains 110 pages, 3 tables, 3 figures, 100 references.

The object of the research is the banking system of China.

Subject of research is modern approaches and methods for diagnosing the stability of the banking system, with an emphasis on macroeconomic and prudential indicators.

Purpose of qualification master's work is to provide a comprehensive theoretical generalization and systematization of the existing approaches to defining the stability of the banking system as a structural component of the economy.

Tasks of qualification master's work are:

- to determine the relationship between the banking system and the real economy;
- to analyze the mechanism of the banking system's contribution to the development of the real economy;
- to determine the type of the Chinese banking system and its contribution to the development of the real economy;
- to investigate the financial activities of the Agricultural Bank of China;
- investigate the relationship between the structure of the banking system and the structure of the real economy;
- to investigate the changes in the development of the banking system caused by the development of the real economy;
- to initial conditions and paths for the development of the Chinese banking system and the real economy;
- to present the main results of research on the relationship between the banking system and the real sector of the economy;
- to propose directions for the coordinated development of the banking system and the real economy of China

According to results of the research, hold significant practical implications for enhancing the stability of China's banking system. The recommendations aim to improve the existing regulatory framework and monitoring practices, aligning them more closely with international best practices and standards, particularly those promoted by organizations such as the Basel Committee on Banking Supervision.

The obtained results can be used to ongoing efforts to modernize China’s banking sector and improve its capacity to manage both domestic and global financial risks. The methodologies and recommendations proposed are designed to support policymakers, financial regulators, and banking institutions in strengthening the long-term stability and sustainability of the financial system in China.

KEY WORDS: BANKING SYSTEM; THE REAL ECONOMY; ECONOMIC DEVELOPMENT; INTERACTIVE RELATIONSHIP.

CONTENT

INTRODUCTION

In a rapidly changing economy in China, it is imperative for banks and national regulators to make sure and accurate assessments of the banking system's financial stability. The stability of the banking system is crucial not only to the effective operation of the financial system, but also to the country's wider economy. Over the years, a variety of approaches and methods have been developed to assess the banking system's financial stability, with varying standards, indicators, and norms. Although there are broad approaches, many of them do not always give an overall assessment of the overall stability of the banking system. This limitation highlights the importance and need for improvements in diagnostic techniques and the development of a more comprehensive framework for assessing the stability of the banking system, which is the core of this paper.

The banking system is an important structural part of the economy, affecting economic growth, investment, and financial intermediation. In China, this role is especially important given the lack of capital markets, which have a key role to play in mobilizing resources to develop the economy and to finance the real economy. It is therefore necessary to develop a modern approach to diagnosing the stability of the banking system, using both macro- and prudential indicators, in order to maintain the resilience of the system in the event of financial shocks. This is not only a matter of theory, but also of great practical significance to the stability of the Chinese financial sector and its capacity to sustain long-term economic growth.

The aim of this study is to develop an integrated framework for the diagnosis of the stability of the Chinese banking system through the integration of modern methods and methods. In particular, the purpose of this study is to analyse and systematize the existing theories about the stability of the banking system, and to put forward a new approach based on macro and prudential indicators. This includes looking at the stability of individual banks and the resilience of the wider banking system. In addition, the study aims to examine possible improvements in the methodologies used for the assessment of financial stability, with emphasis on their practical applicability and relevance in the context of the present Chinese economy.

In order to achieve this objective, this research outlines several specific tasks:

- to determine the relationship between the banking system and the real economy;

- to analyze the mechanism of the banking system's contribution to the development of the real economy;

- to determine the type of the Chinese banking system and its contribution to the development of the real economy;

- to investigate the financial activities of the Agricultural Bank of China;

- investigate the relationship between the structure of the banking system and the structure of the real economy;

- to investigate the changes in the development of the banking system caused by the development of the real economy;

- to initial conditions and paths for the development of the Chinese banking system and the real economy;

- to present the main results of research on the relationship between the banking system and the real sector of the economy;

- to propose directions for the coordinated development of the banking system and the real economy of China

This research focuses on the Chinese banking system, which is a key part of the nation's financial structure. The topic of this study is the modern methods and methods for diagnosing the stability of the banking system based on macro-economic and prudential indicators. The goal of this study is to bridge the gap between existing theoretical frameworks and practical applications in the real world of the Chinese banking system.

This paper uses a combination of theoretical generalization and mathematical modeling. Based on the theory summary, we study and systematize the existing approaches to the stability of the banking system, with particular emphasis on the concept and structure of financial stability. In addition, a systematic approach is applied to the study of organizational and economic provisions, which enables an overall evaluation of the stability factors influencing China's banking system. In addition to the qualitative analysis, the paper uses mathematical models to calculate and interpret the key indicators of financial stability, such as capital adequacy, liquidity, and bad loans. Such methodologies are crucial to ensure reliable and evidence-based assessment of the banking sector's financial soundness.

The new scientific innovation is the introduction of a new comprehensive framework for the diagnosis of the stability of the banking system. This framework includes both macro-economic and prudential indicators, which allows for a more comprehensive assessment of individual banks as well as of the wider banking system. Additionally, the study introduces a new approach to the assessment of the financial stability of China's banks, including the use of mathematical modeling techniques to quantify and interpret key stability indicators. This framework is distinguished from existing approaches in that it focuses on the stability of the system, adapts to China's specific economic circumstances, and is applicable to policy makers and banking supervisors.

The actual significance of the findings is that they could potentially improve the way the Chinese banking system is judged. The findings of the study, by providing a comprehensive set of financial stability indicators and providing policy advice, can help banking regulators to identify vulnerabilities in the banking system and implement effective interventions to enhance their resilience. In addition, the research will help develop a stronger regulatory framework for the banking sector, which will be more resilient to shocks in the economy and promote sustainable growth.

Recognition of research achievements has been achieved by participating in academic conferences and publishing a number of articles in peer-reviewed journals. The findings have been submitted to the PBOC and other regulators, contributing to the ongoing debate on how to improve the banking sector's financial stability. In addition, the findings have been used to inform the debate on macro-prudential and financial regulation, with emphasis on making the Chinese banking system more resilient to domestic and global financial risks.

CHAPTER I
STUDY OF THE RELATIONSHIP
BETWEEN THE BANKING SYSTEM AND THE REAL ECONOMY

1.1. Defining the banking system and the real economy

The banking system is of great importance in the financial system of each country. Nowadays, the development of Chinese capital market is not good, and the importance of Chinese banking system is more prominent.

Since Joseph Schumpeter was the first person to analyze financial and economic growth, there have been a lot of domestic and foreign research results. But the study of the relationship between the banking system and economic growth has achieved certain results, but there are still some shortcomings. Most studies, for instance, have focused on the role of the banking system in the real economy, and few have dealt with the effects of real economic growth on the banking system. Little research has been done on their interaction. How does the banking system interact with the real economy? What is the mechanism? Specifically, what is the most effective way to stimulate the real economy? How do real economic fluctuations affect the banking system's vulnerability? It is of great academic value and practical value to Chinese finance system reform and banking system construction.

After World War II, the United States went into its postwar golden era. As the Bretton Woods system collapsed, the engine of the global economy, the United States, appeared powerless. Then, after recovering from the devastation of World War II, Japan and Germany followed suit, and Japan enjoyed double-digit growth for 20 years, far outpacing the United States. The collapse of the bubble economy in the 1980's threw Japan into a mire of economic stagnation. The merger of the two Germans and the appreciation of the Deutsche Mark left Germany in a state of stagnation and growth. Meanwhile, the United States, after almost 20 years of tough adjustment, gained momentum in the 1990's, and created a new growth miracle in the postwar world economy. This pattern of decline and decline gives a general picture of the relative growth of the real economy in the postwar period. Behind all this, what is the basis for every country's economic growth? Is it capital, system or technology? How do these factors affect each other? In the course of studying these problems, scholars attach great importance to the function of the banking system in the financial system. There are two kinds of financial systems in the world: the United States, United Kingdom and so on the market, and the other is the banking system, which is represented by Germany, Japan, etc. Which of the two systems is more effective and more conducive to economic growth? Is the difference in the performance of the economy due to the different banking systems? These questions need to be answered with a theoretical framework that explains how the banking system has an impact on the real economy.

Since the reform and opening-up policy, China's economy has achieved great success. Many Chinese and international scholars have done deep research on the origin of Chinese economic growth, but up to now, most of them have paid much attention to the contribution of investment level or investment efficiency to economic growth. Since Schumpeter (1912) and Goldsmith (1969), the "Financial Growth Nexus" has been one of the most important issues in economics. Based on the theory analysis and the empirical test, a lot of scholars have carried out a deep and wide study on the relation between finance development and economic growth by means of cross section, time series and panel data.

During China's 30 years of reform and development, the banking system has been playing an important role in the allocation of capital. Even with the rise of the stock market and the rapid development of direct financing channels, the Bank's role in financing has not been affected, just as the World Bank report (1999) noted. Nearly all financial intermediation takes place via the banking system, as these intermediaries have the capacity to address information and contractual issues, which are especially acute in this phase of the economy. Banks are the backbone of the financial system. Bank plays an important role in the financial system of all countries. In particular, in China's capital market is still undeveloped, it is not possible to replace the use of the bank in the financial system. So we need to study the banking system and the real economic growth.

The relationship between financial and economic growth has always been an issue of concern. As early as 1912, Schumpeter pointed out that the development of a nation's finance department has a positive impact on its per capita income and economic growth. Goldsmith, in his seminal book Financial Structure and Financial Development, attempted to analyse financial and economic growth. Later, McKinnon and Shaw turned their attention to the developing world. Since 1980's, the study and argument about the relation of finance and economic growth have been a hot topic in the field of economics, whose main characteristic is the empirical test. In this research, we use the newest methods and tools of econometrics and information economics to research the real economic growth factors. However, there are few studies on the relationship between the banking system and the economic growth, the function channels, and the extent to which the nature of the banking system affects the macro-economy.

The economic development consists of quantitative increase, structural change and quality improvement. We are fully convinced that the banking system will influence the distribution structure and efficiency of financial resources, which will have great influence on the real economy. Changes in the structure of the banking system will also affect the performance of banks. Nowadays, the reform of banking system is the most important task in the reform of Chinese economy. Its success or failure has a direct bearing on the future development of Chinese economy. Along with the completion of the restructuring of China Construction Bank, the Chinese Industrial and Commercial Bank and the Agricultural Bank of China, the reform of Chinese banking has stepped into a new phase. Meanwhile, the argument about introducing foreign strategic investors is getting more and more intense. So, in this situation, what will happen to the banking system, and how will it affect the real economy? Based on the theory analysis, the empirical analysis, the qualitative analysis, the quantitative analysis, the history analysis and the reality analysis, has some theory meaning. On the other hand, it is a hot topic to explore the banking system which suits each country and area's economy development. Therefore, it can not only enrich the theory study on the relation between the banking system and the economy, but also provide theory, policy and practice for future banking reform.

The economic and financial conflicts brought about by the great changes in the banking system have been put forward, which not only influences the further reform of the commercial bank, but also influences the sustainable economic development. Therefore, the research on the relation between the real economy and the banking system is essential. The establishment of rational and efficient banking system to promote the actual economic development is the concrete manifestation of the implementation of the Scientific Development View. Along with the gradual diversification of banks, banks have become more and more important in mobilizing savings to invest in the economy and optimizing the distribution of resources. The bank's development is based on the transition from planned economy to market economy. Therefore, it is of great significance to probe into the banking system in the transitional economy. What's more important is that, by analyzing the relation between banking system and economic development, the author proposes some measures to adjust the banking system, which will not only promote the real economy, but also provide reference for other areas.

Most of the previous studies are focused on the effect of the banking system on the actual economy, but there is little systematic research on the impact of the real economy on the banking system. Real economic development is one of the most important factors that influence the transformation of the banking system. The analysis of the impact of real economic development on banking system changes, and the rational choice of induced change and compulsory change is very significant.

The vulnerability of banks has its own features and is also influenced by real economic fluctuations. Therefore, it is significant both in theory and practice to study the relation between the fluctuation of real economy and the vulnerability of banks.

Banking system definition:

In the course of the development of the commodity economy, the money as the medium of exchange appeared, in a certain sense, the embryo of the financial system appeared, and on this foundation, the "credit money" emerged. In the financial market, the accommodation of money, the relation of supply and demand, deposit and loan, and the issue and transfer of financial instruments are all based on credit. So we can say that finance is the sum of money and credit. Along with the mutual interaction and restraint between currency and credit, a bank system based on money and credit has formed.

System is the fundamental mode of existence. Non-system is relative. In banking research, the term system can be translated as either a system or a system. Goldsmith divided financial institutions into two broad categories: those with monetary obligations (usually currency and checking deposits) and those with non-monetary liabilities. The former is the deposit bank, which has close relationship with the money; the latter includes the savings, the insurance, the finance company, the mortgage bank, the development bank, the investment company, the secondary financial intermediary, and so on. The definition of a bank as a financial institution with a debt is a reflection of the key role of the bank in the money supply system.

The Dictionary of Modern Finance defines a bank as "a financial institution which specializes in the provision of deposit, deposit, exchange, clearing and other banking services, as a credit broker and an intermediary". Article 2, Chapter 1, of the PRC Law on Commercial Banks enacted in 1995 stipulates that commercial banks are corporate entities set up under the present law and Company Law to take in public deposits, issue loans and settle accounts. Based on the research angle and the actual situation in China, the bank system is defined as a whole system which consists of all kinds of financial institutions, including insurance companies, investment banks and all kinds of funds. The characteristics of banks' operations are as follows: deposits or bonds are the principal source of capital; assets consist primarily of loans and securities; they also carry out other financial intermediation activities.

In China, the Chinese banking system consists of the Central Bank, the Regulator, the Self-Regulatory Body and the Banking Financial Institution. The People's Bank of China is a Central Bank, which is in charge of formulating and executing monetary policy, preventing and mitigating financial risk, and maintaining financial stability. The China Banking Regulatory Commission (CBRC) is in charge of the nationwide supervision of banking financial institutions. The China Banking Association is a national nonprofit social organization registered by the Civil Affairs Department. There are policy banks in China (China Development Bank, Export-Import Bank of China, Agricultural Development Bank of China), large commercial banks (ICBC, ICBC, Agricultural Bank, China Construction Bank), small and medium sized commercial banks, Postal Savings

Bank and foreign banks. The CBRC regulates non-bank financial institutions, such as Financial Asset Management Company, Trust Company, Enterprise Group Finance Company, Financial Leasing Company, Automobile Finance Company and Money Broker Company.

Real economic definition. The "real economy" is not a specific term. It is mainly used to manufacture machinery, textile, construction, installation, petrochemical, agriculture, mining, transport, etc. At the very least, we often see this kind of phrase in everyday life. Sometimes it's even used in a very popular manner. In simple terms, it is possible that any registered economic organization that has its own production and service activities can be considered as a true economy. Moreover, its service activities are not the same as those of ordinary services. That's a fairly common notion, but it's a big part of what the Federal Reserve says.

When the subprime crisis broke out in full, the Federal Reserve announced that "the turmoil in the financial market didn't harm the real economy." The Federal Reserve reversed its stance on Sept. 18, 2007. In the statement, it also said, "to avoid market turbulence," San Francisco Federal Reserve Yellen also said that "short-term monetary policy should focus on stabilizing real economic growth". Indeed, before the subprime crisis broke out and the housing market went into a prolonged slump, the Federal Reserve ignored the collapse of the housing market. So, in 2007, the Federal Reserve used the term "real economy" a lot, so what does the "real economy" mean by the Federal Reserve? Is this a popular idea we see everyday?

The Federal Reserve often uses the term "real economy" to refer to areas other than housing and finance. As for the composition of U.S. economic data, the Federal Reserve broadly sums up the components of production, import and export, current account, retail sales, and so on.

In this article, the Real Economy means the economic activities of the production, sale and provision of relevant services. Real economy consists not only of producing goods for agricultural, industrial, transport, trade, logistics, construction and service, but also of educational, artistic, sports, etc. The features of the real economy can be summed up as follows: tangible, dominant, carrier, and declining. Then, the function of entity economy, which is based on the material material production and operation, can be summed up as follows:

1. Basic living materials are provided. These means of subsistence are generated by the various forms of the real economy. If the actual economic production activity stops, then all kinds of consumption activities will not be ensured.

2. Improving the standard of living of people. Not only do people want to live, they also want to live a better life. The material conditions to ensure the well-being of the people are created by the higher levels of the real economy. If the real economy's higher productive activity stops, then people will fundamentally lose the foundation to improve their living standards.

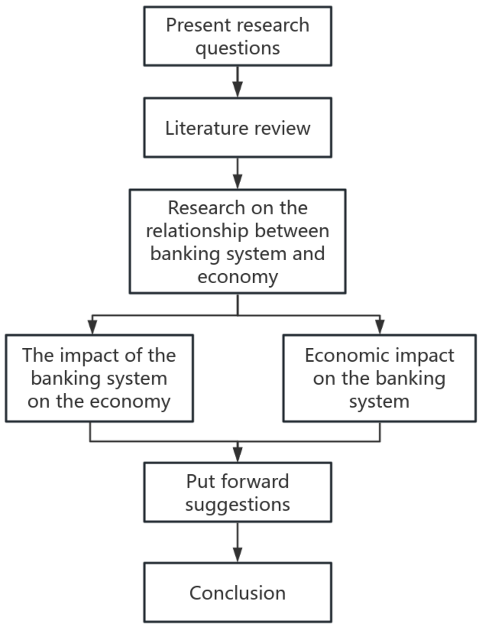
3. Improving the overall quality of people. Not only should people live a better life, but they should also improve their quality. That is, not only should they have a good material life, but they must also have a high level of spiritual life. Moreover, the material precondition to ensure people's high spiritual life is also provided by all kinds of real economy. If the actual economic activity of a number of specific forms stops, then people will fundamentally lose the basis to improve their overall quality.

Research methods. The method serves the purpose. This article aims to draw lessons from the development of Chinese financial system and its experience in the last 30 years, especially from bank development, which will direct the reform and development of Chinese banking system.

1. Interdisciplinary analysis. Interdisciplinarity is of great significance both in theory and practice for the comprehension of complicated subjects. Banking is a complicated system, which has many factors, big combined space, complicated hierarchical structure and harmonious relations. It demands that we go beyond the limit of a single subject. From the angle of finance, this article has carried on the achievements of money, finance tool, person, organization, finance structure, finance system, and so on.

2. Combining quantitative and qualitative analysis. The banking system is a kind of systematic and complicated research object which is made up of the "whole effect" of financial factors. The relations between the factors, the organization and the system are very complicated, and there are both quantitative and qualitative rules. Banking system

development includes both quantity and quality improvement. Therefore, it is necessary to combine quantitative and qualitative analysis in order to accurately reveal the evolvement and developing rule of the complex financial system. Quantitative analysis can reduce unnecessary misunderstandings and disputes. Qualitative analysis has little restriction, especially in understanding the nature and law of social science.



Source: The author organizes and analyzes

Fig. 1.1 Research technology route. Financial system and the development of the real economy

Banking system is a sub-system of financial system. It is necessary to investigate the relationship between the banking system and the real economy from the angle of financial and economic growth.

Some Early Thoughts. The earliest research on financial and economic growth dates back to Joseph Schumpeter, an American economist. In 1912, in The Theory of Economic Development, Schumpeter stressed that financial factors can promote economic growth by stimulating innovation. It is essential for financial institutions to satisfy the demand for credit and loan from new firms, and this is the key to the development of economy. A good bank should be capable of identifying the most innovative businesses and supporting technical innovation through the provision of finance [1].

After Schumpeter, Gurley and Shaw (1960) put forward the possibility of some connection between financial institutions and real economic growth [2]. In particular, they stressed the role of financial intermediaries in lending, which had some influence on economic growth. Hicks (1969), in his analysis of the Industrial Revolution in Britain, found that the financial system had an impact on the formation of capital, and therefore played a crucial role in Britain's industrialization. In the field of empirical research, Goldsmith (1969) used a great deal of international data to explain the relationship between financial development and economic growth. [4] Hugh: Hugh T. Patrick (1966) proposed a "demand follow up" model and a "supply-side" model in financial development. 5 McKinnon (1973) and Shaw (1973) confirmed that economic growth was positively correlated with economic growth. All these researches provide abundant thought resources for future generations. However, because of the limitations of The Times, it is still mainly used to understand and examine the function of financial function in economic growth. For instance, Schumpeter emphasized the credit creation function of finance, Gurley and Shaw emphasized the role of finance in the transformation of savings into investments, while Hicks stressed the role of finance in providing liquidity for diversification of risk

Of course, the results of these researches are not able to explain the new financial phenomena and the relationship between finance and economy in modern economic growth. Therefore, we can see that the financial system as a system is neglected in the mainstream economic analysis system.

Among them, the American economists Patrick and John Mackinnon are worth mentioning. Patrick believes that financial and economic growth interact. Under the "Demand Follow" model, financial institutions and financial services are created in order to satisfy the needs of economic operators (savers and investors) in the real economy. In contrast to the "demand follow-up" model, which focuses on the demand side of financial services, the "supply-oriented" model emphasizes the supply of financial services, i. e., the supply of finance is preceded by demand, and the demand is preceded by the demand of the real growth industry. Patrick went on to say that "supply-oriented" finance played an important role in the initial period of economic development, and "demand-follow" finance took the place of "supply-oriented" mode and played a leading role. Actually, the two patterns of demand follow and supply direction interact and affect each other in the actual economic development. But on the whole, both are in order: "supply-led" finance can stimulate investment, including technical innovation, before sustained modern industrial growth starts. Once the process of real growth starts, this "supply-driven" model becomes less important, and "demand-follow" finance becomes dominant.

In 1973, Development Economists Mackinnon and Shaw proposed a pioneering theory that the reason why the poor in developing countries is not only because of the lack of capital, but also because of the distorted financial market. In 1973, Mackinnon and Shaw published Money and Capital in the Economic Development and Financial Deepening of Economic Development, and set up a series of theories on "Financial Repression" and "Financial Liberalization". They have proved the positive relation between finance deepening and saving, employment and economic growth, and pointed out the harmfulness of "financial repression". Therefore, the author suggests that the developing countries should realize the financial deepening and promote the economic growth through financial liberalization. In order to solve the problem of financial repression, we should reduce the interference of the government and establish the fundamental function of the market. The key point of this theory is to relax the government's control on the financial system, especially to control the interest rate, so that the real interest rate can be raised to reflect the capital supply and demand. Thus, the investor must take into account the cost of financing, and balance the investment cost with the expected return, which will greatly increase the efficiency of capital allocation. Also, high interest rates encourage people to save, so that savings can be transformed into investment. As Xiao (1973) says, "The nature of financial liberalization and the deepening of finance is to relax interest rates so as to reflect the scarcity of savings and stimulate savings."

Recent literature. The emergence of the internal growth model in 1980's has provided a new space for the research of finance and economic growth. Based on this, more and more researches have been done on the integration of endogenous growth and endogenous intermediaries or financial markets into economic growth models. Marco Pagano (1993) disclosed the relationship between finance growth and economic growth by using a simplified endogenous growth model, AK Model 7. In recent years, the research on the relationship between the development of financial institutions and the real economy has been deepening and refining. The relative consensus is that "the development of the financial market and the system can significantly boost the economic growth". Levine and Zero (1998) have proved that there is no correlation between the contribution of the stock market and the banking sector to economic growth. Allen and Gale (2000) further argue that "in the modern economy, the financial system is crucial to the allocation of resources. Through the financial system, household savings flow into the business sector. The financial system allows households to smooth their spending over time and businesses to smooth their spending over time. " Levin (1997) concludes: "Financial growth is related to economic growth, and a more mature financial system promotes higher growth rates." This conclusion is significant for the study of institutional changes in the financial system: when other conditions (capital, human resources, technology) have developed to a certain degree, they will be more mature and mature.

The need for a stable and effective financial system is becoming more and more important, which is one of the drivers of the transformation of the financial system. Of course, there are also some scholars who question whether the development of the financial system is positively related to the development of the real economy. For example, J. Robinson (1952) believed that economic development led to the demand for financial services (where enterprise leads, finance follows). Lucas (1988) argues that "the role of finance in economic growth has been overstated".

Since 90's, along with the development of econometrics, the empirical study on the relation of finance and economic growth has obtained a great deal of results. King and Levin (1993) are the earliest and most representative study in this respect [12]. They put forward four indicators of "financial intermediation": financial depth; an indicator of the importance of deposit-money banks in relation to the central bank; the ratio of non-financial private-sector lending to total lending; and credit to GDP in the non-financial private sector. Furthermore, they construct four indicators of "economic growth": real GDP growth rate; physical capital accumulation rate; FDI/GDP ratio; investment ratio; economic efficiency. Using these indicators, King and Levin analyzed data from 80 countries between 1960 and 1989. It is found that the financial intermediary is closely related to the economic growth, and it can promote the economic growth through improving the accumulation ratio of the physical capital and the efficiency of the economy. Levin and Zroth (1998) noted the differentiation and diversity of financial development and divided the financial system into banks and stock markets. They selected four economic growth indicators: output, capital stock, productivity, and savings. In the design of the Bank Development Index, they have discarded the traditional Financial Deepening Index and replaced it with the Bank Credit Index, which is the ratio of the total amount of loans issued to the private sector by commercial banks and other depository banks to GDP. In terms of stock market, they designed six indexes: size, volume, security, volatility index, CAPM integrated index and APT. The results indicate that the liquidity of the stock market is positively correlated with the economic growth. The development of the bank and the index of the stock market are independent of the economic growth.

Recent studies have started to focus on how the various financial structures contribute to economic growth and the role they play at various stages of the economy. Carlin and Mayer looked at the relationship between the structure of finance and industry, using data from 27 countries. Their findings show that in countries with higher levels of finance and revenue, debt-financed sectors dependent on banks tend to have slower growth rates and lower R&D investment than those that depend on equity. On the other hand, in low-income countries, businesses that depend on bank lending tend to grow more rapidly as banks develop. Therefore, they recommend that the financial structure policy be adapted to the stage of economic development. In particular, in the initial phase, we should focus on the construction of an effective banking system; after that, we should strive to establish a transparent and effective stock market.

The domestic study on the relation of finance development and economic growth mainly focuses on the following three aspects: Firstly, comparing with other countries which have similar economic development history. Kang Jijun (2015) carried out a cross border comparative study on the cause and effect of GDP growth in China, Japan, South Korea, and other countries with similar economic development history, using vector error correction models (VECMs). The empirical results show that there is a causal relation between GDP growth in China, Japan and South Korea.

Secondly, the relationship between the development of Chinese regional finance and economic growth. Ran Guanghe (2016) compared the long term and short term relation between the development of finance and economic growth in East and West of China by means of Panel Root Test, Co-integration Test and Error Correcting Model. The results indicate that there is a long term cause and effect relation between finance development and economic growth, but there is no obvious causal relation between finance development and economic growth. Both long and short term cause and effect relationship exists between the development of finance and economic growth in the east. Meanwhile, the paper also proposes some policy recommendations to promote regional financial coordination and regional economy06. Ma Ruiyong (2016) analyzed the relationship between the regional finance development and the economic growth, and found that the development of finance in the east, middle and west regions had a positive impact on the economy. Feng Huan and Wei Shengmin (2017), on the basis of former theories and research achievements, have carried out empirical research on financial development theory with Shaanxi Province's statistics and linear regression method. In their view, Shaanxi economy is mainly driven by capital investment, but each percentage point of GNP increases the rate of economic growth by 0.177%, which shows that the GFCF has a positive correlation with economic growth, but its conversion rate is low, which reflects the restraining effect of the underdeveloped financial system on the capital driven economy. Moreover, the variable of Shaanxi Province's financial system development is negative, which shows that there is a strong structural feature between financial system and economic growth. The main restricting factor of Shaanxi economy is that the capital formation is insufficient and the finance system is not developed. The establishment of the capital formation mechanism is dependent on an integrated and effective financial system. Although the level of finance development in the west has been greatly improved since 1990's, there are still significant differences between the east and the west, such as inadequate financial assets, distortion of finance structure, slow development of capital market and low liquidity.

Thirdly, the research on the relationship between the development of finance and economic growth in China. Liang Qi (2015) studied the relationship between Chinese stock market development, the development of banks and the growth of the economy by means of multivariate VAR model. The results indicate that the development of the stock market does not promote the growth of the economy, but it has a positive double causality relation with the economic growth. The results also indicate that there is a positive causal relation between the fluctuation of the stock market and the growth of the bank, which is negative.

Ding Zhongming and Wan Guangcai (2018) consider [20] that the key to success of S&T innovation projects is to obtain good financing. The results show that: firstly, the structure of the financial system is related to the way of economic growth. If a country wants to change the way of economic growth, it is necessary to reform the finance system. Otherwise, it will die because of the shortage of financial support. Secondly, although the Chinese financial market has developed rapidly, its scale remains very limited. In the stock market, there is still no solution to the problem of seizing the interests of small shareholders. Moreover, the bond market remains relatively underdeveloped and small. The condition of the development of the financial market can't meet the demand of self-innovation, so it can't promote the change of the way of economy. Thirdly, in the short run, the traditional industry is still the impetus of Chinese economy growth, and it is also an important channel for the absorption of employment. Therefore, we should make great efforts to enhance the efficiency of the banking system in order to support the growth of traditional industries.

The relationship between the development of banking industry and economic growth can be traced back to Schumpeter (1934) and Goldsmith (1969). From then on, the study became a major issue in the field of economics. Since 90's, there have been a lot of empirical studies on the relation between them, and most of them think that the development of a national (regional) banking system is conducive to economic growth.

Rajan and Zingales (1998), for instance, used international data to prove that the more efficient banks are, the faster they develop.

In the empirical test, the majority of papers usually measure the development of a country's (regional) banking system in terms of the size of the banking system or the volume of funding. Concrete indicators are the ratio of current liabilities of the banking system to national (regional) GDP (King and Levine, 1993b) [12], the ratio of bank branches to total population in a region (Ferri and Mattesini, 1997), and the ratio of overall lending to GDP (Rajan and Zingales, 1998, et al. 10). But when it comes to describing the relationship between the development of the banking system and the growth of the economy, they only stress the role of the bank in facilitating the accumulation of capital. Since 1980's, it has been proved that the other important function of commercial banks is to find out the best borrowers, alleviate the asymmetric information in the financial market, and then optimize the allocation of capital and promote economic growth (Diamond, 1984; Stiglitz & Weiss, 1988) 1. However, there is little discussion about the effect of bank's ability to optimize credit allocation on economic growth. According to Levine (1997), there is only one measure that tries to describe the role that banks play in the distribution of credit, that is, the ratio of bank lending to the private sector. This is largely predicated on the assumption that the private sector is more efficient than the public sector. But this is not always the case, and in many developing countries, public lending as a proportion of total lending is often affected by national macroeconomic policies, not by independent decisions of commercial banks. Therefore, the index can not be used to describe the ability or efficiency of the bank's credit distribution.

La Porta et al (1998) used a different methodology to measure the evolution of financial intermediation [22]. Because of the disadvantage in financial services, the author thinks that the higher the state ownership, the lower the bank's development; the more nationalized, the slower the economy grows. Levine, Loayza, and Beek (2000) take into account a variable, the ratio of private-sector lending to GDP (PrivateCement), which differentiates private-sector lending from public and SOEs. Also take into account a loan component issued by a central bank.

Research has also shown that the growth of financial intermediation is closely related to long term economic growth. Riccardo et al. (2001) suggested building an efficiency index of the banking system based on the micro-efficiency of a single bank, and then discussed the relationship between the index and the rate of economic growth. In general, the more efficient a regional banking system is, the more efficient it is in identifying high quality borrowers, which will help to optimize the allocation of credit resources. Through the analysis of the relationship between the efficiency of the (regional) banking system and the growth of the economy, we can find out how the changes in banks' ability to allocate credit have an effect on their economic growth. On the basis of this thought, the paper firstly gets the cost efficiency values of most of the central banks, and then calculates the efficiency index of the regional banks by means of weighted equilibrium, and then puts them into growth regression to study the influence of the optimal allocation of credit on economic growth.

On the domestic side, Tan Ruyong (2019), Wang Guosong (2021) and Rao Huachun (2021) have demonstrated the causal link between the development of banks and economic growth [23]. In this paper, Chi Guotai, Sun Xiufeng, and Ludan (2015) used the translog-cost function model to evaluate the cost efficiency of 14 Chinese commercial banks. The empirical results are as follows: 1. The overall cost efficiency of China's commercial banks is not bad; 2. The cost efficiency of state-owned commercial banks is increasing, but that of joint-stock commercial banks is increasing. 3. The quality of credit output has an obvious negative influence on the cost efficiency of China's commercial banks. The cost efficiency of state-owned commercial banks is lower than that of joint-stock commercial banks when taking into account output quality. Lin Yifu et al. (2016) made an econometric analysis of the influence of development strategy, banking structure, and the matching of banking structure with economic structure on economic development. Zhang Jun (2016) takes the ratio of GDP as an index, and introduces Granger causality analysis, and draws the conclusion that despite the influence of various factors, the economic growth has a weak negative correlation with the level of credit.

Tian Xianliang (2016) constructed an index that reflects the credit allocation efficiency of a regional bank based on the cost efficiency of a single bank in a region. Tian Xianliang believed that the efficiency of the banking system could be used to describe the role of the banking system in selecting borrowers and facilitating the optimal allocation of capital. Finally, it is concluded that the Chinese banking system not only has the capital accumulation effect, but also the credit distribution effect. Yang Wenjin (2016) explores the relationship between the banking system and economic growth. In his opinion, the market economy is a monetary economy, so the money supply is the key factor to decide the economic growth. Judging from the general relation of economic growth and money supply, the rate of money supply is the rate of economic growth of a society. Since the rate of money supply is usually linked to the nature of the banking system in a society, the fastest growth is the one based on the soft constraints of the bank's budget, which will ultimately result in severe financial and economic crises in those societies. A sound financial system and rapid economic growth is a social dilemma. According to Liu Jianfeng (2017), there is a positive correlation between the development of Chinese commercial banks and Chinese economy, but the efficiency is low. In the meantime, the development of the capital market did not promote the economic growth significantly. With the development of financial globalization, liberalization and information technology, Chinese finance will be confronted with bigger challenges.

Zhang Yuying (2019), with the help of GDP and banking, investigates the interaction mechanism between the development of the banking sector and the economic development from the angle of econometrics. Based on GDP data, the size of banks and their relative importance in the allocation of credit to reflect the development of banking industry. On the basis of the data of GDP and the scale of the development of banking industry in recent decade, this paper draws a conclusion that the development of banking industry plays an important role in promoting economic growth. Meanwhile, the fast growth of the economy has also promoted the overall development of the banking industry, which has played a more and more important role in the allocation of credit. In the traditional monetary theory, the creation of multi-deposit multipliers simplifies the behavior of banks, so it is hard to establish a complete system for studying the impact of the banking system on monetary policy. He Liang (2019), based on the previous research, discusses the creation of deposit multiplier and the relative monetary policy effects in a fully monopolistic commercial banking system. The results indicate that the banking system's market structure has great influence on the deposit multiplier and the monetary policy. The more competitive the bank is, the smaller the deposit multiplier is, and the smaller the monetary expansion or contraction will be.

The Bank System and the Regional Economic Development. As a country with a long history, a complicated national structure and a great disparity in economic development, there is a big difference in the economic structure and the level of financial development. As a result, the influence of bank credit on regional economy growth must have significant difference with national economy growth. Wang Xiaoping and Jia Rui. (2023) carried out a case study on the relationship between credit and economy growth in Gansu Province, and found that the declining credit growth has severely weakened the core function of the financial system. Zhang Jun (2015) has analyzed the long-term relation between the credit and the economic growth of Shandong Province, and found that Shandong Province has a long-term steady relation with the economic growth. The credit expansion causes the region economy to flourish, the credit contraction causes the economy to shrink, and the credit is the Granger cause. Chen Feng, Yuan Jinhua, Xu Jun. (2016) found that the loan balance and GDP were positively correlated with the GDP data in Jiangxi Province. Yang Qingxiang and Zhao Shan (2016) built a vector autoregression model on the basis of long-term co-integration of GDP and GDP [34], and found that there is a long term stable relation between credit growth and GDP in Shaanxi Province. The credit expansion is the Granger cause of economic growth, and the effect of the fluctuation of credit growth on the economy is gradually weakened with time.

Banking reform and real economic growth. In the economy, the economic behavior is not only the result of the rational thinking of individual economy, but also the restriction of reality. Therefore, only when the power operation is the core, can we research the conflict and harmony between the investors, the generation of the power rules, and the influence on the finance. This paper analyzes and studies deeply on how to form the order of investors, the design of financial products, the inner foundation, the establishment and operation of financial institutions, and the methods of supervision and supervision. This calls for political and legal research, like Laporta, de Silanes, Shriver, and Vishni, who argue that bank-centric versus market-centric differences in the financial system are not particularly helpful, 4i argues that it is more appropriate to explain the differences in the financial system from the point of view of investor protection. By analyzing the difference of investor protection, we can not only explain the internal logic of each kind of financial system's forming and evolving, but also from experience. Through the comparison of 49 countries, we find that the protection of investors' rights is more powerful than that of Rome, no matter how developed the economy is. On the other hand, Beck, Thorsten, and Levine (1999), through empirical analysis of legal systems, political systems, and resources-endowment42, argued that the different origins and evolution of political systems, as well as the origins of legal systems, had a significant influence on the development of the financial system. As for the dynamic course of the system, a flexible and adaptable law system is beneficial to the development of the financial system. The German and French legal systems, for instance, have the same origin, but they have different adaptability to change, so their financial systems have also developed differently.

Structure of banking system and real economic development. There is a great difference in the competitive environment of the banking system in every economy. On the basis of this question, a lot of papers have been devoted to the study of the banking sector's market structure. In the first row, Krasa Villamil (1992) studies the optimum size, volume and overall equity of banks [53]. Although these researches have been done on the structure of banks, they have focused on the optimal size of banks when there is a risk. The second part focuses on the specific impact of the banking structure on the economy. They assumed a particular market structure, which was neither competitive nor monopolistic. On the other hand, Mark G.Guzman looked at the link between the structure of banking and economic growth [54]. Mark G Gzuman, when discussing the influence of bank structure on the whole economy, divides the discussion into two parts: Local Equilibrium Model and General Equilibrium Model. Local equilibrium model has solved the problem of bad choice and moral hazard. It is believed that the biggest problem in the competitive banking market is the shortage of borrowers. Asymmetric information can lead to negative choice and moral hazard.

As a result, the efficiency of allocating resources is decreased. However, in exceptional cases, a monopoly bank can resolve, or at least alleviate, the problems inherent in the relationship between banks and borrowers. Monopoly banks can promote their own choice and reduce risk by choosing potential borrowers, selecting interest rates, limiting credit, or developing long term relationships. Monopoly banks can make use of these techniques to deal with incomplete information. The general equilibrium model is in contradiction with the partial equilibrium model. The General Equilibrium Theory takes into account not only the bank's credit behavior, but also the household's savings behavior. It corrects the deficiency of the partial equilibrium model, which assumes that the bank has sufficient funds to lend, takes into account the source of the bank's deposit, and makes a detailed analysis of the whole effect of the special bank structure on the economy. For instance, the effect of capital accumulation on economic growth, so that the cost of a monopoly bank structure may exceed its benefits, and it is likely to harm the economy, and the best scenario is not clear. This indicates that the degree of completion of the bank-economic relationship model is a key factor in this conclusion. Nicola Cetorelli and Michele Gambera (1999) supported the General Equilibrium Theory [55] and found that there was a negative correlation between bank concentration and economic growth.

Genevieve Boyreau-Debray (2003) analysed the relationship between the development of financial intermediation and economic growth in different Chinese provinces. Firstly, the regional capital market segmentation has confirmed the existence of local credit channels. Combined GMM

Based on the data of 26 Chinese provinces, this paper analyzes the relationship between the development index and the traditional economy. The results show that there is a negative correlation between credit expansion and local economy growth. It also shows that the economy grows more quickly in the provinces with diversified banking sectors. Luca Deidda and Bassam Fattouh (2002) put in place an endogenous growth model involving both the real and the banking sectors, showing the double effect of bank concentration on economic growth. On the one hand, it can promote the specialization of economy, which is beneficial to the economy. On the other hand, it might result in the double investment of bank with certain capital, which is detrimental to economic development. Luca Deidda and Bassam Fattouh, using data on income and industry growth across countries, found that only in low income countries were there negative correlations between bank concentration and growth in unit capital income and industrial growth. This shows that reducing the concentration of banks in low-income countries is more likely to boost economic growth than in high-income countries. Mark A. Gzuman's analysis suggests that, under certain circumstances, a banking monopoly results in a lower long-term stock of capital and a slower economy than a competitive banking system. Monopoly banks will manipulate lending and deposit rates to boost their profits. But they don't always have to manipulate deposits and lending rates. If the interest rate on savings is not too flexible, it does not have a negative impact on capital formation, even though it distributes revenue among the bank's depositors and its owners. But when the monopoly bank raises the loan rate, it causes the financial system to be overregulated, which is harmful not only to the capital formation but also to the society.

It can be divided into two groups in the domestic literature. Others believe that bank concentration is not beneficial to economy growth, that is to say, it supports the conclusion of general equilibrium model. According to Zhang Yihao (2024), the competitive banking market structure can offer a lower loan rate than the monopoly one. Zhong Ziming and Zhang Zongyi (2024) have proved that the monopoly competitive banking structure is the essential condition for the existence of the implicit subsidy. While such a system of investment and funding can increase rapidly in the short run, it is likely that it will be inefficient and not sustainable over time. The construction of a robust market-based banking system is a prerequisite for addressing sustainability in both the financial and fiscal spheres. In general, the higher the degree of concentration, the larger the market power of a small number of companies, and the less competitive in the market. According to Lu Yimei (2015), China's banking sector, regardless of its assets, is over 60%, 160. This monopolistic market structure is unfavorable for SMEs' production, operation and investment, and restricts the fast development of regional economy.

Early literature often recognized and examined the role of finance in economic growth on the basis of some financial functions. Of course, the results of these researches are not able to explain the new financial phenomena and the relationship between finance and economy in modern economy. Subsequently, Mckinnon and Shaw's theory of financial repression had a great impact. In their view, the development of the economy in the developing world is caused by financial repression. Therefore, they suggested that the developing countries should use financial liberalization to deepen their finance so as to promote economic growth. Along with the development of modern econometrics, the empirical study on the relation of finance and economic growth has also obtained a great deal, which is that finance will promote economic growth. The related documents about the development of the banking system and the real economy are mainly based on the development of the banking system and the real economy. Lots of papers have analyzed the relationship in detail, and most of them think that the development of a national (regional) banking system promotes its economic growth. In the empirical test, the majority of papers usually measure the development of a country's (regional) banking system in terms of the size of the banking system or the volume of funding.

There is also much literature on how fragile the banking system is, and how it relates to the real economy. It is usually discussed from two aspects: the fragility of the banking system and the structure of the banking system. A great deal of research has been done on the vulnerability measure, the forming mechanism and the influential factors of the banking system, and a great deal of valuable literature has been obtained. Since 2022, many researches have been carried out on the vulnerability measure and the influential factors of Chinese banking system. Along with the development of the research, building a scientific and rational vulnerability measure index, describing the vulnerability of Chinese banking system in detail, and researching the forming mechanism of the vulnerability of the banking system, has become one of the problems in theory and practice.

In the past, we have analyzed financial and economic development from the angle of finance development, financial system, banking system and vulnerability of bank, and so on. Based on the literature review, the foreign scholars have built up a series of partial equilibrium models and general equilibrium models for the relation between the financial system and economic growth. As for the empirical study, there are not only cross sectional data, but also longitudinal and temporal data to examine their relationship. There are also cross-city, cross-state (provincial) studies conducted for a specific country or region.

There are many researches on the relation between financial system, finance development and economic growth, but less on the relationship between the banking system and economic growth. However, the importance of its importance is increasingly recognized by the economists and managers.

On the contrary, it can be found that the research on the influence of the structure of the banking market on the economic growth is much later than that of the West. 1. The domestic academic studies of the banking system are mainly concerned with the structure of the banking system, the vulnerability of the banking system, and the relationship between it and real economic growth. The majority of papers think that Chinese banking system is oligopolistic. One of the most notable contributions of these papers is that they point out the way to study the interaction between the banking system and the real economy, including the structure of the banking system, the vulnerability of the banking system, and the development of the banking system. 2. In recent years, particularly in the past 4-5 years, there has been a surge in the literature of empirical analysis, which not only demonstrates the development of Chinese banking and market economy, but also indicates that Chinese academic circles have started to attach importance to this problem. What is more important is that they have put forward a number of useful research methods and tools, and have set up some models that are worth considering. All these methods and models provide a reference for the study of this thesis. 3. In China, the existing literature has also come to some conclusions. For instance, the competitive banking system is better than the monopoly one in the aspects of efficiency, economic growth and stability. Furthermore, only when the banking system is highly concentrated in a market economy dominated by big corporations, can it satisfy the financing demand and promote the industrial and economic development. Moreover, a lot of papers also suggest to develop a banking system which is suited to China's market structure and to enhance the development of non - state banks.

However, there are still a lot of deficiencies and shortcomings in the study of banking system and economic growth. Firstly, although the domestic and international researches on the relation of finance system, finance development and actual economy have made great progress, there is not much research on the interaction between the banking system and the actual economy. Furthermore, the literature is not systematic and dispersed. Most of them only select one side of the banking system, or one angle, and choose different models to study the relation between the banking system and the actual economic development. So far, the study on the development of the banking system and the actual economy has only stopped at the level of the strategy study, and has not done the in-depth systematic study.

Secondly, from the point of view of foreign literature, no matter if it is an international empirical study or an empirical study of a particular country or region, the United States, Italy, OECD, etc. However, there is little empirical research on the relation between the structure of the bank and the economic growth. Based on the domestic literature, domestic and foreign banking system researches mainly focus on the relation between market structure and banking system performance. Little research has been done to link the banking system to the growth of the economy and the real economy. Only a small number of articles have discussed the influence of the banking system on the national economy. It is well known that the development of Chinese regional economy is not balanced, and there are different levels of reform and opening-up in different areas. Especially after the reform and opening-up, the different ways of development for different factors have resulted in different competition modes of finance (including banking) in different areas. The structure of the banking market is closely related to the regional economy structure, which has a deep influence on the function of the bank, and also influences the regional economic development. On this basis, I believe that it is necessary to promote the study of the relationship between the banking system and the economic growth in the region, and to select the representative areas for the study. Therefore, I choose Jiangxi Bank System to analyze, hope to get the conclusion about the shortage of banking system and regional economy development.

Thirdly, the former models only discuss the mechanism and method of the impact of the banking system on the economic growth, but not on the mechanism and mode of economic growth. Actually, the banking system and economic growth may influence each other, and there is a mutual cause and effect. In the short term, however, it will lead to the opposite cause and effect, which will decrease the concentration of the banking system, which will enhance the competition in the banking sector. Moreover, as the degree of marketization increases, the banking system is bound to become more competitive. But the way banks operate is not the same as other companies. It doesn't mean that the more competitive the bank is, the more efficient the bank is, and the more beneficial it is for the economy to develop. It is obvious that the different phases of the economy, the property of the bank, the industry or department, the size of the enterprise, the degree of marketization, and the degree of the government's interference will affect the bank's structure in different ways. Therefore, it is necessary to perfect the rationalization of the bank's structure to promote the harmonious development of the bank and the economy.

Fourthly, as an important component of financial system reform, Chinese banking system is undergoing reform. On the basis of analyzing the relation between the structure of banking and economic growth, it is necessary to study the adjustment and optimization of the banking system in order to suit the development of economy. Furthermore, the causation and nonlinear relation between the structure of banking and economic growth are usually related to the stage and level of economic development in a particular country or area.

1.2. Analysis on the mechanism of banking system promoting the development of real economy

The banking system has certain features of a virtual economy. So, this article is going to use the theory foundation to explain the relation of virtual economy and actual economy. Based on the comparison of the international banking system, this paper analyses the soundness of the banking system, the promotion mechanism of the Central Bank, the Policy Bank and the Commercial Bank.

Virtual economy is a kind of important economic form in the development of real economy. It is also a new transformation of the world economic development. Statistics show that by the end of 2000, the global virtual economy has reached US $16 trillion, which is five times the global GNP. Since the 1980s, global economic growth has averaged 3% annually and international trade 5% annually, while international capital flows have grown 25% annually. With the continuous growth of virtual economy and its importance, the relation of virtual economy has a direct influence on the whole economic system and the stability and continuity of national economy. The Communist Party of China's 16 th National Congress also stressed the need to "properly deal with the development of virtual economic relations" [65]. So, the combination of virtual economy and reality is not only a new characteristic of economy, but also a key factor that influences the whole national economy's sustainable development.

1. Definition of virtual economy and real economy. It is the foundation of research on the relation between virtual economy and actual economy to define the concept of virtual economy. The definition of virtual capital goes back to Marx. In his Classic Capital, Marx put forward that fictitious capital is founded on the existence of interest, which depends on the conversion of money into interest. Real capital is "productive capital" and "commodity capital". Later, foreign scholars also discussed it from various angles.

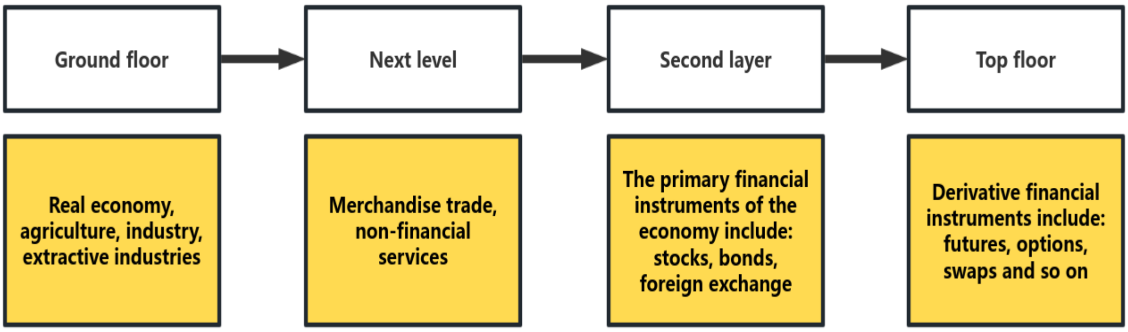
There are different opinions about the concept of virtual economy in domestic academia. From the angle of economic evolution, some scholars think that the virtual economy is a change in the way of economic operation, so as to overcome the bottleneck of efficiency. Virtual economy is actually a virtual tool for the development of real economy. It is a kind of virtual trade method which can increase the efficiency of resource distribution. The relation of virtual economy and actual economy can be summarized as "the relation of virtual transaction means and actual economy". Based on the concept of virtual economy, some scholars consider that virtual economy can be classified into broad and narrow sense. The term "virtual economy" refers to all economic activities except material production and all relevant services. Virtual economy in a narrow sense means the financial activities associated with virtual capital movement [68]. In view of the nature of fictitious economy and the dissimilation of social aim, some scholars think that the foundation of the real economy is the material producing department. Virtual economy is "a kind of economy which is based on credit instrument and speculation, which is relative to the real economy, and has the characteristic of" value-independent movement ". To some extent, virtual economy can be seen as the outcome of financial finance on the basis of actual economy.

Taking into account all kinds of opinions, the author thinks that virtual economy is a kind of economic activity which is based on money, securities, stock certificates and financial derivatives. Real economy means the material and spiritual activities of people's production, service, consumption and circulation. The real economy includes not only agricultural, energy, transport, post, telecom, construction, but also the spiritual goods of business, educational, cultural, artistic, sports, etc. Not only does the real economy consist of primary and secondary industries, but it also includes other industries besides finance.

2. The appearance and development of virtual economy. It is well known that during the period of economic development, the main stage of economic exchange was the exchange of real economy, and the currency also experienced the transition from full currency to credit currency.

Generally speaking, the virtual economy is based on the actual economy, and it has experienced three phases in its development. The initial phase of the virtual economy is the currency's credit and capitalization phase. When credit money takes the place of traditional metallic currency, it becomes a symbol of value. In addition to the exchange function, currency also has the function of storing value, which makes it possible for currency to be capitalized. Especially since the appearance of credit currency, it has broken the restriction of capital in business activity. Through the loan relation, the interest income is generated in the course of the loan from the supplier to the demand side, which is converted into the loan capital. The development of the credit money model has promoted the appearance of bank credit. Along with the continuous deepening of the credit system, money has been separated from the real economy, and has become a kind of virtual capital. The second phase of virtual economy is the appearance of stocks and other securities. Since the credit and bank credit can't satisfy the demand of money demand, the development of the real economy causes the stock and other securities to appear. The appearance of stock, bond, etc., has promoted the development of virtual capital. The third phase of the development of virtual economy is asset securitization and financial derivatives. Along with the development of economy, the securitization of all kinds of mortgages and other accounts receivable has been deepening. Different revenue streams and cash flows are assigned to the securitisation. Meanwhile, the independence of the virtual economy has been greatly enhanced, and a virtual capital has been created that is separate from the physical assets and linked to the whole economy [70]. It was pure gambling. Trading itself is not important anymore, and virtual capital can be a kind of "empty" bet.

After the virtual economy develops, it combines with the real economy and forms the hierarchy relation, as shown in fig. 1.2.



Source: The author organizes and analyzes

Figure 1.2. Hierarchical relationship between virtual economy and real economy

There are four aspects to the relation between the virtual economy and the actual economy. The first layer is the real economy, the second layer is the trade, business, and service economy, and the third layer is the virtual economy, which is represented by bonds, stocks, currencies, and commodities futures. There is a great distance between the development of virtual economy and the actual economy. Currency credit, asset securitization and financial instrument derivatives are the major phases in the development of virtual economy. Based on the appearance and development of the virtual economy, it is natural that the original virtual economy is created to overcome the bottleneck of the real economy. The development of virtual economy in the early stage also reflects the demand of actual economic development, and positively promotes the actual economic development.

3. The main features of virtual economy. Due to the difference between virtual economy and reality, virtual economy has more complicated relations with reality. So, before discussing the relation between virtual economy and reality, we will analyse the

features of virtual economy. Generally speaking, there are five features of virtual economy, such as high liquidity, high risk, high speculative goal, high profit margin and low stability.

4, the status of the virtual economy in China. In view of the fact that China's virtual economy is still in its early stage, though its stock market and bond market have developed quickly, but the total volume and depth of its development are still low. Therefore, it is very meaningful to research the relationship between the banking system and the growth of Chinese economy. From the angle of the development of virtual economy, the true origin and development of the virtual economy is also due to the appearance of the bank which deals with money. The appearance of banks brought about "the result of money capitalization and capital socialization" [74]. The appearance of banks has greatly increased the liquidity and scale of resources, which has made it possible to organize the money which was dispersed among individuals, to form a large and effective investment capital, which can be used to support the development of the real economy, enlarge the size of the real economy, and greatly promote the real economy. Bank, as the main component of virtual economy, can be a representative of virtual economy. Therefore, from the angle of representative of the bank and the actual situation in our country, this paper studies the relationship between Chinese banking system and economic growth.

Only if the degree of coordination between the real economy and the virtual economy can the overall economic growth be sustained. The virtual economy is the outcome of the development of the real economy. There is a double relation between the virtual economy and the actual economy. Virtual economy is highly dependent on real economy, meanwhile, the virtual economy has a relative independent movement pattern. Virtual economy is not only derived from the real economy, but also has great impact on the real economy.

To some extent, the virtual economy is developed on the basis of actual economic development, so as to overcome the bottleneck of actual economic development. Virtual economy meets the demand of the real economy, and promotes the development of real economy. The continuous growth of the real economy has not only brought about the objective development of fictitious economy, but also made it more solid basis for the development of virtual economy. Create conditions for the development of virtual economy. Therefore, the relation of virtual economy and actual economy can be classified into two parts: the virtual economy promotes the real economy and the virtual economy promotes the virtual economy.

The nature and soundness of the banking system is conducive to the real economy. Because of the difference of economy system, economy level, political background, history, and so on, the banking system of every country has a positive effect on the real economy. On the whole, the banking system in the developed countries is in line with the economic development scale, and it is more mature and comprehensive. Developing countries' economies are undergoing transition, and the banking system is also undergoing continuous reform and deepening. This paper makes a comparative study on the relation of foreign banking system with actual economy. It is significant for us to deepen the reform of banking system and set up the banking system.

American banking system. The United States of America is the world's most advanced economy, and its banking system is one of the best in the world. The U.S. banking system is one of the most competitive in the world's banking system. The American banking system is "a large and complicated system with the Federal Reserve as its core, commercial banks as its principal body, private and governmental specialized credit institutions and other non-banking institutions as its two wings, as well as foreign and United States International Financial Institutions" [78].

Looking at the evolution of the U. S. banking system, the U. S. banking system continues to develop along with the real economy. Following the American War of Independence, with the development of commercial and external trade and the need of war, in 1782, North America, the first bank in United States history, was founded. In 1790, the Federal Minister of Finance put forward the Law on the Establishment of the National Bank. The purpose of the establishment of the National Bank was to provide urgently needed paper money with a stable value and a place to store public deposits, thus facilitating banking and promoting economic development. The official establishment of the Federal Reserve System, the United States Central Bank, in 1914 marked the official formation of the United States' modern financial system, and also the last stage of the United States' modern banking system. Since 1920's, with the development and adjustment of U. S. economy, the United States banking system has changed a lot. After the Great Depression, for instance, the end of the United States' free banking system, the collapse of the one-state principle and the single-bank system, and the emergence of financial innovation, the United States eased financial regulation by means of a series of laws, eliminated barriers to M&A, and encouraged orderly competition in the banking sector. Judging from the United States' banking system reform, each reform is required by the actual economic development.

The recent development of the U. S. banking system is to encourage the bank to move into a hybrid business time. The Financial Services Modernization Act, which was passed by the United States Congress in 1999, set the stage in which the United States financial sector moved from stand-alone to mixed business. The American banking system innovated the development idea of "Efficiency and Competition", promoted bank, security, insurance, and so on.

The main characteristics of the American banking system include:

1. Multi-head management system with two lines. Since the United States is a federal state, it is hard to establish an absolute centralized financial system. Meanwhile, the United States has a large area, and there is a big difference in the level of financial development in different areas.

2. Have a lot of commercial banks. The United States has the most commercial banks in the world. After the 1990's, the United States still has over 9,000 of them. In the United States, a lot of commercial banks have adapted to the needs of integrated economy and decentralized economy. 3

. Rapid globalization. Over the past few years, U. S. bank branches abroad have been growing at a faster rate than domestic banks. This is a measure of how quickly American banking has become globalized. In the meantime, the U. S. banking sector is a two-way process, which includes the rapid expansion of the U. S. banking sector worldwide, as well as the establishment of branches in the United States. This characteristic of U. S. banking system ADAPTS to the United States' economic development, and has a significant effect on the United States' financial and economic impact.

British banking system. The United Kingdom was the first capitalist country to develop commodity economy and currency credit. Since the start of the Industrial Revolution, there has been a close connection between Britain's economy and banking. The development of Britain's banking system has gone through a series of reforms and improvements since it was founded in the New World in 1688, when it was founded in the New World, and when the Bank of England Act was promulgated in 1946. The banking system in Britain has been transformed from the promotion of the Industrial Revolution to the development of capitalism and the adaptation of the economic forms. Generally speaking, Britain's banking industry is also in constant development and reform with the development of real economy.

In general, the current United Kingdom banking system is a banking system with the Bank of England as its core and the UK Bank as its core. The main features of the British banking system include:

1. The British Hybrid Banking Age.

2. Sound banking supervision system. Since the Banking Act was promulgated and implemented in 1987, the United Kingdom has made some regulations on the banking sector, such as capital, big loan, liquidity, bad debt reserve, system and control, shareholders and so on.

3. Highly independent Central Bank. The Bank of England, as the United Kingdom Central Bank, has a high degree of independence and independence in the monetary policy.

4. Banking is highly monopolistic. Because British banks have gone through more than 100 years of market competition, the banking industry has been monopolised by means of continuous elimination, merger and reorganization. The United Kingdom's relative restricted geographical area and the relative balanced economic development of each area make this type of headquarters more successful.

5. Highly internationalized. Due to the special history of the United Kingdom's overseas expansion, the UK banks are highly internationalized. The Overseas Bank of England and the Overseas Bank of the United Kingdom together make up an important

component of Britain's banking system. Moreover, Britain's banking system, structure and rules have been influenced more by the changes of international finance, and the trend of globalization has become more apparent.

Japanese banking system. The banking system in Japan consists of Central Bank, Private Financial Institution and Government Policy Financial Institution. It is a comparatively sound banking system, which is characterized by Central Bank, Private Financial Institution and Government Policy Financial Institution.

The main features of the Japanese banking system include:

1. Central Bank has relative independence. The Bank of Japan, as the Central Bank of Japan, is under the supervision and guidance of the government, but has more autonomy in making and executing financial policy. Make sure it can cope with inflation.

2. Developing policy banking. The Government of Japan has set up a special policy bank on the basis of a number of specific laws to promote the development of the economy in certain areas.

3. Centralized banking monopolies are encouraged by the Government. The Japanese government supports and encourages banking concentration and monopolization, which greatly speeds up the concentration of Japanese banks' capital, which is beneficial to the establishment of relatively big banks in the short term.

4. The banking sector is active in the expansion of its securities business. The new Japanese Banking Law was promulgated in 1981, which allowed Japanese banks to operate securities business.

5. Banking was ahead of its time. The development of Japan's finance is ahead of that of the real economy, which leads to the heavy dependence of the industry capital. Bank plays a key role in the consortium, and the bank can control the monopolization of industry and commerce enterprises by means of credit link and share ownership, thus forming the "main bank system".

6. Continuous improvements have been made in the banking regulatory system. After the "Big Bang" in Japan and the bursting of the bubble, Japan's financial regulation has been strengthened.

German banking system. Under the encouragement of the government, Germany's banking system carried out the appropriate development strategy of the United Kingdom and Japan, and formed an integrated banking system. The German banking system consists of the Central Bank of Germany, the General Banking System and the Special Purpose Bank. The German Central Bank is independent of the Government, accountable to the Parliament, and is not restricted or interfered with in the exercise of its powers. Meanwhile, Germany's Universal Bank, as an independent financial institution, offers a wide range of services.

The main characteristics of the German banking system include:

1. Monetary stability is the primary responsibility of the Central Bank System. Germany pays equal attention to the stability of monetary value and the control of inflation and economic growth. The Central Bank carries out a rigorous monetary policy, and always insists on the protection of its currency.

2. A comprehensive banking system. The integration of the banking system in Germany leads to the interdependence of German banks and companies, and the cooperation between them has greatly promoted the economic development. However, the security and liquidity of capital and debt are hard to ensure.

2. Features of developed countries' banking system. Developed countries' banking system has been reformed for a long time, and its institutional construction is relatively complete. In general, the banking system in developed countries is the core of the central bank, the main part of the commercial bank and the supplementary of the professional bank. Developed countries' central banks acted as lender of last resort for ordinary banks. The Central Bank acts as a consultant to the Bank, and directs the Bank to overcome the external constraints of banking rules and monetary policy tools. The Central Bank does not have any administrative relation with the ordinary bank. Central Bank is highly independent and standardized. As the main part of the banking system, the trend of the integration, networking and globalization of the commercial banks is the newest tendency of the financial industry. Moreover, there are many special policy banks in developed countries, which offer effective financial services in certain areas, which can be used to guarantee the country's economic development. The main features of developed countries' banking system are becoming more concentrated, internationalized, and relatively

deregulated. Along with the economic development and the deepening of the financial finance level, the degree of monopoly in the developed countries is higher and all kinds of M&A among banks are increasing. With the development of economy globalization and the development of technology, as well as the development of economy and the expanding of international trade, the tendency of banking is becoming more and more obvious. Meanwhile, in order to support domestic banks in the fierce international competition, they have relaxed their control, and the mixed operation of banking has become a trend. In general, the banking system in developed countries ADAPTS to the demand of real economy in all phases, and has an active effect on the real economy.

3. Characteristics of developing countries' banking systems. In comparison with developing countries, the contribution of the banking system to the real economy is more direct.

The main features of the banking system in developing countries include:

1. The state-owned banks form the principal part of the banking system. Banks in the developing world are mostly owned by the state. By means of the state-owned commercial banks and the specialized banks, we have formed a powerful national finance system, which is more direct and central to the development of the national real economy. In the meantime, the widespread nationalization has brought about more strict control of the central bank and the management of foreign exchange, and more direct and strong government interference in the credit system.

2. Special circumstances restrict the selection and use of monetary and fiscal policies. Because of the low level of economic monetization and imperfect market development in developing countries, the proportion of modern economy in the whole economy is very small. Most of the developing countries have a common financial market, but they do not have a mature government-bond market, which leads to a shortage of non-monetary financing. Under such circumstances, the only way to keep inflation under control is to reduce the budget deficit and reduce the aggregate demand.

3. Developed countries' interest rate is decided by the market mechanism, and the Central Bank can control the interest rate through the intervention of the financial market. However, because of the absence of this mechanism, the development countries can only

use the direct administration method to control the interest rate, so the Central Bank is unable to fully utilize it.

Banking systems of all kinds and the real economy.

1. Real economic impact on the banking system

Because of the difference in the level of the real economy, the way of development, politics, economy, culture, etc. But because every country's banking system serves the actual economic development, every country's banking system is influenced by the actual economy.

The impact of real economic development on banking system. A country's real economic development level is the key factor that decides the level of banking system. The bank, as an intermediary for the real economy, should take the real economy as the starting point. The level of the real economy determines the level of financing and currency circulation, and the different levels of the real economy need different banking systems. As a result, the selection and establishment of different banking systems are influenced by the actual economic development level.

Third, the impact of commodity trade level on the real economy and the level of market mechanism on the banking system. The establishment of banking system is closely related to the size and form of money circulation in a country. Under the non-market economy, the exchange can be substituted by administrative transfer or direct distribution. Therefore, the demand for money is relatively low. In general, the higher the level of commodity economy, the more perfect the market operating mechanism, the bigger the currency circulation scale, the more urgent it is to establish the bank's money circulation medium.

Third, the impact on the banking system of the advanced communication and information industry. The development of modern banking depends more and more on communication and IT. It is necessary for transnational banks to operate in a large scale international operation system by means of modern communication and IT.

2. Banking system classification and its relation to the real economy

The banking system can be classified into various categories according to different classifications. In this paper, the banking system is classified in terms of the development of the banking system and the banking system.

In view of the development and forming of the banking system, there are three main types of banking system:

The banking system came into being in the United Kingdom as a representative of the natural market. The British banking system is a system based on spontaneous market competition, which is gradually improved without the intervention of the state. This is consistent with the real economy of England, which originated from the Industrial Revolution. This decides that the UK banking industry will be able to develop and improve according to the real economy without external competition pressure. Therefore, the gradual development of the real economy and the improvement and standardization of the market economy have decided the characteristics of the banking system gradually. In the process of natural competition, the development of the banking system has also played a vital role in promoting the economic growth. Their interaction has grown naturally.

Japan and Germany as the representative countries to intervene artificially in the banking system. Because both Japanese and German were late capitalist countries, they were transformed into capitalism by reform. Consequently, the real economy has not developed in a gradual manner, as in the United Kingdom, without external competition. The real economy in Japan and Germany followed the national capitalism development route from the beginning, and the real economy developed with the color of state interference. Therefore, in the initial period of their development, the two countries adopted the strategy of financial advancement, directly setting up all kinds of specialized banks, and actively restructuring and elimination of medium and small-sized banks. He's developing his banking system by building it up. Therefore, it can be seen that the government's interference and the key support in the development of the real economy result in the formation of the human structure. The main reason for this is that its actual economic development base is lagging behind and the development pattern of catching up.

The United States has a two-tier, multi-managed banking system. The United States' two-line multi-head banking system is a development model which has been explored for a long time in the United States. The United States of America, with its large population and varying levels of development, has found it hard to cope with the complexity of the situation. Moreover, the United States Federal Political System also exerts a great influence on the forming of the banking system. Therefore, the United States banking system is also a kind of adjustment to its actual economic development. The United States' banking system has developed naturally as well. However, the most significant difference between the United States and United Kingdom is that because of its vast territory, there is a great disparity in the level of development of each area, unlike the United Kingdom, which has a comparatively average level of development. In addition, the United States' federal political system and economic decentralization have also contributed significantly to the development of its banking system.

In view of the development of the banking system, the banking system with its own features has been formed even though there are different ways to develop and depend on each other. But in terms of development, every country's banking system is based on its actual economic development. Every country's banking system is constructed in accordance with the development of the real economy and the different ways of developing the real economy. Therefore, from the angle of development, every country's banking system is closely linked with the national real economy. In terms of banking operations worldwide, the banking system falls into three categories:

1. Specialized banking system means a banking system that operates independently. The special banking system, also called the segregated banking system, stresses the unity of the banking business, that is, the different types of banks are engaged in different business activities, and the banks are not permitted to carry out mixed operations. This banking system is represented by the Bank of Japan. Japan's dual economic structure calls for two things: a multi-tiered, specialized banking system. The Japanese banking system is divided into several sectors. Professional banking system is beneficial to the government's strict control, and it has the features of multi-direction, hierarchical and sub-system. Meanwhile, the special banking system helps to concentrate capital, and gives priority to specific areas and relevant industries, which helps to adjust and reform the economic structure of a country, which is beneficial to macroeconomic control and

control. In countries with severe capital shortage and urgent development, the specialized banking system is of great importance to focus on the utilization of financial resources and promote the rapid development of the real economy. But the professional banking system is not conducive to the development of professional banks, which restricts their expanding capacity and makes them less competitive. On the other hand, the special bank's ability to mobilize capital is limited, and it can only mobilize the capital from one area or another, so it is hard to satisfy the demand of the real economy.

2. The integrated banking system is a hybrid banking system. Integrated Banking System, also called Mixed Banking System, is a banking system which does not restrict the nature and range of banking activities. The integrated banking system is represented by Germany. There is no restriction on the scope of operation of comprehensive banks, and they can determine their business scope and business scope based on their business ability. Banks can be engaged in short term loan, long term loan, investment bank, security, insurance, and so on. Integrated banks can satisfy the demands of financial institutions to maximize their profits. When the profits of the traditional banking business are reduced, they turn to other relevant industries. Meanwhile, it will be helpful for the banks to diversify their investment risks, gain profits by diversification and diversification of channels, and facilitate financial innovation. The weakness of the comprehensive banking system is that "the banks may engage in high risk investment and use the advantage of capital to manipulate the stock market, which leads to the equity market being unbalanced, which increases the systemic risk of the bank, and poses a challenge to the safety of the bank's capital, which leads to the chaos of the whole credit system." Nowadays, the banking system in developed countries is coming into a new age. Integration and integrated operation is the trend of the developed countries' banking system. In 1981, Japan promulgated the New Banking Law to permit the mixed operation of banks, and in the United Kingdom, after the financial reform in 1986, the Financial Services Modernization Act was adopted in the United States, which ushered in the era of hybrid banking.

3. Hybrid banking system. The hybrid banking system means that there are independent and mixed banks in the banking system of a country, and they form a hybrid

banking system. Due to the impact of the new trend of globalization and globalization, some countries have started to reform their banking system from specialized banks to integrated banking systems. Under the condition of keeping the original relatively specialized banking system, the integrated bank can exist, and the transformation is done in the same way as the ordinary commercial banks.

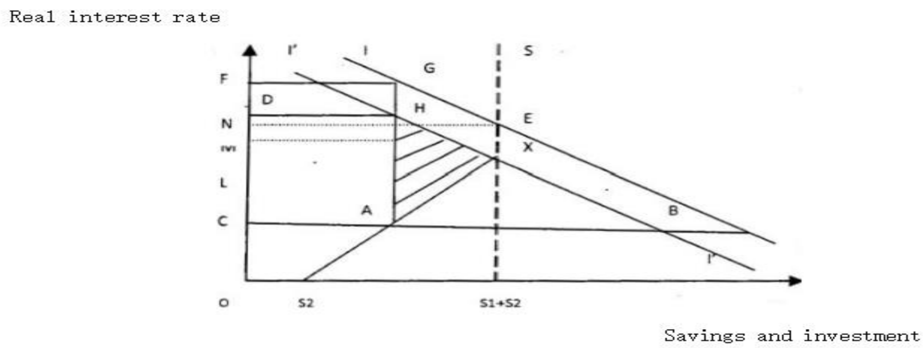
From the angle of banking business, there are a lot of differences in the range of business, and whether the banking systems in different countries are operating independently. In general, the segregated banking system is favored by the developing countries because it can concentrate on specific areas and relevant industries, which is helpful to adjust and reform the economic structure, adjust and control the macro economy, and supervise the government. A segregated banking system would be more appropriate for a fast-catching and expanding real economy. The hybrid banking system is favored by more and more developed countries because it can satisfy the needs of maximizing profit, spreading risk, encouraging financial innovation, adapting to new technology and developing direction. The hybrid banking system is more suitable for the more developed and mature real economy. Hybrid banking is a transitional form in between. The hybrid banking system is fit for the development of the real economy from the development level to the advanced level. The selection of the banking system should take into account the degree of national economic development. Meanwhile, as the real economy continues to grow and advance, it is also possible to transform it among different banking systems, so that it can be used to establish a banking system which is suitable for the real economy.

The nature and soundness of the banking system is conducive to the real economy. Banking systems have a complementary effect on the real economy. Firstly, a comparatively sound banking system can effectively mobilize savings, direct them to produce and invest, so that the real economy can be developed. Second, the inefficient bank system can't satisfy the demand of the real economy, which hinders the development of the real economy. Last but not least, there is a development of banking system between a sound banking system and an underdeveloped one, namely, a constrained banking system. The banking system is a transition from the former to the former, and it also has some influence on the actual economy.

1. Theory that the banking system inhibits the development of the real economy

Central Bank's interest rate control in developing countries does not reflect capital shortage. In addition, the Central Bank failed to control inflation effectively, so the real interest rate became negative. Not only does it not attract savings, but it also stimulates credit demand and widens the fund gap. In the face of capital shortage, banks use "rationing" to grant credit. Owing to the large proportion of state owned banks in the entire banking system, a lot of loans go to the privileged state enterprises and agencies, or to the private enterprises which have special relationship with the banks. However, the efficiency of such enterprises is usually lower, which decreases the overall efficiency of capital utilization. Resulting in inefficient capital allocation. In the meantime, developing countries' central banks could impose exchange controls, which would lead to overvaluation of their currencies and harm their exports. Under these circumstances, the banking system as a whole, through its inability to control inflation and excessive intervention in the financial markets, has had a depressing impact on the real economy.

The inhibition of an unsound banking system on real economic growth is illustrated by the following model (fig. 1.3).



Source: The author organizes and analyzes

Fig. 1.3. Negative impact of an unsound banking system on the real economy

Fig. 1.3 shows the actual deposit and loan rates on the vertical axis, and savings and investments on the horizontal axis. Let's assume that the economy is split into two sections, a traditional and a modern one, and all the banks are concentrated in a modern department. If the actual deposit rate is zero, the traditional sector's savings S1 are not willing to deposit in the banking system, and only the savings S2 of the modern sector can be partially deposited, since they require settlement or loan from the bank, as shown in the horizontal axis of the OS2. Only when the real interest rate rises will the savings flow to the banking system. That is, the line from S2 goes up, and the savings of both sectors will be absorbed at point X. Therefore, the saving line is S2XS, which means that social savings are in the same direction as the real interest rate. On the other hand, the real investment line II has a downward slope, which shows that the real investment and the real loan interest rate are opposite, and it also shows that the return of the real investment will decrease with the increase of investment and market saturation. The Savings and Investment Lines meet at Point E, which is in theory the Equilibrium Rate. But in the course of operation, there will be expense, if deposit and loan interest rate is equal, the banking system will not work.

Assuming that EX is the operational cost of the banking system, the II row, parallel to II, is derived from X and is an investment line less the operational costs of the banking system. Therefore, under the condition of equilibrium, the bank's lending rate is E and its deposit rate is X. In the OC level, the supply of capital should be CA and CB, and there is an excess of capital requirement, so the bank offers credit credit by rationing. Thus, the small number of companies that have access to bank credit can obtain surplus profits equivalent to AHDC, whereas the loss of the entire company is an AXH triangle. Moreover, if there is a high degree of fragmentation in the banking system, which could increase the lending rate to OF, AHDC's additional profits would flow into the banking system. From the point of view of real economic growth, it will result in inefficient allocation of resources and unfair allocation of resources, which will cause negative influence on real economic growth. So a weak banking system is a major obstacle to real economic growth.

2. The theory that the banking system supports the real economy. On the other hand, in a relatively healthy banking system, the Central Bank will not interfere too much with the financial market and financial system, so that the interest rate and exchange rate can

reflect the supply and demand of capital and foreign exchange. Meanwhile, it can satisfy the real economy's capital demand with proper interest rate, and finally promote the development of real economy. Under such circumstances, the banking system has played an even more important role in stimulating the real economy.

3. Influence Theory of Moderate Restraint Banking System on Real Economy. In view of macroeconomic stability and low and predictable inflation, the growth of the real economy can be aided by a modest set of restrictions, including deposit controls, market access restrictions, and maintaining real interest rates below balance but positive. The essence of moderate restraint on the banking system is that the Central Bank uses a set of financial policies to create rental opportunities for the private sector, i.e., to generate more returns than would otherwise be possible in a competitive market.

These rents contribute positively to the reduction of information issues that hinder a fully competitive market. In particular, this rent has the following positive effects:

1. It creates franchise value for the bank. The franchise value provides a long term incentive for the bank to punish the risk of risky loans, so as to improve the stability of the bank's operation and reduce the credit risk.

2. Setting aside the rental for special bank loans may encourage the banks to conduct certain operations in the adverse market conditions.

In fact, the moderate restraint of the banking system is a transitional phase, which advocates selective intervention to facilitate, not hinder, the improvement of the banking system when developing countries are unable to improve their banking system immediately. To prevent developing countries from intervening further in the banking system, so as not to create a cycle where the banking system is stifling the growth of the real economy.

1.3. The type of Chinese banking system and its promotion to the development of real economy

The banking system in China consists of the following:

1. Central Bank, namely the PBOC. In 1983, the PBOC started to take over the role

of the Central Bank of China, and the Bank of China started to establish a banking system centered on the Central Bank. The People's Bank of China is responsible for the national finance affairs under The State Council. It is responsible for issuing money, supervising banks, financial institutions and corporations.

2. Commercial banks. The commercial bank is the principal part of the banking system in our country. It consists of the Chinese Industrial and Commercial Bank, the Chinese Agricultural Bank, the Chinese bank, the China Construction Bank, the State Stock Bank, and the regional commercial banks.

3. Policy banks. Among them are China Development Bank, China's Export-Import Bank and China's Agricultural Development Bank.

As far as the operation range of our banking system is concerned, the banking system of our country belongs to the independent banking system. In the early 90's, when the financial overheating and the financial disorder, The State Council made clear the principle that the bank should operate separately and manage separately. Since 1995, Commercial Bank Law, Securities Law and Insurance Law have promulgated and implemented China's banks' independent operating system. Later, CSRC, Insurance Regulatory Commission and Banking Regulatory Commission were established in China. With China's accession to WTO and the development of economy and finance globalization, the management system of Chinese banks is also affected by the loss of revenue and risk. In 2005, Commercial Banks issued "Pilot Management Measures" for the establishment of fund management companies, which opened a new window for the mixed operation of Chinese banking system.

In view of the development of Chinese banking system, Chinese banking system is constructed artificially, and from the point of view of system economy, it is compulsory change and development. After Reform and Opening-Up,

Reconstruction and development of Chinese banking is filled with the color of government. Between 1979 and 1984, the PBC became the Central Bank. Secondly, from 1985 to 1988, China gradually relaxed financial and banking control, lowered the entry threshold for financial institutions and banks, and accelerated the growth of stock banks. From 1988 to 1991, because of the excessive financial speculation in China, the government tightened its control on the banking sector, closed its business scope, and adopted the principle of separation in 1993. The promulgation of "Commercial Bank Law" in 1995 accelerated China's commercial banks to operate independently, and separated commercial credit from policy credit. Since 2003, China has carried out the reform of the four state banks' shares and listed them on the stock market by removing the bad assets of the four state-owned banks. Up to 2010, the four big state-owned commercial banks in China have been listed and completed the stock transfer. In the course of building and developing China's banking system, the Chinese banking system is based on the macro economy and the real economy. The reform of Chinese banking system is accompanied by the reform of the market economy, the transformation of the global economy and the opening of the financial market. Therefore, from the angle of development, the construction and perfection of Chinese commercial banking system is a kind of compulsory system change with obviously man-made features.

3. Key features of our banking system. The main characteristics of Chinese banks include:

1. The PBC's Central Bank's function has been strengthened step by step, and its financial macro-regulation system has been improved day by day. In 1983, the PBOC started to function as the Chinese Central Bank. In 1995, the P. R. R. C. P. R. C. C. P. R. C. C. C. The PBOC is not allowed to issue overdrafts to the government, not to buy government bonds directly, or to provide loans or guarantees to the administrative departments at all levels. A series of measures have been taken to guarantee the independence of PBOC. In 1998, the PBOC implemented a reform of its management system, which further strengthened the independence of the execution of monetary policy and strengthened the independence of the Central Bank. In 2008, in response to the global economic crisis, the PBOC firmly implemented a moderately loose monetary policy, which helped to maintain adequate liquidity in the banking system and play an important role in regulating interest rate.

2. The operation mechanism of Chinese commercial banks should be improved and the policy finance should be separated from the commercial finance. Between 1979 and 1984, four big state banks were restored and established in China. In 1995, China adopted

the "Commercial Bank Law", which made it clear that commercial banks should be independent and take on their own risks. Since 2003, the four big Chinese commercial banks have carried out the reform. By the end of 2006, the PBOC, China Construction Bank, ICBC and Industrial and Commercial Bank have completed their share reform. In 2010, the Chinese Agricultural Bank was also successfully restructured.

3. Set up a Special Policy Bank. In 1993, The State Council passed the Financial System Reform Decision, which established China Development Bank, Chinese Agricultural Development Bank and Export-Import Bank. The establishment of the special policy bank marks the separation between the policy bank and the commercial bank in China. It also improves the integrity of our banking system.

4. Break the monopoly of four state-owned commercial banks. Since 1987, many commercial banks have been rebuilt in China, including CITIC Industrial Bank, China Everbright Bank, Huaxia Bank, China Minsheng Bank,, China Merchants Bank, Fujian Industrial Bank, and Shanghai Pudong Development Bank, and so on. By setting up a group of joint-stock commercial banks with distinct ownership, independent operation, and self-accountability, the monopoly status of the four state-owned commercial banks has been broken, which has promoted the market competition and raised the whole efficiency.

5. The banking system has been basically completed. Through the reform and opening up for many years, the banking system of our country has basically taken shape. The central bank is the core, the commercial bank is the main body, the commercial bank is separated from the policy bank. The division of responsibilities between different banks is clearer, and the business is clearly defined.

Currently, the deficiencies of Chinese banking system:

1. Central Bank's macro-regulation and financial regulation is still weak. Although China has set up an independent Central Bank, its position, functions and functions have been changed. However, the Central Bank of China is still weak in macroeconomic regulation and supervision. Neglect to regulate the assets and liabilities and risk of financial institutions, be easily affected by the government, and lack of independence.

2. China's commercial banks have diversified ownership, but the state banks remain

dominant. Through a series of reforms, Chinese commercial banks have become diversified, including joint venture banks, foreign-funded banks, overseas banks, joint stock banks, etc. Although the market competition among commercial banks is becoming more and more intense, in general, the four state-owned commercial banks still play an important role in Chinese commercial banking system. The proportion of the four state-owned commercial banks is dominant in the establishment of the system outlet and the proportion of the deposit and loan.

3. There are a number of areas for improvement in the operation and management of commercial banks. There are some problems in China's commercial banks' operation and management, such as the irrational credit and investment institution, the low ratio of long term loans, and so on.

The Central Bank System has been formed in the course of every country's real economic development, and it has played an important role in the development of the real economy. Today, all countries in the world have adopted the Central Bank System. In the context of financial globalization and finance, the Central Bank System is especially outstanding in the development of the real economy.

The Central Bank can promote the development of the real economy by strengthening the financial supervision and keeping the virtual economy stable. It can also promote the real economy by managing and balancing the foreign exchange reserves and the international balance of payments. Although the Central Bank has a lot of ways to stimulate the real economy, one of the main transfer mechanisms is that the Central Bank controls inflation by means of monetary policy, thus influencing the real economy.

Through the formulation of all kinds of monetary policies and the use of all kinds of instruments to regulate and control the money supply, the Central Bank has promoted the development of the macro-economy and the actual economy. Due to the influence of monetary policy on aggregate demand and total supply, general price level and balance of payments, it will ultimately influence real economic growth and economic structure change. Therefore, the currency policy is an important measure in the modern market economy. The Central Bank is independent in formulating monetary policy, making use of its right to issue money and all kinds of policy measures, so as to achieve the equilibrium of total demand and total supply, to keep monetary value stable, and to promote real economic growth. Every country's monetary policy instruments are generally classified into common currency policy instruments, chosen monetary policy instruments, direct credit control and indirect credit guidance. Among them, the common policy tools include deposit reserve, rediscount, and open market operations. Common policy instruments are mainly used to adjust the money supply, so as to improve the actual economic growth. Selective currency instruments are used to regulate credit in certain specific fields, including the regulation of consumer credit, the regulation of credit in the stock market, and the regulation and control of real estate credit. Direct credit control refers to the direct control of commercial bank's credit activities through administrative orders or other methods. Indirect credit guidance is to affect the credit creation of commercial banks indirectly. The Central Bank applies all kinds of policy instruments and measures to control inflation, and gives proper attention to the stable output that is needed for economic growth, so that the real economy can be developed. Since its founding, the Central Bank of China has always paid close attention to the stability of the monetary policy, the control of inflation and the stability of the macro economy. In 2008, for instance, the Central Bank of China decided to change its currency policy from "tight" to "moderate". In 2008, the Central Bank of China responded to the financial crisis with a flexible reduction in the intensity of open market operations, a four-fold reduction in the RMB reserve requirement, a five-fold reduction in the RMB benchmark lending rate, and a four-fold reduction in the RMB base deposit rate. It is necessary to prevent the rapid growth of economy from overheating, and to avoid the structural increase of price to the apparent inflation, and to guarantee the growth of the real economy and the stable market. The Central Bank of China adopted discretionary measures and applied all kinds of monetary policy instruments in an all-round way to ensure that the objectives of controlling inflation and stabilizing the real economy were achieved. Meanwhile, the Central Bank of China has played a significant role in the fields of finance reform, the development of financial markets, the development of financial products, and the strengthening of financial supervision. Generally speaking, the Central Bank of China plays an important role in the promotion of the real economy.

Policy Bank is a kind of bank which is specialized in carrying out and coordinating the policy of the government. It is also an important component of every country's banking system.

The main mechanisms of policy banks to support the real economy include:

1. The provision of policy loans. In the course of the development of the real economy, there are some areas which are not willing to finance because of risk or profit, but they are important for the development of society and economy. The policy banks offer preferential funds to these projects through the provision of policy loans. This paper aims to promote the development of those industries which have positive externalities to the real economy, so as to promote the real economy.

2. Directing social capital to the areas of policy support. Policy bank's lending funds mainly come from national finance. Under the leadership of the government, more private investment will be introduced into the policy support area, and financial support will be ensured in key areas, and the relevant areas will be further developed.

3. Policy guarantees. Through the market operation, the policy bank makes use of the government credit to provide credit security to SMEs, and gives support to the small enterprises whose resources are not well distributed because of their small size and market share, and make full use of the leverage function of credit guarantee. Stimulate real economic growth.

4. Develop using PPP model. The PPP (Public-Private-Partnership) model is a type of partnership between public authorities and private companies. The policy banks may use BOT (build-operate-transfer) mode to provide concession financing for infrastructure. Through policy banks, the government can speed up the construction of basic infrastructure by using franchise rights in return for credit.

The policy bank in China directs the social capital to support the construction of the real economy by cooperating with the government, the trade association, the big business, the social security, the security, the insurance, the trust and so on.

The effect of Chinese policy banks on the real economy is as follows:

1. Promote the construction of infrastructure, basic industry and pillar industries. Such as coal, electric power, oil transport, agriculture, forestry, water conservancy,

communication and public infrastructure, etc. In 2018, China's policy banks issued RMB 816 billion in the key areas of "Two Bases and One Branch", and supported South-to-North Water Diversion Project, Beijing Olympic Games, Shanghai World Expo and Beijing-Shanghai High Speed Railway.

2. Support China's regional economy through loans, guarantees and guidance. There is great difference in the level of regional development in our country. Guided by the strategy of developing the west and revitalizing the old industrial zone in Northeast China, the regional economy is developing gradually. The policy banks in our country have contributed a lot to regional economic coordination by means of capital tilt. In 2018, Chinese policy banks issued RMB loans amounting to RMB 818.3 billion and RMB 813 billion in RMB in Northeast China.

3. Promote China's industry development and independent science and technology innovation by means of financing, financing, and policies. The development of Chinese real economy is in the process of upgrading industry, and the development of science and technology and self-innovation are the main impetus for the development of Chinese real economy. Through the support of science and technology innovation and industry upgrading, Chinese policy banks have promoted the transformation of Chinese real economy and promoted the development of Chinese real economy.

4. Promote Chinese energy conservation and emission reduction by implementing green credit, and promote the sustainable development of Chinese real economy. The policy banks in China will carry out the policy of saving energy and protecting the environment. They will pay more attention to the implementation of green credit. They will pay more attention to wastewater treatment, clean energy, river basin management and so on.

5. Support China's agriculture by supporting financial policies and enhancing credit support. Although agriculture is the main industry in China's real economy, it has a close relationship with China's real economy. The policy banks in China have carried out oil and food credit, plum blossom credit, agricultural scientific and technological loan, agricultural production loan, special reserve loan, leading business loan, rural circulation system building loan, rural infrastructure building loan, rural small business lending.

6. Promote the healthy development of Chinese real economy through the promotion of international cooperation. By carrying out the National Strategy of "Going Global", Chinese Policy Bank has made great contributions to the development of enterprises. The World Bank, International Monetary Fund, Asian Development Bank, Shanghai Cooperation Organization members, and other overseas financial institutions have established a good financing platform for Chinese enterprises. It will speed up the process of international finance internationalization by joining the regional and global financial institutions, which will greatly improve the economic growth capability in the context of globalization.

The mechanism that the commercial bank promotes the real economic development.

1. The model analysis of the promotion of the real economy by the commercial banks. The commercial bank is the most widely used and promoted bank in every country's banking system. It is the main body of the bank system, the basis for the establishment of the Central Bank and the main guidance of the monetary policy.

2. China's commercial banks to promote the real economy. The promotion of Chinese commercial banks to the real economy is as follows:

Through the collection of deposits and the issuance of loans, the promotion of the real economy. According to the China Financial Yearbook 2019, the total amount of RMB deposits in China was 46.6 trillion yuan, up 19.7 percent, and the RMB lending reached 30.3 trillion yuan, up 18.8 percent. Through short term consumer loans and corporate loans, medium and long term loans to infrastructure, manufacturing and real estate, the commercial banks have made sure to invest and accumulate capital for the construction of Chinese real economy.

The commercial banks improve their efficiency to promote the real economy. Based on the above model analysis, it is found that the efficiency of the commercial bank will influence the rate of the equilibrium growth of the real economy. It is true that China's commercial banks are promoting the real economy through continuous improvement in efficiency. In the highly competitive banking market, Chinese commercial banks have taken active steps to adjust credit structure, expand institution business, actively implement financial innovation, expand intermediary business, set up distribution channels widely, speed up sales channels and build specialized operating agencies, promote information services and electronic banking products, and improve risk management and control system. Enhance the operation efficiency of the bank, and provide more financial support to the real economy, and promote the development of real economy.

In this chapter, the author studies the mechanism of China's banking system to promote the real economic development. By discussing the relation of virtual economy with actual economy, this article provides a foundation for the development of Chinese banking system. Based on the literature review and comparative research, this chapter discusses the relation between the different banking system and the actual economy in theory. Based on this, this chapter further expounds the different promotion mechanism between the Central Bank, the Policy Bank and the Commercial Bank. Based on the model, the paper illustrates the effect of different kinds of banks on the development of the real economy.

CHAPTER II
STUDY OF THE ROLE OF THE BANKING SYSTEM IN THE STRUCTURE OF THE REAL ECONOMY

2.1. Financial activities of the Agricultural Bank of China

The Agricultural Bank of China was founded in 1951 as the Agricultural Cooperative Bank. Since it was restored in February 1979, the bank has gone through various stages of development, including the state specialized bank, the state-owned commercial bank and the state-owned holding commercial bank. In January 2009, the Bank was restructured as a Limited Company. Agricultural Bank of China was listed in Shanghai Stock Exchange and Hong Kong Stock Exchange in July 2010.

Agricultural Bank of China is one of China's main integrated financial services providers. The Agricultural Bank of China emphasizes the importance of "Leading Bank for Rural Revitalization" and "Leading Bank for Serving the Real Economy". The bank has a comprehensive portfolio, a wide distribution network, and an advanced technology platform. It also provides its customers with a broad range of corporate and retail banking and asset management, including investment banking, fund management, finance leasing, and life insurance. Up to 2023, the bank's total assets amounted to RMB 3,982,989 million (as shown below), RMB 226,146.21 million in loans and advances, RMB 288,984.68 million in deposits, 17.14% in capital adequacy, and RMB 269,820 million in net profit.

By 2023, there are 22 843 branches in Agricultural Bank of China, including the head office, the head office, 4 branch offices, 4 branches, 4 research institutes, 37 first level branches, 409 second level branches, 3316 first level branches, 19,025 grassroots commercial organizations, and 46 others. There are 13 overseas branches and 4 overseas subsidiaries. The Bank has 16 main subsidiaries, 11 of which are domestic and five abroad.

Revenue Statement Analysis. In 2023, the bank made RMB 269,820 million in net profit, up by RMB 10,954 million, or 4.2 percent more than last year.

Unit: RMB million, except percentage.

Table 2.1.

Profit Statement of Agricultural Bank of China 2022-2023

Item	2023	2022	Increase/Decrease	Growth Rate (%)
Net Interest Income	571,750	589,883	-18,133	-3.1
Net Operating Income	80,093	81,282	-1,189	-1.5
Other Non-interest Income	42,985	23,487	19,498	83
Total Operating Revenue	694,828	694,652	176	0.03
Less: Operating & Management Fees	235,296	227,940	7,356	3.2
Taxes and Surcharges	7,260	6,525	735	11.3
Credit Impairment Loss	135,707	145,266	-9,559	-6.6
Other Asset Impairment Loss	226	59	167	283.1
Other Operating Costs	7,546	6,877	669	9.7
Operating Profit	308,793	307,985	808	0.3
Plus: Non-operating Income/Loss Net	-1,374	-1,532	158	-
Pre-tax Profit	307,419	306,453	966	0.3
Less: Income Tax Expense	37,599	47,587	-9,988	-21
Net Profit	269,820	258,866	10,954	4.2
Attributable to: Parent Company Shareholders	269,356	259,232	10,124	3.9
Minority Interests	464	-366	830	-

Source:The author organizes and analyzes

Net interest revenue is the biggest part of Agricultural Bank of China, accounting for 82.3% of the operating revenue in 2023. In 2023, the bank's net interest revenue reached RMB 571,750 million, RMB 18.133 million less than last year. Of this, the increase in size led to an increase in net interest income of RMB 63,668 million, while the change in interest rates led to a reduction in net interest revenue of RMB 81,801 million. Net interest margins of 1.60 per cent and 1.45 per cent, respectively, were reduced by 30 and 28 bps, mainly because of:

As a result of the bank's support to the real economy, a downward revision of the LPR, and a further revaluation of equity assets, such as individual housing loans, the return on interest-bearing assets decreased.

2.Under the influence of the market environment, the interest rate of interest-bearing debt is increased.

Net interest revenue: RMB 18.133 million, or 3.1 per cent, from 2022.

Net fee and commission revenue: RMB 1.189 million, or 1.5%, from 2022.

Other non-interest income: RMB 19.498 million, or 83.0 percent, from 2022.

Total operating income: RMB 176 million, or 0.03% higher than 2022.

Business and administrative charges: RMB 7.356 million, or 3.2%, from 2022.

Taxes and surcharges: RMB 735 million more than in 2022, or 11.3 per cent.

Loss of credit impairment: RMB 9.559 million, or 6.6%, in comparison with 2022.

Other impairment losses: RMB 167 million, or 283.1 per cent higher than 2022.

Other operating expenses: RMB 669 million, or 9.7 percent, from 2022.

Operating profit: RMB 808 million, or 0.3 per cent higher than 2022.

Net non-operating revenue and expenses: RMB 158 million more than 2022.

Profit before tax: RMB 966 million, or 0.3%, compared with 2022.

Income tax expenditure: RMB 988 million, or 21.0% less than in 2022.

Net profit: RMB 10,954 million, or 4.2 percent, from 2022.

Net profit for parent company shareholders: RMB 10.124 million, or 3.9%, compared with 2022.

Profit and loss of minority shareholders: RMB 830 million more than 2022.

Between 2022 and 2023, there was a 3.1 percent drop in net interest revenue of RMB 18.133 million.

Between 2022 and 2023, the net fee and commission revenue fell by RMB 1,189 million, or 1.5 percent.

Other non-interest income from 2022 to 2023 was RMB 19,498 million, up 83.0 percent.

Between 2022 and 2023, the total operating revenue rose by 0.03 percent to RMB 176 million.

Between 2022 and 2023, business and administrative charges rose by 3.2 per cent to RMB 7356 million.

Between 2022 and 2023, RMB 735 million was added, up 11.3 per cent.

Between 2022 and 2023, the loss of credit impairment was reduced by RMB 9,559 million, or 6.6 percent.

Between 2022 and 2023, the loss of other assets is RMB 167 million, up 283.1 percent.

Between 2022 and 2023, the cost of other operations grew by 9.7 percent to RMB 669 million.

Between 2022 and 2023, the operating profit grew by 0.3 per cent to RMB 808 million.

Net non-operating revenue and expenses

Between 2022 and 2023, the net non-operating revenue and expenses increased RMB 158 million.

Between 2022 and 2023, earnings before tax rose 0.3 percent to RMB 966 million.

Between 2022 and 2023, income tax expenditure fell by RMB 988 million, a decline of 21.0 percent.

Between 2022 and 2023, net profit rose 4.2 percent to RMB 10954 million.

Between 2022 and 2023, the net profit of the parent company's shareholders rose by 3.9 percent to RMB 10124 million.

Between 2022 and 2023, the profit and loss of minority shareholders increased by RMB 830 million.

The financial data for 2023 indicate that the firm's overall performance has been volatile. There was a slight decline in net interest income and net fee and commission revenue, with RMB 18.133 million (3.1 percent) and RMB 1,189 million (1.5 percent), respectively. Other non-interest income, however, rose 83.0 percent from RMB 23,487 million to RMB 42,985 million. Total operating revenue rose 0.03 percent, but the cost of business and management, tax and surcharge, loss of credit impairment, and other asset depreciation, all increased. In spite of the challenges of rising costs, its operating profit rose 0.3 per cent to RMB 308,793 million. The net profit also improved, rising 4.2 percent from RMB 288866 million to RMB 269,820 million. The net profit attributed to the parent company's shareholders and the profit and loss of the minority shareholders both increased.

Overall, in 2023, the company maintained stable profitability, despite some challenges, but achieved an increase in net profit thanks to effective cost control and revenue growth.

By 31 December 2023, the bank had a total assets of RMB 39,872,989 million, up by RMB 5,947,501 million, or 17.5 percent more than last year. Of these, net lending and deposits rose by 14.5% to RMB 2,757,930 million; financial investment rose by RMB 1,683,550 million, up 17.7%; cash and deposits at the Central Bank rose 14.6%, up 14.6%; interbank deposits and loans rose by RMB 465,042 million, up 41.1%, mainly because of the increase in the number of cooperative interbank deposits; the value of financial assets bought for resale rose by RMB 637,372 million, up 54.4 percent, mainly because of the increase in the number of securities bought for resale.

Table 2.2

Balance sheet of Agricultural Bank of China 2022-2023

Item	Amount (2023)	Percentage (2023)	Amount (2022)	Percentage (2022)
Total loans and advances	22,614,621	54.5	19,763,827	55.9
Less: Loan impairment allowance	882,855	N/A	782,854	N/A
Net loans and advances	21,731,766	N/A	18,980,973	N/A
Financial investments	11,213,713	28.1	9,530,163	28.1
Cash and balances with central banks	2,922,047	7.3	2,549,130	7.5
Due from banks and financial institutions	1,596,257	4	1,131,215	3.3
Repurchase of financial assets	1,809,559	4.5	1,172,187	3.5
Other	599,647	1.6	561,820	1.7
Total assets	39,872,989	100	33,925,488	100

Source: The author organizes and analyzes

Net loans and advances represent 54.5 per cent of total assets and constitute a major part of the company's assets.

The financial investment accounted for 28.1%, indicating that the company invested more in the field of investment.

Cash and deposits with the Central Bank, deposits with interbank and credit funds, buying and selling financial assets, etc. account for 7.3 per cent, 4.0 per cent, 4.5 per cent and 1.6 per cent respectively.

Loans and net deposits also represented 55.9 per cent of total assets, making them the largest asset segment.

Financial investments represented 28.1%, unchanged from 2023, suggesting a coherent investment strategy.

Cash and deposits with central banks, interbank and credit funds, buying and selling of financial assets and others represent 7.5 per cent, 3.3 per cent, 3.5 per cent and 1.7 per cent respectively, with slightly different percentages but similar general trends.

The increase from 19,763,827 in 2022 to 22,614,621 in 2023 represents an increase of 2,850,794, showing growth in the lending business.

The increase in loan impairment provisions is reflected in an increase of 99,991 from 782,854 in 2022 to 882,855 in 2023.

From 18,980,973 in 2022 to 21,731,766 in 2023, an increase of 2,750,793 is consistent with the overall increase.

The increase from 9,530,163 in 2022 to 11,213,713 in 2023 represents an increase of 1,683,550, indicating an expansion in the scale of investment.

From 2,549,130 in 2022 to 2,922,047 in 2023, an increase of 372,917, reflecting an increase in cash flow.

The expansion of interbank business is illustrated by 465,042, from 1,131,215 in 2022 to 1,596,257 in 2023.

From 1,172,187 in 2022 to 1,809,559 in 2023, a significant increase of 637,372.

From 561,820 in 2022 to 599,647 in 2023, an increase of 37,827, a small increase.

By means of horizontal and vertical analysis, we can find that in 2023, the value of all assets has increased, especially in the amount of loans and advances, finance investment, and financial assets. This indicates that while the company is expanding its lending business, it is also actively investing and managing its assets in order to increase the size of its assets and its profitability. Overall, the company has a more diversified asset structure and a sound financial situation.

In 2023, the Bank has successfully completed the "Fourteenth Five-Year Plan" of China Clothing Bank. The two positions of "Leading Bank for Rural Revitalization" and

"Main Bank for the Actual Economy" have been strengthened. Three strategies of "Three Clothes", "Green Finance" and "Digital Economy" were carried out steadily. Science & Technology Finance, Green Finance, Inclusive Finance, Retirement Finance, Digital Finance, etc. The whole competitive power has been continuously enhanced, and the capability of risk management has been improved.

The capacity of agricultural, rural and farmers to deliver inclusive services has been continuously improved. To strengthen and enlarge the achievement of poverty relief, to guarantee the supply of food and clothing, to develop rural industry, and to build rural areas. Up to 2023, there were 12.33 trillion yuan and 8.78 trillion yuan in deposits and loans, up 14.2 percent and 19.8 percent, respectively. Inclusive lending continued to grow at a high speed and high quality. The PBOC has more than 3 trillion RMB lending, and more than 3 million small and micro-lending clients.

The development of green financial services is high quality. The green finance strategy has been pushed forward, the green finance product and service system has been perfected, the supply of green finance has been improved, and the green investment and financing channels have become richer, and the brand image of the green bank has been continuously improved. Up to 2023, the amount of green credit remained at 4.05 trillion yuan, up 1.35 trillion yuan, or 50.1 percent more than last year. The company was named "Green Bank Evaluation Advanced Unit" by China Banking Association, and "China ESG Model" by China Media Group, and its ESG rating was raised to "AA".

Quality and efficiency of digital operations have been steadily improved. We will continue to perfect the "Yiyin E-loan" online loan system, launch "Technology E-loan" and "Torch Innovation Integrated Loan", and further perfect the digital product service system. We will continue to enhance the ability of mobile banking, launch the "Better Life" series of mobile banking, construct a specialized, multi-dimension, smart and personalized web service platform, and deepen the digital channel construction. The application of Tag Center, Decision Engine, Knowledge Graph Platform, etc., has been widely used in Distributed Core Building, Disaster Recovery, Network and Information Security. Up to 2023, "Yiyin E-loan" has surpassed 4 trillion yuan, and 213 million individuals have received a monthly payment.

The efficiency of operation and management continued to increase. Network layout and business flow optimization, the county distribution rate increased to 56.4%, and the construction of old outlets and green outlets have achieved solid progress. The reform and innovation has been further deepened and strengthened, and the coordination of price and quantity management has been improved, and the ability of customer service has been enhanced. The regional strategic policy system for national service has been improved gradually, and the competitive power of the key areas has been raised steadily. The system of talent team building has been perfected, talent cultivation policy has been perfected, and the strategy of talent forcing has been pushed forward.

The risk control cases were further reinforced. Comprehensive risk management system has been perfected continuously, and the initiative of risk management has been strengthened. In general, the credit risk of real estate and local government bonds is under control, and credit asset quality is stable. Up to 2023, the NPL ratio stood at 1.33%, a decline of 0.04 percentage points compared with the previous year. The market risk management and control platform has been set up, and the capability of penetration of market risk monitoring and active prevention has been further enhanced. Strong and efficient promotion of case-prevention and compliance work, the monitoring and handling of cases and operations have been strengthened.

2.2. Research on the relationship between banking system structure and real economy

The Agricultural Bank of China plays a vital role in the Chinese economy, as shown below.

The Agricultural Bank of China plays a vital role in supporting the real economy. The Agricultural Bank of China insists on serving the real economy, and carries out the new development idea in a comprehensive way, and makes a positive contribution to the construction of a new development model.

As of June 2023, the Agricultural Bank has accumulated over 13 trillion yuan of public loans, with an annual increase of over 1.56 trillion yuan.

The Agricultural Bank of China also supports the strategy of producing power by providing accurate and strong credit, and promotes the quality of manufacturing. As of June 2023, the outstanding amount of credit in the manufacturing sector has reached RMB 2.91 trillion, with an annual growth rate of 612 billion yuan.

The Agricultural Bank of China has contributed greatly to the development of agriculture, countryside and farmers. The Agricultural Bank has always insisted on "facing 'agriculture, countryside and peasants'", and strives to become the leading bank for the development of the countryside.

Up to 2022, the Agricultural Bank of China's outstanding loans for rural revitalization has reached 7.3 trillion yuan, up 1.1 trillion yuan from the beginning of this year, and close to 200 billion yuan from the same period last year. Agricultural Bank also provides support for people out of poverty to increase their income and get richer (2) through innovative financial products and services such as "Fumindai". Moreover, the Agricultural Bank of China has also given many financial support to the food safety and the revival of the seed industry. Up to 2022, the amount of outstanding loans in the key areas of food security has reached 235.9 billion yuan, and the amount of outstanding loans in seed industry has reached 28.2 billion yuan.

The Agricultural Bank has also made notable achievements in the fields of inclusive finance and financial services at county level. By the end of 2024, the total amount of loans granted by the agricultural banks amounted to 24.69 trillion yuan, up 2.07 trillion yuan, or 9.17 percent. In the area of inclusive finance, the Agricultural Bank of China and the PBOC have reached 4.59 trillion RMB in inclusive finance.

The Agricultural Bank of China has also implemented the "one county, one policy" plan to help keep the bottom line from falling back into poverty. The outstanding loans in 832 poor counties and 160 key rural areas were 2.25 trillion RMB and 425.9 billion yuan respectively, with a growth rate above the average of the entire bank.

In conclusion, the Agricultural Bank of China plays a vital role in the development of Chinese economy through its support of real economy, service of "agriculture, countryside and peasants", and the promotion of inclusive finance.

The difference in ownership structure between banks' credit entities affects the real economy. Based on the ownership structure, the banking system can be classified as the state, the private and the foreign. Compared with each other, there is a difference in the role of the ownership bank in the real economic growth.

1. Influence of State-owned Banks on Real Economy

The influence of state banks on the real economy is twofold. On the positive side, because of the ownership, the state bank can provide enough financial support to the key industries and areas supported by the country, and the government's macroeconomic and monetary policies, and by providing favorable financial support, so as to stimulate the real economy. Seen from this perspective, the state bank can promote real economic growth. On the other hand, owing to the special benefit relation with the state enterprises and the low efficiency, the state banks can't make effective allocation of credit funds. Especially in many developing countries, the state bank is not only the principal part of the bank, but also the main source of bank credit. As a result, the state banks have a great deal of credit capital. Because of the inefficiency of the state banks, the inefficient utilization of credit capital may cause the efficiency of capital utilization and distribution to be distorted. The low efficiency enterprise may have more capital, but the high efficiency enterprise cannot obtain the credit support, so the real economy grows.

2. Non-state-owned banks' influence on the real economy. Privately owned banks, foreign banks and other joint-stock banks are not state owned banks. Non-state-owned banks pay more attention to the market competition than the state banks, and seek profit through the minimum risk and maximum profit. As a result, non-state-owned banks have higher capital allocation efficiency and can maximize the efficiency of capital allocation by supporting high quality projects, which is beneficial to the economic growth. On the other hand, because of their profit-seeking characteristics, the non-state-owned banks are not interested in the projects with relatively low profits but positive externalities.

The ownership structure of Chinese banking system influences the real economy mainly by means of bank credit. Judging from the main body of bank credit, Chinese bank credit mainly belongs to the state. By the end of 2011, the total assets of Chinese state-owned commercial banks amounted to 14.3 trillion RMB, accounting for 74 percent of China's total banking sector. Although China's stock market and other financial institutions have developed rapidly in recent years, the size of credit assets has also increased rapidly. Up to 2018, the total assets of Chinese state-owned commercial banks amounted to RMB 31.8 trillion, still accounting for 51 percent of the total Chinese banking sector.

From the perspective of the main body of credit transfer, Chinese bank credit is greatly influenced by state owned commercial banks. Although Chinese commercial banks account for a high proportion of credit, their credit utilization efficiency is lower than that of stock commercial banks, which leads to low credit efficiency. By the end of 1995, the bad loans of the four big state-owned commercial banks took up 22% of the total amount of bad loans, and the bad loans amounted to 860 billion yuan. In the late 90's, the bad loans of Chinese state banks were over 20%. If the rate of NPL is too high, it will influence the stability and safety of banking and even the whole financial system.

Although China has succeeded in listing the four big state-owned banks by means of financial injection and bad loan stripping, but overall, the credit efficiency and credit structure of Chinese state-owned banks are not as good as those in stock market. The rate of unscrupulous lending in Chinese state-owned commercial banks is far higher than that of other types of commercial banks. As a result, the ownership structure of state-owned banks is still relatively low in both the stability of lending and the efficiency of lending funds. This is also an important factor influencing Chinese real economy's long term growth.

Bank is the interaction between the real economy and the real economy, which results in the mutual benefit and mutual development. Similarly, there is a correlation between the regional banking system and the real economy. For one thing, because of the pursuit of profit maximization, the banks are inclined to the more developed areas of the real economy. Because of the high quality of the economy, the high quality of the investment projects, the lower risk, and the higher capital requirements, the regions with relatively developed real economy will attract the banks to favor the developed areas. As a result, the developed regions of the real economy are usually the places where the banks are concentrated, and the banks are also relatively advanced. Conversely, the less developed regions tend to have higher risks and less attractive to banks due to the weakness of the real economy. Lots of banks are converging on the developed regions of real economy, which leads to regional structural imbalance. This imbalance is due to the imbalance in the real economy and the imbalance in the real economy. The regional unbalance of banking system can easily cause Matthew effect, which leads to the shortage of funds and financial services among different areas, which hinders the balanced development of regional economy. So, in the long term, it is very important to adjust the regional structure of the banking system to the real economy.

The real economy in China is not balanced. The real economic development of Eastern, Middle and West regions is very different. From the GDP point of view, the GDP created by the east of China has long taken up over 50% of the GDP, which exceeds the total GDP of the middle and west regions put together. In the context of the continuous development of Chinese real economy, there is an upward trend in the real economy in China. In 2015, the proportion of GDP in East China reaches 61.69%, which is much higher than that of the middle and west areas. In recent years, along with China's West Development Strategy and Central Rising Strategy, the gap in GDP has been reduced. By 2019, however, the share of GDP in East China remained at 56.45%, much higher than that of the middle and west regions of 24.42% and 19.14% respectively. In terms of GDP per capita, in 2019, the average GDP in the east of China was 1.87 times higher than that in the middle and 2.04 times higher than in the west. Three regions of China's real economic gap can be seen. The difference in the real economy in the three regions of China has further widened the difference of the three regional bank deposits, loans, and regional economic development funds. Meanwhile, the regional structure of China's banks tends to the eastern developed regions, and the regional structure of banking system is not balanced.

Table 2.3

GDP ratio of eastern and Central China

Region	1978	1992	2015	2019
East	52.41	56.86	61.69	56.45
Central	30.67	27.81	25.41	24.41
West	16.93	15.33	12.9	19.14

Source: The author organizes and analyzes

The big difference between the three regions lies in the lack of basic facilities, capital shortage and so on. Especially in the Middle and West Regions, there is a severe capital shortage, and the economy is weak, so it is hard for them to form a new economic growth point. As a result, the regional structure of Chinese banking system plays an important role in the development of the real economy.

China's bank's regional structure affects the real economic growth by credit. On the one hand, the bank lending to the more developed regions can get more profit in the short run with little risk, but the shortage of bank credit in less-developed regions will put the real economy under severe financial pressure. As a result, the regional structure of bank credit will influence the balance of development between the developed and the less developed areas. Due to the widening of the regional economic gap, it will not be beneficial to the long-term development of the real economy, and will influence the equilibrium and sustainable development of the real economy.

On the other hand, the region structure of bank credit also influences the distribution of city and countryside. Bank credit bias to the city and the lack of credit in the countryside may also result in the disparity of real economic development, which is unfavorable to the development of the real economy.

Based on the regional structure of Chinese bank credit, there is an imbalance between the three regional banks' credit agencies in China. Objectively speaking, under the impetus of the bank's own benefit, the excellent project, the excellent business and the favorable credit environment, the bank credit flows to the east of China. As a result of Matthew Effect, the east region receives more financial support, and the real economy develops more quickly, which leads to more savings. Moreover, it is more attractive to bank credit, which makes the development of Chinese regional real economy more unbalanced.

Therefore, it is the core of China's real economy to adjust the regional structure of China's banking system, to balance regional credit structure, to coordinate with the development strategy of West China and the Middle West.

The matching of banking system and economy structure has a great influence on real economic growth. In this paper, as discussed before, the improvement of the efficiency of the bank and the change of the economic structure are mutually reinforcing and affecting. As a result, the matching of the banking system with the economic structure is critical to the sustainable development of the economy. On the one hand, the sound banking system can make more effective use of savings funds, which can be used in production, so as to promote the transformation of the economy and the development of the economy. If the banking system is not in harmony with the economic structure, a vicious cycle can also arise. On the one hand, the imperfect banking system results in the backwardness of the overall efficiency of the financial system, which is not enough to guarantee the development of the present economic structure, and not to provide the necessary financial support for the restructuring of the economy. Secondly, the stagnation of the economy has also resulted in the distortion of the economic structure, which has had a negative effect on the development of the banking system, which has restricted the development of the banking system.

Looking from the angle that the banking system and the economic structure match, when both of them do not match, it will easily lead to the circulation of capital in the economy. As a result of the backwardness of the economic structure, the development of the economy, and the per capita income is low,

Therefore, the savings rate is low, the saving capacity is low, and the savings are small, which leads to the shortage of funds. Because of the shortage of capital, it is hard to enlarge the scale of production, and it is hard to change the structure of economy. Low economic growth, in turn, results in a new cycle of low income, which, over and over, forms a cycle that hinders the sustainable development of the economy. When they are matched, they promote each other and form a positive cycle. Reasonable economic structure makes the economy develop rapidly, and then the average income of people increases greatly, and the savings and investments are also increasing rapidly. Abundant economic capital promotes the competition of banking industry, makes the banks perfect the system continuously, enhances the efficiency, promotes the economic reproduction ability expands, the economy grows speed, so that the positive cycle is formed. Keep pushing forward the economy.

From the view of the development of economy structure, it is decided by the development of the economy structure. Moreover, the development of the banking system has reversed the transformation of the economic structure. Because of the backwardness of the second and third industries, the lack of large scale industrial enterprises, and the development of the small craft industry, the total income of the residents is low and the savings is low, so the bank's financial service consciousness is lagging. On the other hand, because of the lagging development of the secondary and tertiary industries, the need for financing is not strong, and the financial transactions are few. Therefore, there is no need for a complete and effective banking system. This leads to a relatively backward banking system. At this time, the relatively underdeveloped banking system is not strong enough to support the real economy. Therefore, it has less effect on the economic growth and less on the transformation of economic structure. When the economy develops to a higher stage, the economy structure is mainly composed of second and third industries, and the total income of residents is high, and the demand for financial investment and services is high. Meanwhile, due to the large number of large enterprises and strong economic demand, the need for loans to banks is also very strong. At this time, the bank, as the main body of the financial system, must improve its system, improve its operating efficiency, and offer more innovative financial products and trading methods to satisfy the client's investment and financing requirements. Therefore, it is necessary to improve and upgrade the banking system. Because of its high operational efficiency, a sound banking system can increase the efficiency of capital distribution in the economy, and thus promote the upgrading of the economy and the economy.

Viewed from the angle of banking system development, the improvement of banking system directs the economic structure transition and economic continuous growth. In general, when the banking system is dominated by the country, the government controls the main resources of the banking system, and the development of private and joint stock banks is slow. At that time, the low operation efficiency of the bank resulted in the inefficient mobilization of the funds, and the capital was relatively scarce. Owing to the preference of state-owned banks towards big state-owned enterprises and big projects, China's enterprises can get more financial support, but many SMEs are unable to expand their scale because of the lack of capital support. On the other hand, because the operating efficiency is low, the capital utilization efficiency is low, and the state enterprises with capital support are not efficient. Therefore, in the economic structure, SMEs are not able to grow because of the pressure of capital, and the state enterprises are inefficient in using capital, and their development is limited. Thus, the overall economic structure is distorted. As a result, the imperfect banking system, which is dominated by state banks, has inhibited the economic structure transition and prevented the sustainable economic growth. Based on full market competition, the banking system can operate more efficiently, raise capital and use capital more efficiently, and the bank can select the good projects and the promising future to provide financial support, so as to guarantee the economic structure. Therefore, the small and medium enterprises with great potential can obtain sufficient financial support and growth, which will accelerate the transformation of the economic structure and the promotion of sustainable economic growth.

Regional banking system development has a special relation with regional economy growth. Generally speaking, there is a greater likelihood that financial resources will come in from abroad, leading to an unbalanced growth scenario. The inflow of financial resources is probably due to the regional preferential tax policy, the efficient regional banking system, etc. "If there is no restriction on the flow of physical resources into the area, then the inflow of funds will not lead to a marked increase in prices, and it will be possible to generate exceptional growth in the region." Therefore, the development of regional banking system is beneficial to the absorption of foreign finance and the transformation of domestic savings into investment. On the other hand, if the development of regional banking system is not stable, it will influence regional economic stability and prosperity, and hinder regional economic development. Therefore, the development of the regional banking system and the regional economic growth have close relationship.

The regional banking system is generally made up of regional branches of national banks and individual regional banks. Among them, the regional bank is "the geographical division of the bank according to the location." The regional banks consist of the Local Bank, the City Commercial Bank, the City Credit Cooperative, the Rural Credit Cooperative and the Rural Commercial Bank. Regional banks have important effect on the development of regional economy, including:

1. Regional banks improve the efficiency of regional finance to promote regional economy growth. Because of its business superiority, the regional banks have a good understanding of the local industry and relevant enterprises, so they can easily choose the highly competitive SMEs, so as to improve the efficiency of the issuing of credit capital. Meanwhile, the regional financial services can be further improved by speeding up the division of services in the region. As a result, the whole operating efficiency of the regional finance system is enhanced, and the regional economic growth is promoted.

2. Regional banks support regional economic development policy to promote the growth of regional economy. Because the majority of regional banks are supported by local financial and local governments, the regional banking business is mainly based on the local economy. By means of industrial policies and key support areas, the regional banks have chosen and given priority to the areas in which they have been developed.

2.3. Research on the changes of banking system promoted by the development of real economy

There are various manifestations of the interaction between the real economy and the banking system, such as the beneficial relationship between the real economy and the banking system, the vicious relationship between the two, and the dynamic change of the relationship.

When the rapid growth of the real economy and the strong support from the banking system, they interact with each other in a positive way. The growth of the real economy has improved the efficiency and function of the banking system, and the improvement of the banking system has promoted the rapid growth of real economy. On the other hand, real economic growth has positive effects on the banking system, so it is a positive cycle. In doing so, the banking system can influence the level of savings, investment decisions, technology innovation, and real economic growth in the long run. Firstly, in the market with information and transaction costs, it is beneficial to improve the banking system to deal with risk, avoid risk, diversify risk and share risk. Efficient functioning of the banking system balances liquidity and risks. Some high-return projects, for instance, need long-term capital loans, and savers are unwilling to let go of their savings. Therefore, if the banking system does not improve the liquidity of the long term investment, the high return projects will not be able to obtain the necessary investment, which will influence the economic development. Secondly, it is difficult and expensive to assess the situation of firms and markets.

One depositor does not have the time, energy, skills, or resources to collect and process information about a large number of companies and market conditions, so the high cost of information may discourage the flow of capital to its most valuable applications. Perfecting the banking system can decrease the information cost effectively, and facilitate the obtaining of investment information and optimizing the distribution of resources. Thirdly, the improvement of the banking system can produce other financial tools, so as to provide diversified investment opportunities and improve the distribution of resources.

So, as the financial intermediary, the effective operation of the banking system can guarantee the real economy to grow rapidly. The rapid growth of the real economy will bring more new projects and higher profits to the banking system, which will greatly stimulate the bank's innovation and efficiency, and thus promote the development of the banking system. Moreover, the continued growth of the real economy will result in the expansion of the real economy, which in turn will increase the need for financial services, which will further expand the size of the banking system. Moreover, the diversification of the banking system can be supported on a large scale, so that the banking system can continue to develop. So, at this time, the development of the real economy is mutually beneficial with the banking system development, mutual promotion and mutual progress.

In times of economic depression or crisis, the weakness of the real economy will cause a panic in the banking system because of the shortage of investment opportunities and market expectations, which will cause the banking system to go into recession. The decline of the cycle shows the reciprocal regression relation. For instance, in a relatively weak banking system, because of its low capital adequacy ratio, profitability index, asset quality index, and so on, the bank system's ability to diversify risk and credit is low. But when the real economy falls into crisis, the economy grows weak, the inflation is high, the weak banking system is not able to stabilize the violent fluctuation of the real economy. At this time, the worsening of the macro economy will cause the bank's credit to collapse, and a lot of banks might go bankrupt or go bankrupt. Moreover, it will cause a great deal of "blood loss" in the real economy, which will make the real economy lose its essential credit support, and cause many SMEs to go bankrupt and lose their jobs, and the real economy will worsen. That, in turn, exacerbated the problems of bank runs and worsened the banking system. The economic recession and the banking system go bankrupt each other, which causes them to be trapped in a circle and regression relation. Especially in the wake of financial liberalization and economic globalization, the banking system and the real economy are "highly infectious".

There are two situations in which the real economy and the banking system differ from the one with high growth rate and the other is the difference between a low growth real economy and an effective banking system. The real economy is also somewhat independent from the banking system. However, when they are not in harmony with each other, there will also be independent forms of sport.

In the case of the rapid growth of the real economy, it is possible that the banking system can not keep up with the rapid growth of the real economy because of the government's supervision, the low initial level or the imperfect banking system. The high growth in the real economy is a departure from the inefficient banking system. This is the case for government-led economic development models. In other words, the government may adopt a series of policies, such as low yield reserve, deposit and loan interest rate, to prevent the banking system from developing to the extent that its technological potential allows, which leads to the lagging of the banking system. Since the suppression of the banking system will have a long-term impact on the sustainable development of the real economy, the divergence between the real economy with the low efficiency is not stable. Either the real economy is constrained by the banking system, which lowers the rate of growth, resulting in a poor balance between the two; or the banking system will shed its restraints on rapid growth and continue to grow in the real economy, and the relationship will reach a high balance.

The other disjunction lies in the fact that the real economy grows more slowly than it does in a more efficient banking system. The developed world is more susceptible to such a situation. Developed countries have a relatively high level of real economic development and banking system efficiency. Due to the relative maturity of the real economy, the rate of growth is low. At this point, the banking system is still developing at a rapid pace. Under such circumstances, the banking system could not gain enough profit from the development of the real economy, which could cause the banking system to expand continuously by speculation. Therefore, the banking system is not only concerned with the growth of the real economy, but also because of the over-speculation, it has caused the "crowding out" effect, which leads to the excessive "blood loss" in the real economy. Under such circumstances, the divergence of the banking system and the real economy could result in over-consumption and false prosperity, which would result in an increase in the amount of bad debt, which would shake the credibility of the real economy, and might also cause excessive money growth and inflation. It is inevitable that the banking system will expand away from the real economy, which will influence the level of risk and credit in the banking system. As a result, the gap between the real economy, which is slowly growing, and the effective banking system, is destabilizing. The excessive expansion of the banking system will cause the real economy to be hollow and virtual, which will ultimately damage the real economy and the banking system. Therefore, if this situation goes on, the risk of the banking system and the real economy will infect each other, and cause a large scale economic crisis.

According to the analysis above, the relationship between the development of the real economy and the banking system is in a good state of mutual progress, vicious retreat and deviation. These are clearly unstable. There is a dynamic relation between the development of the real economy and the banking system. Therefore, the relation between the development of the real economy and the banking system should be observed in a dynamic way. In other words, it is necessary to take into account the concrete path dependency and the transition mode of the relation.

From the angle of path dependence, the initial level of the real economy and the banking system will have a great influence on their relations. Because of the path dependence, it is hard for the real economy or the banking system to change the original relation by the spontaneous change. Therefore, when both of them are at a low level of development, the impact of external factors will lead to real economic crisis or banking system crisis, which will lead to a vicious regression between them. Moreover, because of the path dependence, it is hard to adjust the relation of the two malignant regression to the benign balance state, which may cause the relationship to be locked into a malignant regression state. Even if the real economy and the banking system make steady progress in the short-term, because of their low development level and weak stability, if the external shocks happen, the relationship will turn from a favorable one to a harmful one in the long run. As a result, the path of initial conditions has a significant effect on the dynamic change of the long term relations.

From the angle of transition model, the forced change pattern and the induced change pattern usually cause the relation between the real economic development and the banking system to be different.

In general, the compulsory change pattern is usually the government's leading role, and it involves a large number of benefits redistribution. Forced changes often result in the difference in the level of development and the degree of change. For instance, the forced changes in the real economy are often not coordinated with the reform of the banking system, which may result in the failure of the banking system to keep pace with the development of the real economy. Moreover, if the government carries out forced changes in the banking system, it will not consider the actual demand of the real economy, and the banking system will not be able to keep up with the development of the real economy. Last but not least, even if the government adopts the complementary reform of the real economy and the banking system, it is forced to change the system. Due to the mandatory system change, it is usually based on the subjective idea of the government, and lacks the practical benefit of the market. After the change, it is easy for the real economy to develop with the banking system. Especially in the short-term, the deviation will easily occur. Due to the compulsory system change, the change process has not received the recognition and cooperation of the market, and the external regulation has been entrusted by the government. As a result, the relationship between them is easily transformed into a kind of vicious regression in the long run. That is, because they are incompatible and incompatible, they restrain each other rather than promote each other, and finally result in their relations.

Induced change is a kind of spontaneous system change which is carried out by all parties in the market. Therefore, it is more harmonious in the course of change. The development of the real economy and the reform of the banking system are generally consistent with each other in the course of dynamic change. Under the circumstance that the real economy develops and the banking system develops, both the real economic development pattern and the system change induced by the bank system can easily stimulate the relations between them and produce beneficial mutual progress. Moreover, from the dynamic angle, the relationship between them is relatively stable, and it is easy to develop from short term to long term balance.

The effect of real economic development on the transformation of banking system lies in the induced change and forced change in the course of the transformation of banking system. From the angle of induced transformation of the banking system, if the banking system and the real economy are more compatible, the development of the real economy will result in different requirements for the banking system. Therefore, if the banking system is reformed according to the original way, it will be able to increase the efficiency of the banking system and satisfy the needs of the real economy. In the meantime, it can also make the bank, as an individual pursuing the maximum profit, get more profit. At this time, the development of the real economy will cause the banking system to change. The banking system should be perfected and reformed according to its original route and actual economic development.

Consider changes in Britain's banking system. The origin of Britain's early banking system originated from the need of financial services after the development of the real economy. Due to the fact that the real economy at that time was limited to small transactions and the exchange of precious metals, Therefore, from keeping gold and silver for clients and issuing receipts, it gradually evolved into private bills, and then into banknotes. In the meantime, along with the increase of capital requirement in the real economy, the banking business has also started to have the business of investing and lending. Later, with the rapid development of the real economy in England and the expansion of foreign trade, the old banking system could not adapt to the development of the real economy. Based on this, the expansion of the need for banking financial services in the real economy is a kind of spontaneous change that leads the banking system to seek higher yield. The Bank of England was established in 1694, which was the foundation of the British modern banking system. Later, with the expansion of Britain's foreign colonialism and the expansion of its overseas trade, Britain's banking system was transformed into a trans-banking institution and extended to the colonies. Since the Industrial Revolution, the British real economy has exploded, and the small scale private banks have not been able to satisfy the demands of the real economy. Through successive mergers and acquisitions, the bigger and stronger big banks will be able to improve their competitive power and gain more profits.

As a result, the development of the real economy caused the banking system to change spontaneously. "In 1850, there were 77 per cent of all United Kingdom banks. By 1913, that number had dropped to 41%, and by the First World War, the United Kingdom had 98 per cent of all banks. " Based on this, the United Kingdom developed a typical branch banking system, with Barclays Bank, National West Bank, Lloyds Bank, and Midland Bank as the main body. The British banking system is gradually reforming and perfecting the banking system by inducing changes in the original banking system.

Take the change of our banking system as an example. Before the reform and opening-up, the real economy in China followed the planned economy path. The planned development model of the real economy demands that the government should focus on the control of income and expenditure, so as to make the bank credit service for the actual economic development. After the establishment of the PBOC, the forced transformation of the banking system was carried out by the central bank, which was carried out by public and private enterprises. Undoubtedly, the planned development of the real economy at that time had a decisive effect on the direction of the compulsory reform of the banking system. With China's reform and opening-up, the real economy has changed into a market economy mode. Through the continuous expansion of credit subject in banking system, the diversification of Chinese banking system can be promoted to suit the market development mode of real economy.

Compulsory system change usually means the change brought about by government regulations. "Since the transition from an existing institutional arrangement to a different one is costly, there will be no incentive for institutional change unless the net benefits for the individuals of the change outweigh the cost of the institutional change." Therefore, when the real economic development cannot induce the change of the banking system, the adoption of binding changes is especially important for the reform of the banking system.

When the original banking system is in balance with the real economy. Along with the further development of the real economy, the banking system can not be maintained. But because of locking and reliance on the road, it is hard for the banking system to make spontaneous changes. Then, the forced change can break the original route dependence, and push the banking system to achieve the balance of supply and demand by forcing the government to adjust and redistribute the benefits of different interests.

The development of Japan's banking system is characterized by forced change. In 1868, after the Meiji Restoration, Japan rapidly developed its economy to shake off its backwardness. The Japanese government has chosen the strategy of catching up. Based on Japanese real economy's development level and the existing banking system, Japan's rapid development is not easy. Japan has made it a priority to develop banks' capital through compulsory changes to the banking system. With the support and support of the government, the National Banking Regulations and other laws were promulgated, which set up the Central Bank and Policy Bank, encouraged the centralized monopoly of the banking sector, and forced the banking system to change according to the government's plan. Meanwhile, the Japanese real economy developed rapidly through the transformation of the banking system. In 1896, the Bank Merger Law was promulgated in Japan, which demonstrated the government's concern and support for the banking industry's centralized monopoly. During this period, the number of Japanese commercial banks fell from 1 876 to 374 through bankruptcy and mergers between 1901 and 1913 [19]. The BOJ's compulsory change experience indicates that the forced change of the banking system in the course of real economic development is very important to break the original path dependency and construct the new balance.

In the meantime, it is also necessary to observe that in the course of the transformation of the banking system, the compulsory change and the induced change intercross each other. Even in an innovation-driven banking system like the UK.

The government has also enforced changes to the national banking system by issuing laws, establishing Central Bank and Policy Bank. Taking Japan as a representative, there are also self-induced changes in the banking system, which are driven by market competition and benefit. Therefore, in the course of the development of the real economy, the forced and induced changes of the banking system are always intermixed and mutual. In the course of forcing change, the laws and regulations of the government often cause the market rules to change and the benefit allocation to be changed. Moreover, it is necessary to take into account a lot of factors of induced change in order to adapt to the demand of market and reality.

So, generally speaking, depending on the initial development of the real economy, the different development phases, and the requirements of the banking system, the changes of the banking system will have different effects. Induced changes and forced changes in the banking system have different effects.

CHAPTER III
COUNTERMEASURE RESEARCH ON THE COORDINATED DEVELOPMENT OF CHINESE BANKING SYSTEM AND REAL ECONOMY

3.1. Initial conditions and path dependence of Chinese banking system and real economy development

Based on the theory of New System Economy, an organization's change course and orientation will be influenced by the original route. Therefore, the initial condition of China's banking system development is an important factor that influences the transformation of China's banking system.

The unique initial conditions of China's banks are shown as follows:

1. The system transformation of Chinese banking system is unique. "Different from the West, the system change of the banking system is mainly in the banking system, while the reform of Chinese banking system is based on the change of ownership." After the expansion of the size and participants of the banking system, from the one-yuan universal banking system to the dual banking system of the Central Bank and Commercial Bank. Nowadays, there are three kinds of banks in China: Central Bank, Policy Bank and Commercial Bank. However, since the reform of Chinese banking system has been implemented with the social economy, the state has been in a dominant position, and the banking system has been dominated by state. This is reflected in the course of the reform from a unitary system to a binary one, and then a pluralistic one in Chinese banking system. Between 1979 and 1984, the four state-owned commercial banks in China were established successively, and from 1985 to 1988, China gradually relaxed its control over banks. In 1993, Chinese policy banks were set up one after another. After 2003, the four big state-owned commercial banks were removed from their bad assets and went public. This series of great changes in the banking system is under the direct control and guidance of the country. On the contrary, the changes brought about by the market demand are always in the secondary and subsidiary status. The banking system in China before the reform and opening-up was based on the PBOC. Along with the continuous reform and

diversification of Chinese banking system, China's banking system is now equal to the four big commercial banks in terms of assets size, number of outlets, staff, and deposits. The four big state-owned commercial banks have the absolute control over the entire banking market. As a result, the changes of Chinese banking system are mainly characterized by the change of ownership, the forced change in the course of transformation, and the strong control of the banking system.

2. The system basis of Chinese banking system is relatively weak. Firstly, since the Chinese banking system is the result of forced change, the banking system is built on the basis of the reform of the banking system. Meanwhile, due to the change of the banking system from a unitary model to a diversified one suited to the market economy, there are still a lot of traces of planning times in our banking system. But the relevant laws and regulations about the change of banking system are mainly the guidance frame, but there are no concrete implementing rules. Therefore, in the process of practical operation, it is very easy to have a few loopholes and speculative holes. This results in the poor perfection of the entire banking system in our country. On the other hand, because of the financial safety, Chinese banks are not open to the outside, which leads to the low competitiveness of Chinese banking market. Third, due to the strong monopolization of the state owned banks, the state banks are the principal part of the banking system. Because of the benefit relation between the state bank and the state enterprise, the operation behavior of the state bank is casual, benefit relation, human relations, and so on.

3. The Chinese banking system is not competitive. Because of the country's powerful control, the market is low, and the reform of Chinese banking system is not enough, so the ability of Chinese banking system to adapt to the market and competition is weak. The main features are the degree of risk in the banking system, especially the high system risk and the strong vulnerability. Meanwhile, "China's special financing system, government interference, the structure of the financial system, and the related property right system influence the robustness of Chinese banking system." Before the reform and opening-up, China's banks played the role of "cashier" of the finance department, providing funds and subsidies to SOEs, which caused the credit risk to expand and the

bad debts accumulated in the banking system.

Since the reform and opening-up, with the continuous reform of Chinese banking system, the commercial operation of banking system has been improved. But on the whole, Chinese banking system is still confronted with more bad loans, the benefit relationship between state and state banks is not severed. Currently, Chinese banking system is mainly based on the spread of deposits and loans. The company mainly depends on the monopoly superiority to gain the profit. In the face of the fierce market competition, our bank's innovative capability, management and operation level, middle business development and so on are still relatively weak. Meanwhile, with the development of economic globalization, as well as the expansion of Chinese enterprises' international trade, China's banking system is confronted with external challenges, and it is necessary to expand its global business. Therefore, it is an urgent task to enhance the competitive power of our banking system and get rid of the lagging competitive power.

4. The Chinese banking system has historically borne a heavy burden. Due to the development of Chinese banking system, compulsory changes are more apparent. The development of Chinese banking system has a great deal of history. The main manifestation is the unbalanced structure of China's banks. Firstly, the credit structure of the banking system in China is not balanced. There is an imbalance in the structure of urban and rural areas, the usage structure and the regional structure of bank credit.

There are a lot of structural unbalance, for example, the difference of city and countryside, the difference of long-term and short-term, and eastern and western. This has resulted in a structural imbalance in our banking system as a whole. Second, the Chinese banking system is out of balance. Most of the banks in our country are located in the eastern coastal areas and provincial capital cities. However, the shortage of banks and their distribution in the Middle and West regions has resulted in the unbalanced regional structure of China's banks. Third, the Chinese banking system is biased to the real economy. Due to the strong state of Chinese banking system, Chinese banking system provides more financial support to SOEs than SMEs and privately owned enterprises. Therefore, the SOE's capital cost is low, the capital utilization efficiency is low, and the capital demand of SMEs and private enterprises can not be satisfied. As a result, our banking system is weak in its ability to allocate funds. As a result, our banking system is inefficient.

The initial conditions of Chinese banking system and actual economic development result in a strict path dependence. It is mainly manifested in the following aspects:

1. The relationship between Chinese banking system and the real economy has a severe degree of ownership preference. Under the leadership of the government, China has implemented a compulsory system change in both the real economy and the banking system. The real economy has changed from the planned economy to the market economy, and the banking system has been reformed accordingly. In the course of this process, the Chinese economy has changed from the direct financial financing to the direct financing of the state bank. In the new system of "Strong Finance, Weak Financial", Chinese state bank's credit capital has become "rigid reliance". Because of the same property right, the former benefit relation and the strengthening of the benefit group, the mutual promotion of the relationship between the bank and the real economy is mainly reflected in the bank's strong preference for the SOE. It is the main characteristic of our banking system to fill up the capital support of state-owned enterprises at the cost of the capital demand of SMEs and privately owned enterprises. SOE capital support is abundant, but its utilization efficiency is low. The growth of SMEs and privately owned enterprises is strong, but they are short of funds, which results in "financial restraint". Because the operation efficiency of state owned enterprises is low, the main reason is that the government monopolizes the market profits, plus the financial financing privilege. The ownership preference of Chinese banking system and real economy results in systemic risk in Chinese banking system, which is the limitation of real economic development.

2. There is evident pro-cyclicality in Chinese banking system and real economy. Since the reform and opening-up 30 years ago, the dynamic interaction of Chinese banking system and the real economy has shown positive feedback. "These interdependent interactions can increase the volatility of the cycle and cause or aggravate the instability of the financial sector." In terms of lending behavior, profit margin and asset quality of Chinese banking system, the relationship between Chinese banking system and real economy is obviously procyclical. Real economic fluctuation and bank's

credit and profit index basically coincide. Under the condition of good economic development, Chinese banking system has been stimulated by real economic development, and its lending volume and profit level have been greatly improved. As Chinese real economic growth slows, the rate of lending and profits of Chinese banking system also decreases. On the one hand, Chinese banking system is controlled by the Central Bank of China, while on the other hand, it is influenced by the fluctuation of the real economy, which has obvious pro-cyclicality. In particular, China's banking system is dependent on credit, and the main source of its profits is the interest rate of deposit. Because of its low proportion of intermediary business, the absence of credit dependence has seriously influenced China's banking system. The pro-cyclicality of both makes the real economy more volatile, which is unfavorable to macroeconomic stability, and not beneficial to their long-term coordination. While the real economic growth is good, the banking system should accumulate enough capital and release it when real economic growth is slow, in order to avoid the severe fluctuation in the real economy and the long-term stability of the financial system. Their procyclicality is also one of the historic routes to be changed.

3. There are serious double structural features in Chinese banking system and real economy. The development of Chinese real economy is characterized by the geographical isolation of city and countryside. The double economic structure of urban and rural areas has resulted in "the unbalanced development of Chinese real economy, the widening disparity of wealth, and the unbalance of regional development". The double structure of the city surplus and the shortage of the countryside exists in the banking system. According to the data, the average number of Chinese banks is 1.34 for every 10,000, compared with 0.36 for every 10,000 population in the countryside. As of the end of June 2019, there were still 2,945 towns and villages in China without banking financial institutions. "

According to modern finance theory, it is possible that there will be different tendencies of financial repression and virtual economy when the time is used. That is to say, the poor countries and regions will delay the development of real economy.

The financial concentration is probably caused by the over-development of financial industry, which has been separated from the real economy, and has become virtual and bubble. The phenomenon of "financial repression" in the underdeveloped regions of China, particularly in the west and the countryside, and the "virtual" trend of virtual economy crowding out the real economy. Therefore, the dual structure is also the key to the original route which the coordinated banking system and the actual economic development must get rid of.

3.2. The main results of research on the relationship between the banking system and the real economy

By analyzing the mechanism that the banking system has played in promoting the real economy, we can get the following results:

1. Proper treatment of the relation between virtual economy and reality is necessary to avoid regression and deviation.

2. The soundness of the banking system has a significant effect on the real economy. A sound banking system can effectively mobilize savings funds, direct them to produce and invest, and promote real economic development. Because of its low efficiency, the unhealthy banking system can not satisfy the demand of the real economy, which hinders the development of the real economy.

3. The Central Bank, by making all kinds of monetary policies, makes use of all kinds of tools to regulate and control the money supply, and then promotes the development of the macro-economy and the actual economy. By cooperating with government departments, trade associations, big corporations and other financial institutions, the policy bank directs the social capital to support the construction of the real economy and the real economy.

The promotion of commercial banks to the real economy can be seen in the following aspects: by taking deposits and issuing loans, the commercial banks can promote the real economy by improving their efficiency.

Based on the study of banking system structure and real economic growth, the main achievements are as follows:

1. With the reform of the banking system, the changes in the structure of the banking market, and the intensified competition in the banking market, the efficiency of the Chinese banking system has been continuously improved. Overall, the efficiency of Chinese banking system appears to be rising. In the course of this process, the efficiency of the four state-owned banks in China has obviously increased, which is higher than that of the joint stock commercial banks.

2. The efficiency of Chinese banking system is positively correlated with Chinese real economic growth.

3. Overall scale efficiency of Chinese banking system is not significantly correlated with real economic growth. This indicates that the expansion of banks' scale has no effect on the growth of Chinese real economy, and it is impossible for China to expand the size of banks at this stage. In the meantime, it shows that we should walk the path of intension development, and the intension of banking system is the steady and continuing power of economic growth.

3.3. Policy suggestions for the coordinated development of China's banking system and real economy

On the basis of the initial conditions of Chinese banking system development, actual economic conditions, path dependent factors, and the main achievements of the former research, this paper proposes the following policy recommendations:

Make full use of the functions of all kinds of institutions in the banking system, and promote the development of real economy.

1. First, draw on the experience of the main developed countries' banking system, and combine the actual situation of our country to promote and perfect the banking system. The banking system in developed countries is mainly composed of Central Bank and Commercial Bank, with specialized banks as auxiliary. In order to help the domestic banks to win the competitive advantage, the developed countries have relaxed their control. We can benefit from these lessons for our country. In the future, China will continue to follow up and analyse other countries' banking systems, learn from them, and

continue to perfect our banking system.

2. Bring the Central Bank into full play. We will combine monetary policy instruments to stabilize the price so that the real economy can develop. Strengthen the management of money supply. Enhance forward-looking economic analysis, identify problems and take preventive measures. We should make full use of interest rate, exchange rate, and other price instruments to guide the rational saving and consumption and the rational utilization of credit capital by enterprises. Various kinds of loans will be managed in different ways, the amount of loans to SMEs should be increased, and the credit problems of SMEs will be resolved. Enhance the efficiency analysis of the railway, highway and infrastructure projects, so as to avoid the rush to the bottom. The reserve requirement rate should be set on a scientific basis, and the reserve ratio should be increased for the banks with excessive lending, poor basic management and high risk.

3. Exert the impetus function of policy bank. Support China's economic development in the region, for example, by supporting Poyang Lake's economic development. Support agriculture, countryside and peasants, raise the level of agriculture development, increase the income of peasants, and promote the rural economy. Third, we will support international economic and financial cooperation to promote the healthy development of Chinese real economy under the background of globalization.

4. Exert the impetus function of commercial banks. The commercial banks should be encouraged to operate differently and compete with each other. It is encouraged to set up SMEs and innovative enterprises. It is encouraged to develop banking products for real business, particularly SMEs. We will encourage the establishment of rural banking financial institutions and develop innovative services for rural banks. In areas that are hard to expand, we will provide financial services to the peasants. The bank's capital management should be strengthened, and the ability to transform savings into investment should be enhanced. Secondly, it is necessary to strengthen the self-governance of the commercial bank, and to reduce its management and management costs.

Perfect bank structure, increase efficiency, and promote real economic development.

1. Optimize the East, Middle and West Bank Structure, speed up the distribution and development of the Middle and West Regions.

2. Optimize the structure of the city and countryside banks, speed up the distribution and development of the rural bank, and increase the financial support services, so as to make the majority of the rural population have access to high quality banking services. The compensation system will be set up for the city bank and the east bank to the central and western banks. The compensation system will be used to set up bank service points and staff allocation in the city and countryside, east and west.

3. Further optimization of the ownership structure. Increase the proportion of joint-stock banks, promote the listing of eligible unlisted banks, increase the proportion of rural banks, and promote the development of medium and small-sized banks. Reciprocal involvement shall be promoted.

4. Further reduce the concentration of banks and enhance the efficiency of banks. Bank concentration is negatively correlated with bank efficiency. Currently, the bank's concentration is still relatively high, and the data shows that it is necessary to further reduce the concentration of banks in order to increase the efficiency of the banks.

5. The number and size of banks should be strictly controlled, and the path of conformal development should be followed. Based on the above analysis, there is no obvious correlation between Chinese banks' overall scale efficiency and real economic growth. This indicates that China should not expand the size of banks blindly at this stage. Instead, it is necessary to walk the path of connotative development.

Promote the main transformation of our banking system through incentives.

1. According to the actual situation in China, we should draw lessons from the changes of banking system in other countries, and promote the change of system allocation, operation and ownership.

2. Induced change should be the main way for Chinese banking system to change. There is a need for different conditions to stimulate and facilitate induced changes in the banking system. One of the achievements of Chinese banking system reform is the transformation from compulsory change to induced change. Therefore, the coordinated development of Chinese banking system and real economy should be based on induced change. In particular, after the establishment and perfection of the basic market system and the regulatory framework, it will be an important approach to the harmonious

development of Chinese banking system and the real economy.

3. Based on the features of the double structure of Chinese banking system and real economic development, it is necessary to make full use of the advantages of compulsory reform. Attention should be paid to the improvement of the rural banking system and the financial system, and the development of small and medium banks and financial institutions. To support the financing needs of the less developed regions and the countryside by the National Policy Bank's financial policy guidance. More favourable policies should be adopted for the less developed and rural areas, such as interest rate, deposit reserve ratio, bank branch and loan policy.

Reduce real economic volatility and make the banking system less vulnerable.

1. Aiming at the weakness of Chinese banking system, the paper focuses on the analysis and monitoring of relevant economic indicators, and takes the economic measures ahead of time, so as to make sure that the real economy develops smoothly and the banking system is stable.

2. Lower the rate of inflation and stabilize the savings rate. Based on the above analysis, there is a high correlation between the inflation rate and the bank's vulnerability. Currently, the inflation rate in China is relatively high, for example, from June-September 2021, keeping 5-6%, while in September 2021, the balance of household savings fell from the previous month. Under such circumstances, the bank's bad loan rate is rising, and the private loan financing is very active. Many owners of SMEs in Wenzhou have been forced to borrow from private lenders because they are unable to borrow money from the banks, which eventually leads to their inability to repay. All of this illustrates how important it is to lower inflation and stabilize savings rates. It is necessary to adopt positive and effective measures to lower the inflation rate and stabilize the savings rate. Meanwhile, in view of the high saving rate in China, we can reduce it to a reasonable extent, but we should avoid major fluctuations.

3. Set up a deposit insurance scheme. The fragility of Chinese banking system has its own features. For one thing, China's banks don't have the real risk of going bankrupt or going bankrupt like other banks, but the country is the last straw. Along with the establishment of the socialist market economic system in China, this nature must be

broken and broken. In order to maintain the stability of the banking system, it is necessary to set up a deposit insurance system.

We will promote the mutual development of the Chinese banking system and the real economy.

1. In order to avoid the mutual retreat, deviation, prevention of crowding out effect in Chinese banking system and its products from developing blindly in reality, blindly expanding. Gradually transforming the banking system.

2. Speed up the industrial upgrading of the real economy. Over the past three decades, China's real economy has made great progress. But facing the huge limitations of the old broad growth model and the constraints of the environment, the reform of Chinese real economy is also urgent. It is a necessary way to develop the real economy by changing from a broad growth model to an intensive one, to build a sustainable development model, to build a resource efficient and environmentally friendly development model, to promote the economy by means of technology innovation, to promote economic growth by means of residents' consumption, and to realize regional balance and overall development of city and countryside. It is also an important route for Chinese banking system to develop in harmony with reality. Speed up the development of the less developed regions and the countryside, balance the east, the middle and the west, and balance the three industries.

3. Carry out counter-cyclical supervision of banks and perfect banking regulation. We should strengthen the supervision of the bank's capital adequacy ratio and add counter-cyclical risk factors to the capital adequacy ratio. Furthermore, it is necessary to strengthen the information communication and policy coordination between the supervisory authorities and the Central Bank. By improving the management system, the financial system will be stable. It is necessary to establish a solid financial basis by improving the banking system in order to stabilize the real economy.

CONCLUSIONS

The research conducted in this thesis provides the following conclusions.

The study of the interaction between China's banking system and the real economy reveals the essential role that the banking system plays in promoting economic growth, maintaining financial stability, and supporting industrial development. Through this research, it is clear that the banking system and the real economy are not separate entities, but rather interdependent components that mutually influence each other. While the banking system plays a critical role in financing and facilitating economic growth, the stability and development of the real economy also directly impact the health of the banking system.

The variety of methodological approaches used to assess the stability of China's banking system demonstrates the complexity of diagnosing its financial health. This research has utilized a combination of macroeconomic indicators, prudential regulations, and empirical data to assess the state of the banking system. The findings highlight that the stability of the banking system cannot be defined by a single indicator, but rather through a comprehensive framework that accounts for multiple factors, such as capital adequacy, loan quality, and liquidity. The relationship between the banking system and economic growth is dynamic and multifaceted, and a systemic approach is necessary to understand the full scope of this relationship.

One of the key findings of this research is that while China's banking system has shown significant progress in recent years, particularly in terms of capital growth and financial stability, there are still challenges to address. The level of non-performing loans (NPLs) remains a persistent issue, and the banking system's vulnerability to external economic shocks is still a concern. The research also identified that fluctuations in the real economy, such as changes in industrial output or consumption, have a direct impact on the stability of the banking sector. Economic downturns, for example, tend to increase the rate of bad loans and place additional pressure on financial institutions.

The research also emphasizes the need for a more diversified banking system. By broadening the scope of financial institutions and services offered, banks can better support different sectors of the economy, reducing their reliance on traditional sectors and making the entire financial system more resilient. The role of commercial banks, particularly the Agricultural Bank of China, was examined as a representative example. The study highlighted how changes in the bank's credit structure, ownership, and regional distribution can directly affect its contribution to economic growth. As China's economy continues to evolve, the banking system must adapt to these changes, ensuring that it can meet the needs of both traditional and emerging industries.

Furthermore, this research underscores the importance of improving the regulatory framework to better manage the relationship between the banking sector and the real economy. While China has made significant strides in strengthening its banking regulations, ongoing efforts are needed to address systemic risks, particularly in terms of non-performing loans and over-reliance on specific sectors. Strengthening stress testing and adopting more flexible regulatory measures are key to ensuring that the banking system remains stable, even during periods of economic volatility.

The findings also suggest that stress testing, which evaluates the resilience of banks under different economic scenarios, should be a standard practice to identify potential vulnerabilities before they escalate into major issues. Stress testing can help regulators assess the impact of economic fluctuations on the banking sector and guide policy adjustments to mitigate risks. This practice will also support the adoption of macro-prudential policies that promote long-term stability and economic growth.

Lastly, the research suggests that fostering closer ties between the banking sector and the real economy is essential for sustainable growth. Banks must continue to support industrial upgrading, increase investments in key sectors such as manufacturing and infrastructure, and enhance their support for small and medium-sized enterprises (SMEs). On the other hand, the government should focus on strengthening the banking supervision system to ensure that financial institutions remain aligned with the needs of the real economy while managing systemic risks.

In conclusion, while China's banking system has made significant progress in adapting to the needs of the economy, it still faces challenges related to non-performing loans, over-reliance on specific sectors, and the vulnerability of the financial system to external shocks.

The recommendations presented in this research provide a comprehensive roadmap for enhancing the resilience of China’s banking system, ensuring that it continues to support sustainable economic development while mitigating systemic risks. By focusing on improving regulatory frameworks, enhancing stress testing practices, and promoting the mutual development of the banking system and the real economy, China can build a more stable and resilient financial system for the future.

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Онлайн сервіс створення та перевірки кваліфікованого та удосконаленого електронного підпису

ПРОТОКОЛ
створення та перевірки кваліфікованого та удосконаленого електронного підпису

Дата та час: 10:57:55 15.05.2025

Назва файлу з підписом: Чжоу_Цзінь_(Zhou_Jin)_MT.pdf[1].p7s[1].p7s
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Результат перевірки підпису: Підпис створено та перевірено успішно. Цілісність даних підтверджено

Підписувач - 1: АЗАРЕНКОВА ГАЛИНА МИХАЙЛІВНА
П.І.Б.: АЗАРЕНКОВА ГАЛИНА МИХАЙЛІВНА
Країна: Україна
РНОКПП: 2571514226
Організація (установа): ФІЗИЧНА ОСОБА
Час підпису (підтверджено кваліфікованою позначкою часу для підпису від Надавача): 22:06:16 09.12.2024
Сертифікат виданий: КНЕДП АЦСК АТ КБ "ПРИВАТБАНК"
Серійний номер: 5E984D526F82F38F04000000E4DA710112DF3D05
Тип носія особистого ключа: Незахищений
Алгоритм підпису: ДСТУ 4145
Тип підпису: Удосконалений
Тип контейнера: Підпис та дані в одному файлі (CAdES enveloped)
Формат підпису: З повними даними ЦСК для перевірки (CAdES-X Long)
Сертифікат: Кваліфікований

Підписувач - 2: Омеляненко Денис Олегович
П.І.Б.: Омеляненко Денис Олегович
Країна: Україна
РНОКПП: 3634714115
Час підпису (підтверджено кваліфікованою позначкою часу для підпису від Надавача): 17:13:22 19.12.2024
Сертифікат виданий: "Дія". Кваліфікований надавач електронних довірчих послуг
Серійний номер: 382367105294AF9704000000EF5A070009B10B03
Тип носія особистого ключа: ЗНКІ криптомодуль ІІТ Гряда-301
Серійний номер носія особистого ключа: Не визначено
Алгоритм підпису: ДСТУ 4145
Тип підпису: Кваліфікований
Тип контейнера: Підпис та дані в одному файлі (CAdES enveloped)
Формат підпису: З повними даними ЦСК для перевірки (CAdES-X Long)
Сертифікат: Кваліфікований

Версія від: 2025.01.15 13:00