

# Financial Risk Analysis of Commercial Banks

## -- Taking ICBC as an Example

Lingcan Sun<sup>1</sup>, Yaning Wang<sup>2</sup> and Erhao Lou<sup>3</sup>

<sup>1</sup>Sichuan International Studies University, China

<sup>2</sup>North China University of Science and Technology, China

<sup>3</sup>Zhengzhou College of Finance and Economics, China

### Abstract

With the continuous development of the trend of globalization, the Internet, big data application breadth and depth are constantly expanding, brought opportunities for the development of financial institutions, but also challenges at the same time, the intensity of competition in the financial markets, the vicious competition means, represented by the bank of all aspects of the facing the risk of financial institutions, at present, for commercial Banks, It is particularly important to effectively predict and avoid financial risks. This paper will take THE Industrial and Commercial Bank of China as an example to analyze the current situation of operation and management with its relevant business as the starting point, and then extend to the financial risk analysis, develop the existing problems, and put forward targeted financial risk prevention measures. Enable it to resolve financial risks, promote their own and effective development of the banking industry.

### Keywords

Commercial Banks; Financial Risk; Industrial and Commercial Bank of China.

## 1. Overview of ICBC

Established on January 1, 1984, INDUSTRIAL and Commercial Bank of China (ICBC) is a large state-owned bank under the management of the central government. It is a financial institution engaged in deposit and loan, settlement and cash management. With its large customer base, Gong Commercial Bank has become one of the largest commercial banks in China with a wide range of business, including: For seven consecutive years, the company has topped the list of "Banker" Global Bank 1000, "Forbes" Global Enterprise 2000 "and" Fortune 500 "Commercial bank sub-list. Top of Brand Finance's Global Bank Brand Value 500 list for four consecutive years. It raises social funds through the financing function, provides deposit and loan services for customers, provides financial support for enterprise operation, and increases the input of technical transformation. In recent years, in order to increase its share of the domestic market, ICBC has continuously expanded its business scale and business scope, infiltrating into every aspect of people's life.

## 2. Major Financial Data Analysis

### 2.1. Profitability Index Analysis

Profitability indicators reflect the profitability of commercial banks. Including average return on total assets, cost to income ratio, net interest rate and so on.

### 2.1.1. Average Return on Total Assets

Roa is the ratio of net profit to the average balance of total assets. As can be seen from Figure 1, the average roA of ICBC is decreasing year by year, indicating that its profitability is poor and its ability to resist risks is weak.

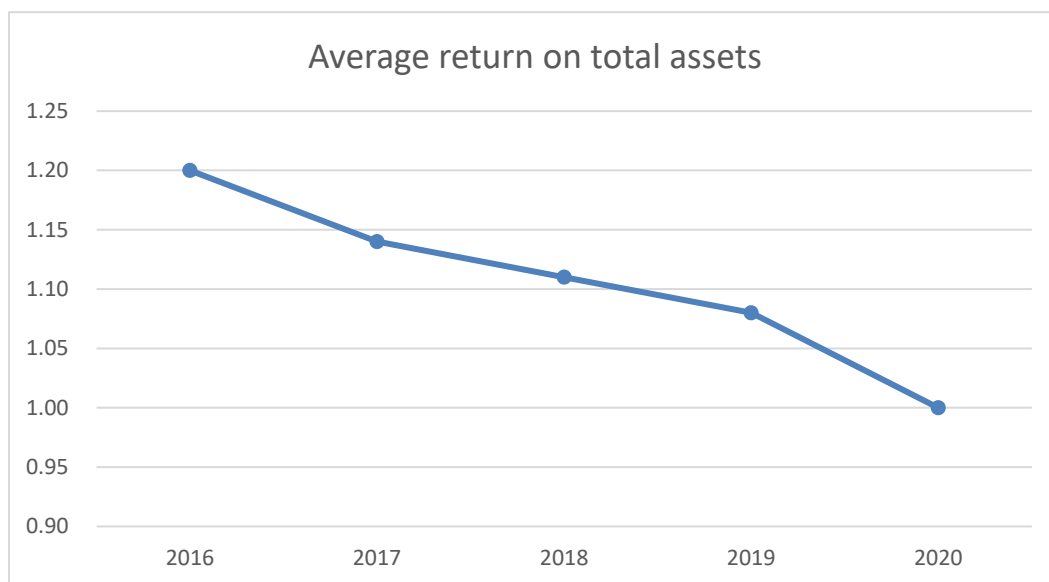


Figure 1. Average return on total assets

### 2.1.2. Cost-income Ratio

Cost-income ratio refers to the ratio of operating expenses plus depreciation to operating income, reflecting the cost and expense borne by ICBC for each unit of revenue. As can be seen from Figure 2, the cost to income ratio of ICBC has been declining in recent years. In recent years, banks have been reducing staff, popularizing artificial intelligence, reducing costs and expanding profit margins.

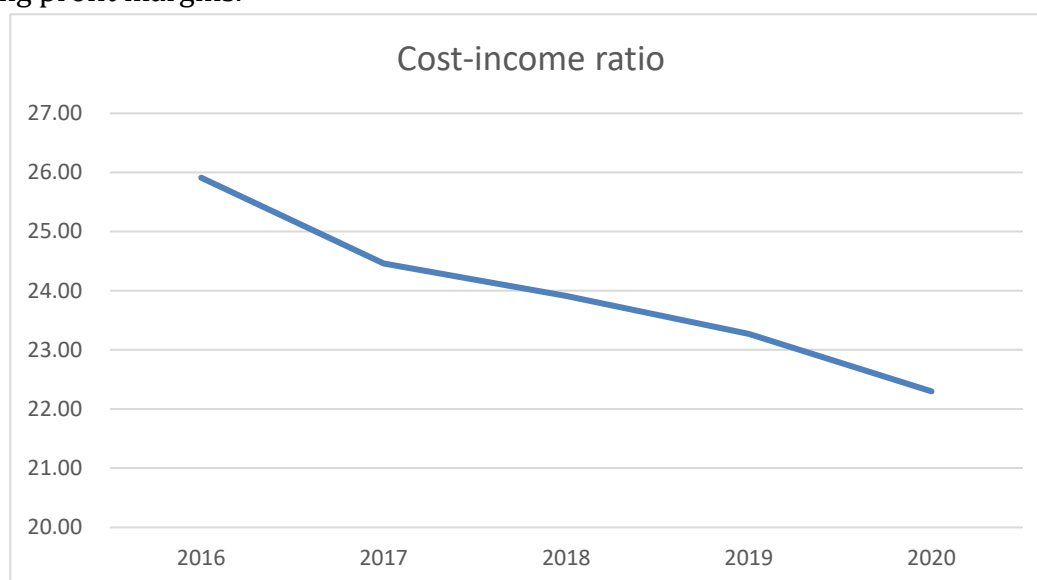


Figure 2. Cost-income ratio

### 2.1.3. Net Interest Rate

Net interest rate of return (NIM) = (interest income - interest expenses) to the average balance of interest-bearing assets, reflecting a bank's lending capacity. As can be seen from FIG. 3, the net interest rate of ICBC reached a peak in 2018 and began to decline again, as a whole like an inverted V shape, with large fluctuations and weak stability.

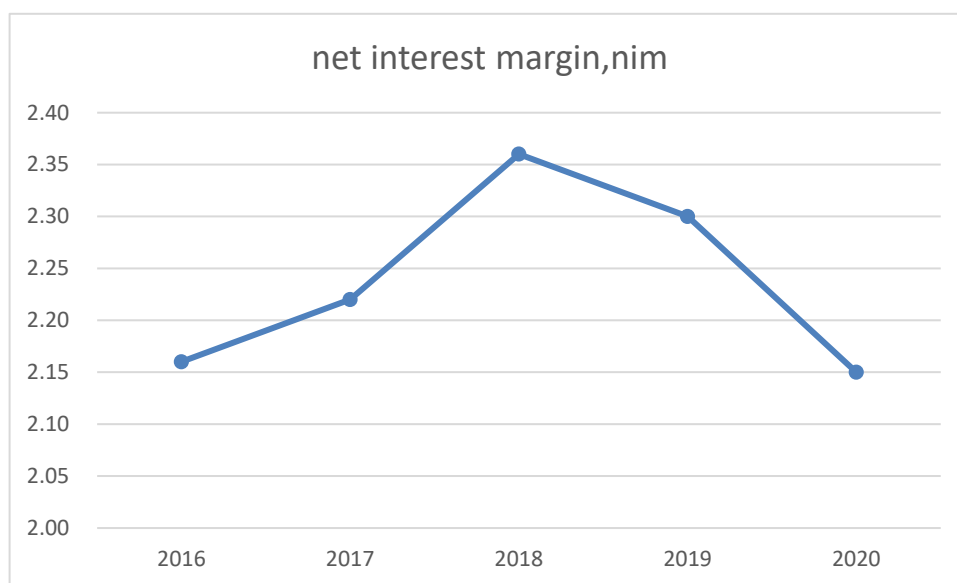


Figure 3. Net interest margin, nim

## 2.2. Risk Management Index Analysis

Risk management indicators reflect the basic risk management ability of commercial banks, including the ratio of net interest income, Non-performing loan ratio and total loan reserve ratio.

### 2.2.1. Percentage of Net Interest Income

The ratio of net interest income is the ratio of net interest income to operating income, corresponding to the interest rate risk and liquidity risk of commercial banks. As shown in Figure 4, the ratio of ICBC's net interest income has been declining since 2018. It shows that ICBC is gradually transforming and getting rid of the traditional mode of relying on interest as the main income.

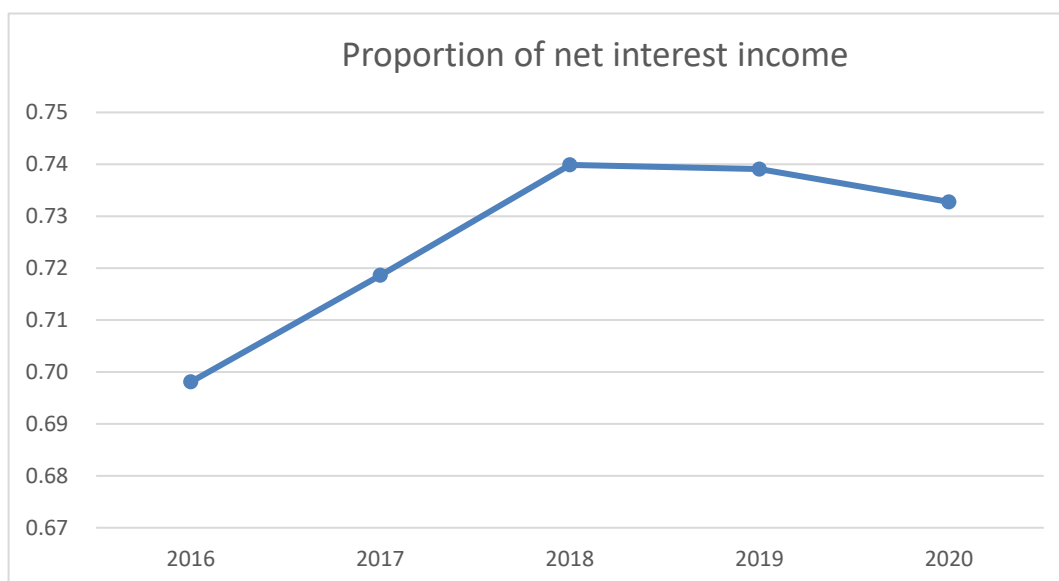


Figure 4. Proportion of net interest income

### 2.2.2. Non-performing Loan Ratio

Non-performing loan ratio is the ratio of Non-performing loan balances and total loan balance, can be seen from the Figure 5, 2016-2018 industrial and commercial bank of good development momentum, Non-performing loan ratio is lower, 2019 reached the lowest, but in the later due

to the changes of social environment, the outbreak of raid, etc., that raises the risk of bank, Non-performing loans grow at a faster speed.

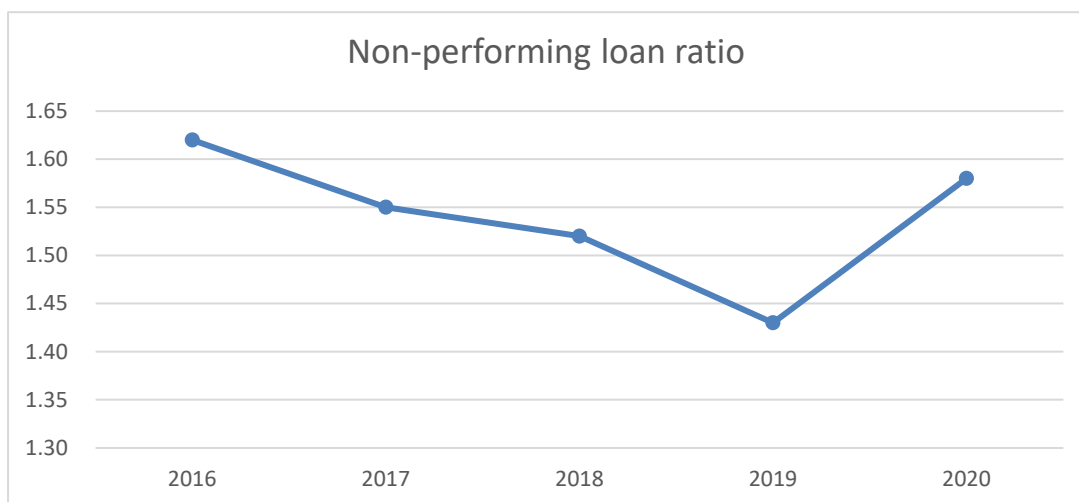


Figure 5. Non-performing loan ratio

### 2.3. Analysis of Cash Flow Indicators

Commercial banks mainly operate with money flow, and liquidity is a necessary condition for the continuous operation of commercial banks. It mainly includes net cash flow generated by operating activities, profit margin of cash flow and profit margin of cash flow assets.

#### 2.3.1. Net Cash Flows from Operating Activities

Net cash flow from operating activities is the net increase in cash and cash equivalents less the net cash flow from financing activities less the net cash flow from investing activities. On the whole, it shows a trend of rising volatility and a good momentum of development, especially after 2019, it once showed a straight rise. Icbbc has good liquidity.

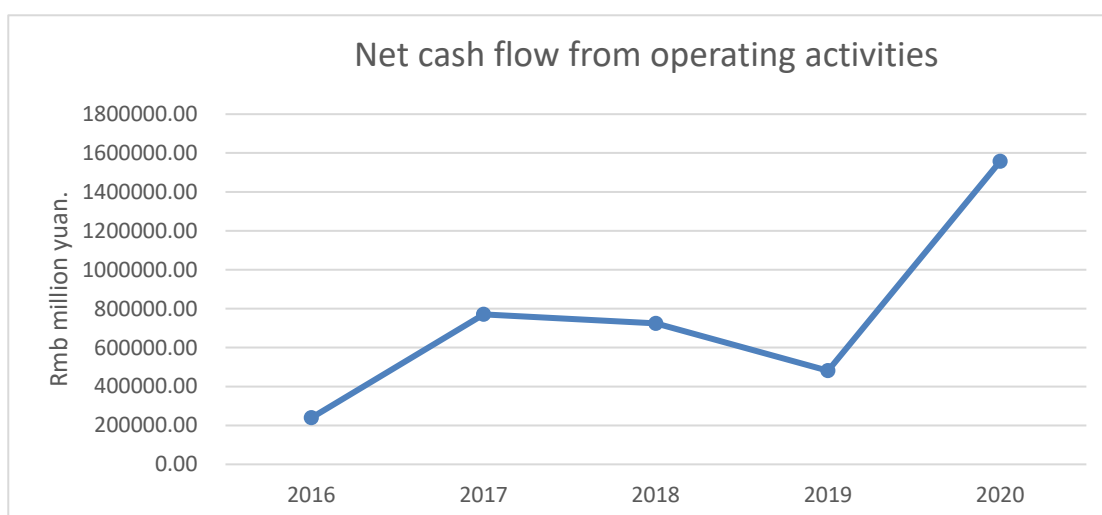


Figure 6. Net cash flow from operating activities

#### 2.3.2. Profit Margin on Cash Flow

Profit margin of cash flow refers to the ratio of cash obtained from operating activities to operating income, indicating the percentage of cash available to commercial banks in each unit of operating income. The higher the ratio, the better. As can be seen from Figure 7, icbbc's cash flow profit margin fluctuated from 2016 to 2019, but the range of change was relatively small. After 2019, it showed a trend of straight-line rise, with a positive development trend.

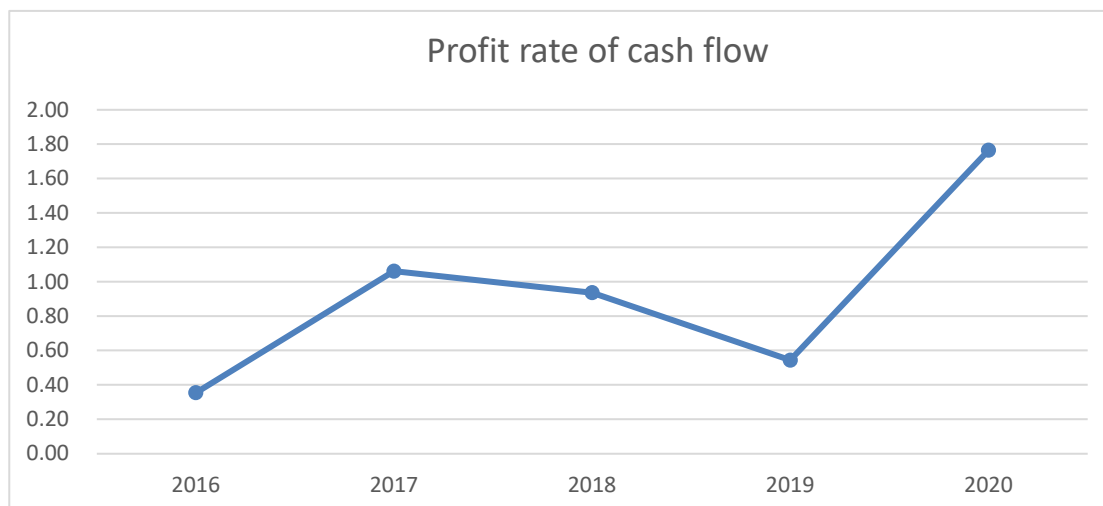


Figure 7. Profit rate of cash flow

### 3. Financial Risk Management of INDUSTRIAL and Commercial Bank of China

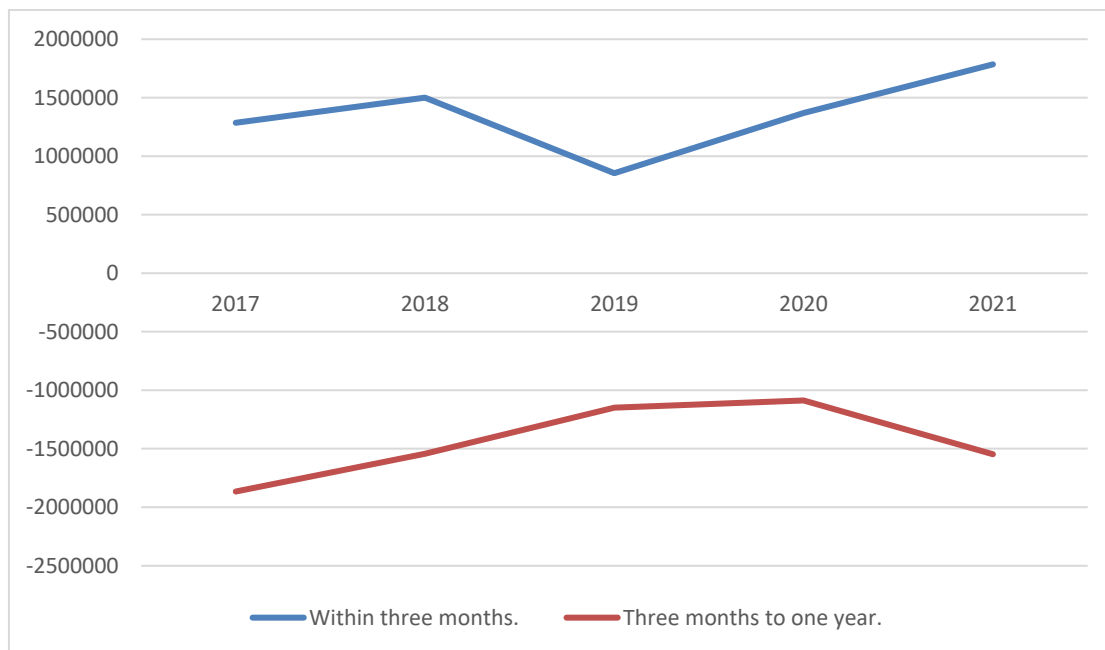
#### 3.1. Financial Risk Management in the Market Needs to be Strengthened

Industrial and Commercial Bank of China is not a commercial bank with strict financial risk control, but a level that needs to be paid attention to and the degree of financial risk management of commercial banks needs to be strengthened. Published data show that commercial banks are good at managing capital, and indicators are at a safer stage, which can indicate a serious underinvestment. However, it is also possible that two types of credit risk, namely coverage and low credit performance, represent specific problems in private bank lending. At the same time, the net profit growth rate for the period was likely due to the imbalance in credit activity, which was significantly lower than the industry average. In 2012, the government gradually intensified the control over interest rate fluctuations caused by foreign intervention. In 2015, it began to fully announce loan interest rates on the basis of all domestic markets, which greatly increased the risk of uncertainty growth of commercial banks and required strict supervision by relevant departments.

##### 3.1.1. Data on Interest Rates have Become More Sensitive

Commercial banks often use a sensitivity error model to manage day-to-day interest rate risk, which accumulates the difference between interest rates and liabilities. If the calculated difference is positive, the difference can be positive or negative, resulting in a positive bias, or negative bias if it is negative. Positive bias is a sensitive asset, because of the impact of interest rates, it is higher than debt financing, negative bias indicates that sensitive debt is higher than assets, liabilities are more dependent on interest rates than investment. If the balance is zero, then the sensitive assets and liabilities cancel each other out, so there is no negative impact on interest rates. If the interest rate sensitivity value is positive, it is proportional to the change in net interest rate, and if the interest rate spread value is negative, the net income is inversely proportional to the change in interest rate, and the interest rate spread value is zero, thus exempting the bank from the interest rate.

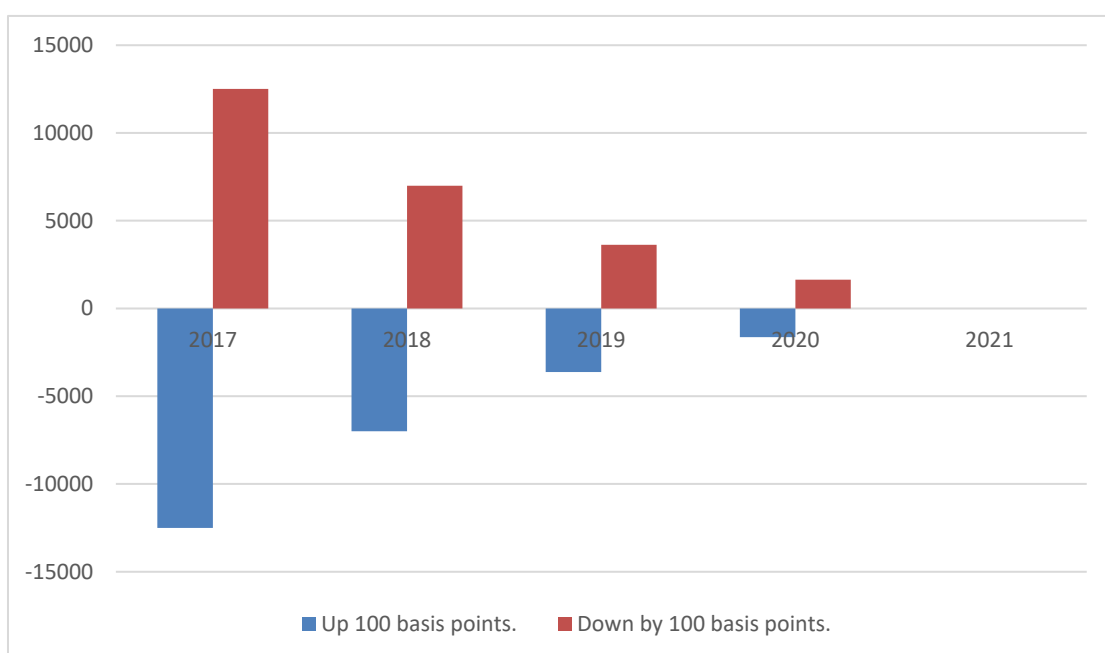
Therefore, rising interest rate volatility is a direct factor leading to changes in bank profits, and also indicates the extent of direct profits. Figure 8 shows the interest rate fluctuation data of commercial banks in the past five years:



**Figure 8.** Fluctuation chart of partial interest rate data

Over the past five years, commercial banks' interest deficit has generally been an annual trend with varying effects of interest rate changes over time. In particular, the three-month spread between sensitive assets and liabilities in 2021 was high at 41%, meaning the company would be exposed to huge interest rates if market rates rose. Second, interest rates rose rapidly from three months to a year from 2019, doubling by 2021, which means that falling market interest rates will have a significant impact on banks' productivity.

Overall, ICBC's insensitivity to short-term interest rates in recent years requires a lot of attention, and interest rate hikes or cuts may cause losses. Therefore, to avoid the impact of interest rate fluctuations, the spread between sensitive asset-liability accounts should be as low as possible.



**Figure 9.** Relationship between changes in interest rate base points and net interest income.

This estimate assumes that interest rates increase or decrease equally in all periods to determine the extent to which the impact of interest rates affects interest rates, and as the interest rate base increases, the net profit of commercial banks usually shows a downward trend. That is, debt has a stronger impact on interest rates than sensitive assets; When the net interest margin falls by 100 units, it is generally on the rise. Second, the surge in 2021 was more than four times that in 2020, suggesting that small changes in interest rates will lead to profit growth. Overall, the interest rate risk of commercial banks is increasing, and timely measures should be taken to avoid intervention.

### 3.2. Risk Management of Asset Quality Needs to Improve Prevention Intensity

The main income of commercial bank's commercial relationship comes from the interest income of loan, and the profit rate is derived from the difference of deposit interest rate. Therefore, loan as a bank's asset is a crucial element of bank's asset quality. Every commercial bank has its own loan conditions. Although the borrower or the reason for accepting the loan is carefully examined in advance, such interest may not be paid or repaid to the maturing debt, posing a risk to asset quality. If assets are of poor quality, meaning more bad loans, commercial banks' profits will take a big hit. This is particularly important for asset risk management, which requires commercial banks to strictly close and monitor assets in order to effectively prevent asset quality risks.

#### 3.2.1. Risk-weighted Assets

**Table 1.** Risk-weighted assets

Financial risk	weight of asset	category details.	
<b>Customer advances and loans.</b>		Short-term corporate loans	75%
		Long-term corporate loans	100%
		Personal housing mortgage loan.	50%
		Add a partial loan to the mortgaged property.	150%
		Other creditor's rights to individuals.	75%
		Bill discounting	100%
		Overseas business	20%
<b>bond investment</b>		Non-restructuring bonds.	100%
		Restructured bonds.	100%
<b>Inter-bank funds and lending funds.</b>		Within 3 months.	20%
		Over 3 months.	25%
<b>Deposit with central bank.</b>			0%
<b>Net interest income of financial assets bought and sold back.</b>			100%
<b>Trust income right.</b>			100%
<b>Financial products of financial institutions.</b>			100%

The risk weighting in the table shows that the detailed weight of each company code is different. The credit rating represents the highest risk of its own capital, while the deposit rating represents the lowest risk of its own capital. Venture capital weights in China have long been higher than industry standards, possibly because of the growing size of commercial banks. Horizontally, commercial and commercial banking has increased over the past five years. The

increase in risky assets means existing assets pose greater future risk, making it more difficult to manage risky assets in the division.

As the banking system has developed, the proportion of average income generated by commercial banks off their balance sheets has risen. These include intermediary trade with reception banks, credit banks and insurance companies. Off-balance sheet assets may mean profits for commercial banks, while the typical interest rate on bank earnings indicates the quality of the bank's assets, regardless of the size of the off-balance sheet assets. The total income of a bank is the operation of a commercial bank, which is the most direct and does not exclude diverting factors, while the net income of a bank is the net profit generated by the total income, minus the impact of high interest rates and other factors.

Public data show that the risk-asset return of commercial banks has declined continuously over the past four years (from 3.246% to 2.748%). The evolution of gross profits and risky assets suggests that profits have slowed over the past five years on the back of strong growth, suggesting that a large number of risky assets are not delivering comparable returns. At the same time, loans used to be an important part of bank asset projects, which affected the quality of bank assets and increased bank profits. Therefore, the study of bank asset risk needs more attention and more detailed planning.

### **3.2.2. Risk of External Assets**

As commercial banks continue to expand, new intermediate transactions and large amounts of off-balance sheet assets are emerging. Off-balance sheet assets, also known as off-balance sheet transactions, benefit from bank profits. The balance sheet business of commercial banks is mainly driven by the financial sector, accepting checks and trust funds, and commercial banks acquired a share of \$2.5 trillion in assets at the end of 2015 to invest more than \$25 billion in various construction projects and take on some market risks. At the same time, the disastrous products of the market industry are invested in the property sector with high risk of profit, which may influence the unions through enforced interest relations. There are also financial sector products that are used during transactions to avoid increased financial risk once the organization's business needs are exceeded. For this reason, attention and risk prevention should also be directed at external assets.

### **3.3. Credit Risk becomes the Core Factor that Causes Bank Financial Risk**

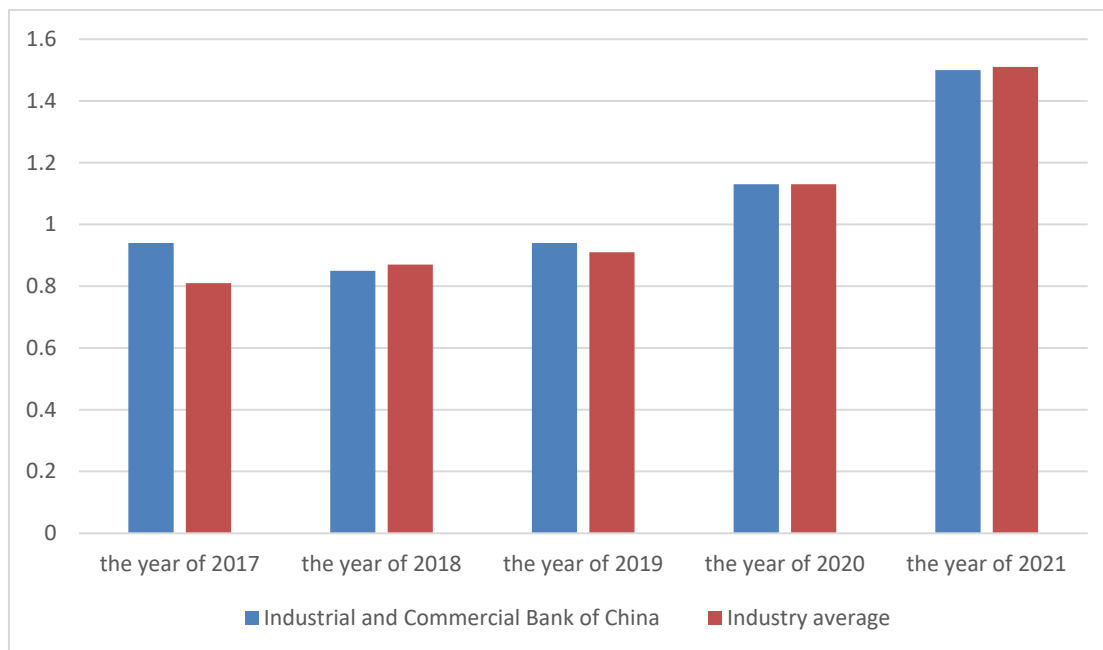
Credit risk is a significant but difficult risk for commercial banks to control, usually because of the credit crisis, which can lead to a decline in trading volumes. The main reason for credit risk is the default risk of the borrower's inability to pay the principal and interest, and the potential default risk in the case of declining solvency. Therefore, credit risk is the biggest financial risk facing many uncertainties of commercial banks. It requires managers to adjust assets trading, debt trading, intermediate real-time trading and other strategic objectives, and has become an important tool to create high income for the whole bank. For commercial banks, the asset structure is very high, the loan-to-deposit ratio is high, the loan interest rate is closely related to the loan risk, and the debt is much higher than the principal of the owner. Therefore, as a risky industry, commercial banks can only provide their own assets to create value and make profits for banks.

#### **3.3.1. Analysis of Loan Situation**

Total loans and fixed capital investment by commercial banks have improved steadily over the past five years, with corporate bonds and private loans making up the majority of loans by type of loan. Corporate bonds are the main assets of commercial banks.

In the category of credit management, commercial banks use 5 types of credit rating, among which high risk rating, doubtful category and loss need special attention and action. Poor credit is the main factor of poor asset quality and the main cause of credit risk.





**Figure 10.** Comparison table of Non-performing loan ratio

Raising the lending rates of commercial banks and then bringing them into line with the industrial average is a highly unfavorable task for the credit departments of commercial banks, implying that negative credit is high risk. Since the third quarter of 2018, the Non-performing loan ratio of commercial banks has reached 1.63 percent, below the test average. Among the big four banks, commercial banks also became the banks with the worst loans and the most mortgages. In the spirit of the loss-management procedure for commercial banks, the National Banking Administration stressed that commercial banks must have coverage ratios exceeding or equal to 150 percent, a major limit on credit risk.

In addition, credit risk premium is an important indicator to control bank credit risk, which requires banks to 2.5% or above. In this context, the scope and level of credit reserve directly measure the bank's credit policy status and cred.

**Table 2.** Comparison Table of Overdue Loans of ICBC

project	2018		2019		2020	
overdue loans	sum of money	proportion of loans	sum of money	proportion of loans	sum of money	proportion of loans
	133631	1.35%	210578	1.91%	332698	2.79%

As can be seen from the table, inflows to commercial banks have fallen sharply in recent years, exceeding regulatory limits. The subsidy rate in the third quarter of 2017 was 136.14%, compared with 20% in the same period last year, the smallest and most consistent reduction in regulatory and supervisory limits. Credit ceiling rates have also fallen in recent years under regulatory guidance from equity banks. At the same time, the proportion of loans has been declining every year, indicating that commercial banks are in full control of the management of outstanding loans. However, with the decline of total loans, the capacity to bear reserves and loans declined steadily, indicating that commercial banks continued to issue open loans, such as the \$383.64 billion of open loans issued by commercial banks in 2016, which increased the willingness to repay loans and reduced the total amount of loans. And this index is much lower than the denominator, and continuously raise the loan reserve ratio of commercial banks.

Analysis shows that in recent years, commercial banks have implemented a large number of loan extension policies, and available funds and available loans have decreased. It can be seen that the desire to reduce credit has a direct impact on profit margins if the decline in value losses is reversed. For this reason, feedback and the impact of the economic crisis on the profit growth that commercial banks could have achieved through these policies. Considering the increase of loan ratio and the decrease of reserve, it can be seen that commercial banks soon spent enough money, the good loan management model of debt is becoming increasingly clear, and the loan risk is serious in the future.

The bank's credit risk behavior is largely determined by the bank's overall credit management mechanism, which is the main reason for the bank's higher returns. Therefore, it can be seen from the general mode of loan management of commercial banks that the exemplary order of the whole process processing is mainly driven by consumer demand, customer credit rating, customer unified credit, loan processing and post-loan tracking. Among them, the loan business process is the most important aspect of commercial banks.

In Commodity Account Manager, it can be determined that investigators, defendants and experts are responsible for Account management throughout the process, that auditors are led by the upgrade line, and that auditors are led by the risk and credit management department and get maximum approval in management. Therefore, it is clear that employees are crossed throughout the credit process, with one person having more than one position, even though the employee is following certain procedures.

#### **4. Current Situation of Risk Management of Internet Finance**

In recent years, Internet finance has become an important means of trade in commercial activities, promoting the development of the whole social economy. Online financial is a new way to conduct financial transactions online, such as lending to the third party trading platform, network, the raise, online trading financial assets, etc., is a large financial transactions in the new form based on network information technology of the Internet financial has overcome the time limit of financial transactions, make more timely and accurate financial transactions, become today's fastest growing mode of payment, It may greatly harm the traditional business practice of commercial banks. Faced with the flow of Internet funds, commercial banks began to adopt a comprehensive financial strategy to establish the five I goal of Internet design, mainly marking the future of information sharing and intelligent network. Commercial banks are also focusing on developing mobile payment and have developed a number of mobile banking and peripherals, aiming to speed up the establishment of information banking and create new areas of value. However, given the huge demand of mobile payment, online banking and mobile banking of commercial banks are limited.

The online financial services of commercial banks and commercial banks are divided into two directions: B2C and third-party payment. They also provide cash bank payment, loan, financial purchase and salary package and other business models, which greatly improve the construction of online banking. Employee and Employee Pay are a fast payment method developed by the industry that allows customers to make small online transactions quickly and easily. "Online credit" means entity or small business credit models that offer more specialized credit online; "Electronic processing" refers to the first e-commerce virtual market developed by commercial banks, mainly responsible for the e-commerce of goods; All Internet finance models are suitable for bank transfer, payment, commission and net interest. Does network finance have great advantages for commercial banks?

Bank cards and commercial bank assets saw the biggest increase in operating profit, with a total increase of 47.43% in commission, while bank cards and assets combined accounted for 13.73% of operating income. Bank card receipts cannot be calculated, for example, in normal bank

transactions, because the detailed operational results of active off-balance sheet assets cannot be calculated. Under the traditional model, a bill of 1% to 2% of the transaction value is recorded as an expense, while the card issuer keeps 70% of the revenue from its own expenses, transfers 10% of the amount to the bank and keeps the remaining 20% for itself. So, credit card banks get 0.7% of the consumer's value. For example, the form of payment to third parties may change in terms of payment from the platform because the platform payment ignores the banking system due to special payment types, i.e., it does not pay a 10% transfer commission to the bank and can charge a transaction fee of 0.3% to 0.5% to the seller. From there, 70 percent of these fees are transferred only to the credit card bank. Based on the payment model, credit card banks receive only 0.2 to 0.4 percent of consumption as transfer income. In other words, if THE INDUSTRIAL Bank acts as the card issuer, the expenditure income generated by the consumption on the payment platform will decrease by 70%, which will also affect the operating income of the industrial Bank.

**Table 3.** Sensitivity analysis table of the potential impact of third-party payment on bank fee income and operating income

	Impact on fee income.				
Substitution ratio	10%	20%	30%	40%	50%
rate of change	-1.78%	-3.57%	-5.35%	-7.13%	-8.91%
	Impact on operating income.				
Substitution ratio	10%	20%	30%	40%	50%
rate of change	-0.43%	-0.85%	-1.28%	-1.71%	-2.13%

The calculation shows that the increase in the number of third-party payments not only reduces the commission of commercial banks, but also reduces the operating income. It pointed out whether internet-related financial risks should lead to the elimination of commissions for commercial banks, given the increasing prevalence of third-party online payment methods, or risk for Internet enterprises, which are too small for ICBC to seriously evaluate and implement related risk management programs.

## 5. Financial Risk of INDUSTRIAL and Commercial Bank of China

### 5.1. Financial Risk in the Market

#### 5.1.1. The Structure of Financial Assets is Simpler

In recent years, the interest rate differential of commercial banks has widened because the imbalance between the number of sensitive assets and confidential liabilities leads to the resolution of the imbalance, mainly for three main reasons. The first is the balance sheet structure. Most of the sensitive assets of commercial banks are loans and headquarters, while the most sensitive liabilities are retail customers. For example, in 2015, commercial banks had total assets of \$22.0978 billion. Loans and advances to customers were \$11,433,346 million. In 2005, total debt was \$155 million, or 53.8%, making the single debt balance and structure less favorable for the allocation of interest rate and cash flow risk. At the same time, commercial banks have issued many medium - and long-term government bonds in recent years, which would cause an immediate interest rate loss if interest rates rose. Therefore, it is imperative to perfect the structure of sensitive assets and liabilities.

#### 5.1.2. Unused Products of Interest

In the interest rate market, the competition of commercial banks is increasingly fierce, but the use of interest rate products by commercial banks is still in the initial stage. Financial instruments can address interest rate risk and have a degree of competitiveness. Derivative

financial instruments, such as future interest rates, future interest rates, periods, maturities, etc. Buildings anticipate interest rate changes to some extent and help transfer interest rate risk. This is too low, especially for large percentage risks, to be a risk factor for diversification.

### **5.1.3. Unused New Interest Rate Forecasting Methods**

Commercial banks' assessment of interest rate risk is mainly based on interest rate uncertainty analysis, but these methods cannot accurately predict and measure interest rate risk. The vAT-widely used by western banks in developed countries is only mentioned in the risk management of commercial banks, not a real risk assessment system, that is to say, it is a risk assessment system. Lack of technical knowledge. Of course, this also requires better integration of our national information systems, as VAR is based on a large amount of historical data and industry norms. Therefore, interest rate risk monitoring needs more research and integration of the actual use methods.

In general, interest rate risk for commercial banks has increased in recent years, mainly due to inconsistent asset and debt levels. Therefore, future risk management must also take into account the structural integrity of capital liabilities and the updating of valuation methods in order to effectively avoid many potential gains that may arise from interest rate negotiations.

## **5.2. Financial Risk Issues Related to Asset Quality**

In recent years, the main defects lead to the sharp rise in the rate of return on venture investment, while the rate of return on risk assets declines, which seriously threaten the safety and liquidity of commercial banks' assets.

### **5.2.1. High Savings Rates and Low Capital Flows**

The most important activities of banks are deposits and loans. An analysis of Risk-weighted assets shows a significant increase in risky assets, with most of the venture capital coming from loans. You can see that loans to commercial banks are 71.4% higher than the industry average, meaning that the value of loans is much higher than the value of deposits. In recent years, the main reason for the rapid growth of risk assets is the imbalance of deposit interest rate. Asset risk management must start from deposit and loan.

### **5.2.2. Lack of Temporary Transactions**

The huge venture investment of commercial banks is several kinds of loans and promising projects, and the trend has been rising year by year in recent years, while the Non-performing loans are still in the red line, resulting in large-scale loan extension and insufficient liquidity. The increase of intermediaries can not only increase new revenues for banks, such as higher profits from different types of agency costs, but also improve the efficiency of capital use. However, the intermediate trading positions of commercial banks are not as advanced, mainly through lending rates, fueling a vicious circle of risky assets and supporting potential risks to asset quality.

## **5.3. Credit Risk Management Issues**

### **5.3.1. Credit Checks are Time-consuming and Inefficient**

The main business of credit line staff is qualification, authorization and credit granting. The approval of these three departments must be taken charge by the general leader of the municipal subsidiary before provincial intensification, and the maximum loan must be reported to the head office. The three sections shall be approved in a certain order, and each section shall be upgraded or improved to at least three levels, including a total of nine approval levels. The approval process takes at least three months, by which time ordinary account managers say new regular account companies want to apply for mortgages, both for small and large start-ups. Due to the complicated and strict procedures, many good customers decide to borrow money from other banks, which affects the loan quality of commercial banks.

### **5.3.2. Loans are Only Part of the Management System**

The documents required to approve each credit line are mainly financial reports and supporting data, documents, etc. Failed to authenticate or personally send the company to check and investigate the operational integrity of the business in the last three years. The solvency of a company is determined only based on textual data or untrue documents. While some subsidiaries are taking steps to audit the company itself, they are only taking one step at a time and do not have the exact conditions or audit experience to achieve true operating conditions. Second, it is also not clear whether formalism on the guarantee side is a lending decision that undervalues mortgages or medicines, or holds mortgages that inaccurately value mortgages, fails to carefully study the borrower's actual financial condition and sometimes authorizes approval even if the guarantee contract is inadequate.

### **5.3.3. The Authority's Areas of Responsibility are not Fully Separated and are Weak**

There are many tasks in different lines of account managers: starting markets, managing credit and even marketing finance and capital assets, leading to a lot of overlapping areas of responsibility and unclear divisions of Labour. For this reason, when checking loans to clients, the account manager must take into account his loan sales, his position is not transparent, and he is sensitive to blind lending and unacceptable lending. Professional credit risk managers perform approval processes without knowing the actual credit situation, which means data asymmetry between credit brokers in the back office and account managers in the front office. Customer managers blindly after the excuse, may lead to difficult recovery. At the same time, some loan managers also act as administrative staff when exercising the loan authority, which may lead to lower loan quality because bank transaction management spends too much time considering the loan.

### **5.3.4. Mismanagement of Loans**

A study of the loan structure of commercial banks shows that there is still a lot of room for loan monitoring and inspection, and commercial banks are rarely able to track the use of loans once they enter corporate accounts. Whether the company made blind loans to foreign investments or did not use them under loan agreements, losses on bad investments can lead to flows, even without collateral. Credit risk will increase dramatically as companies' lending and financial positions are no longer studied or understood.

## **6. Problems Existing in Risk Management of Internet Finance**

### **6.1. Obvious Homogenous Competition**

As payment competition from online third-party payment platforms continues to grow, commercial banks are developing employee payment as a payment platform for their own online banking. In terms of payment model, it is like a payment platform for children, where it is safer and more convenient to pay to children than to children. However, the financial e-shopping and salary package adopted by commercial banks simulate the platform operation mode and remaining balance of a telephone company, but there are gaps in operation concept and marketing. The homogeneity of competition is obvious, and the profits of these companies are not always large. At the same time, the Internet lacks quantitative financial risk control tools, which are analyzed in their own financial data and not evaluated in the market, and are not perfect enough to establish the risk management of commercial banks. The current situation of risk management of commercial banks obviously does not adapt to the growing number of Internet financial companies, transaction scale, frequency and business categories. In this case, commercial banks should actively resolve network financial risks, take corresponding measures to prevent and reduce risks.

## 6.2. Low Compensation and Indirect Financial Management

With the rapid development of Internet finance, new financing mode and new means of payment are becoming more and more important to commercial banks, which is also a major problem facing commercial banks. As with P2P online loans and government loans that were popular in 2016, the speed of dissemination using different types of social media customers will greatly reduce financing costs and greatly reduce the impact of asymmetric information effects. On the other hand, the traditional financing methods of commercial banks are sustainable, inefficient and inefficient, and their management does not follow the Internet. At the same time, the payment and financing methods of third-party payment platforms are the same, which is a fact that a large amount of funds are raised to different types of third-party payment institutions through the rapid spread and popularity of the Internet, while the speed and efficiency of payment management and financing of commercial banks are relatively low. Chapter five, Internet financial risk analysis of commercial banks, determines the payment risk of third-party companies and money market funds on the balance sheet. Its risk management tools are in urgent need of maintenance and a better management mode is urgently needed.

## 7. Financial Risk Prevention Measures of ICBC

### 1. Improve the asset allocation level of banks

The method and intensity of asset allocation of commercial banks have a great impact on the normal business operation of banks. On the other hand, most financial risks have an impact on the capital adequacy ratio and asset allocation of banks. Therefore, in addition to meeting national standards and regulations in Basel Accord, commercial banks need to further improve their asset level. When capital is sufficient, the impact of financial risk can be greatly reduced. Sufficient capital is the basis for the normal operation of a bank, as well as the fulfillment of its liquidity and safety principles. To optimize the allocation level and quality of assets, commercial banks need to upgrade the credit system, optimize the examination and testing, and use various evaluation models. Under these methods can reduce the bank's bad loans, as well as the low level of credit intermediary component of the impact. In a word, the credit system will be fully improved in the process of providing loans and the relevant credit evaluation will be perfected. To identify the risk points and reduce the risk of bank assets. In the Internet financial era, banks also need to customize different credit evaluation and review models according to different customers to improve the moat of bank assets.

### 2. Enhance the financial accounting strength of the bank and improve the financial audit system of the bank

Banks accounting for financial risk and rating and around is important, accounting for the analysis of the information can directly affect the economic behavior of the bank, the financial statements of the part of companies on the market may have some false composition, enterprises in the loan to the bank if you can't review out when you will make a great financial risk for the Banks. Therefore, more attention should be paid to improving the quality of accounting information in commercial banks, so that it can accurately reflect the economic business. On the one hand, the way to improve accounting ability is to improve the threshold of accounting into the bank, and on the other hand, the bank is to increase the training of accounting information processing ability. In the banking system, a continuously optimized accounting system is also essential. In the era of Internet finance, with the progress of computers, the processing capacity of big data is also improving. For commercial banks, a complete and scientific accounting system is essential. Real-time market information, big data analysis and the association with social credit data, as well as real-time early warning of bank financial risks. A complete accounting system not only represents a set of mature software system, but also the iteration of some systems and positions in the bank. Let the accounting

system establish the outermost protective cover of commercial banks. This can not only effectively reduce the risk of the bank but also enable the whole commercial bank to adapt to the changing times and standardize the financial risk management information of commercial banks. In the era of big data, Internet finance can set up a protective cover for the bank's accounting system.

### 3. Improve the credit mechanism construction of banks

Commercial banks need to summarize and judge the credit granting process in the financial risk management system, and develop the credit risk system and model in line with the long-term goals of the bank credit system, to better meet the control requirements of the related risks of accounting risk management. In the process of construction, it is necessary to collect and accumulate previous credit experience, listen to opinions from various aspects, and formulate different types of systems according to the needs of different types of customers, to improve the efficiency of the banking system. The salesman should strengthen the training of his business ability, and should not unilaterally deal with the business beyond the customer's ability for the sake of performance. Strengthen the examination and approval work, use manual examination and approval and computer audit two ways, combined with the financial system to carry out risk analysis, reduce the risk of business. On the other hand, the connection between customer credit data and accounting system, three-party audit and asset analysis of customers can also better meet the group preference of customers. The optimization of the credit system can avoid the risk of many Non-performing assets customers' credit to the bank. Tripartite examination and approval system also better realize the effective interception of financial management risks.

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