

iscte

INSTITUTO
UNIVERSITÁRIO
DE LISBOA

Research of Financing Problems and Countermeasures of Small and Medium Enterprises in China

Duan Xuan

Master in Finance

Supervisor:

PhD Luis Laureano, Assistant Professor,
Iscte - University Institute of Lisbon

October, 2020

iscte

BUSINESS
SCHOOL

Department of Finance

**Research of Financing Problems and Countermeasures of
Small and Medium Enterprises in China**

Duan Xuan

Master in Finance

Supervisor:

PhD Luis Laureano, Assistant Professor,
Iscte - University Institute of Lisbon

October, 2020

Resumo

As pequenas e médias empresas (PMEs) desempenham um papel muito importante na promoção do crescimento económico e no aumento das taxas de emprego. Com a economia da China num novo estágio de desenvolvimento normal, as PME têm atraído a atenção de todos os setores da sociedade. No entanto, a dificuldade de financiamento das PME sempre foi um problema no seu percurso de desenvolvimento, patente durante todo o ciclo de vida. Nos últimos anos, o governo chinês introduziu continuamente políticas e diretrizes para apoiar as PME, mas a maioria delas teve pouco efeito.

Este trabalho começa com uma breve introdução, seguido da apresentação de definições relevantes e a situação atual de financiamento das PME. Além disso, analisa as causas internas e externas do problema de financiamento e aponta que a má gestão, o déficit de crédito, o apoio insuficiente da política financeira e a proteção legal têm causado a deterioração dos problemas de financiamento. Analisa também as experiências de financiamento de outros países e.

Este estudo argumenta que os esforços conjuntos de diferentes partes são benéficos para o financiamento das PME, nomeadamente: as PME devem reforçar a sua própria construção, uniformizar a gestão e melhorar os ativos de crédito; o governo deve introduzir políticas preferenciais e enriquecer constantemente o sistema financeiro; deverá ser estabelecido um sistema aberto de investigação de crédito e instituições sólidas de garantia de crédito; deverão ser ampliados os canais de financiamento para as PME e; deverá fazer-se pleno uso de métodos e ferramentas de financiamento inovadores.

Palavras-chave: PME; Financiamento; Experiências; Contramedidas

Classificação JEL: D25; G32

Abstract

Small and medium-sized enterprises (SMEs) play a very important role in promoting economic growth and increasing employment rates. As China's economy enters a new normal development stage, SMEs have attracted the attention of all sectors of society. However, the financing difficulty of SMEs has always been a problem on their development path, and throughout the entire life cycle. In recent years, the Chinese government has continuously introduced policies and guidelines to support SMEs, but most of them have achieved little effect.

This work starts with a brief introduction, including research background, overall research status, research methods, innovations and deficiencies. Besides, it introduces relevant definitions and the current financing status of SMEs. In addition, it analyzes the root causes of the financing problem from an internal and external perspective and points out that poor management, deficit credit, insufficient financial policy support and legal protection have caused the deterioration of the financing problems. It also analyzes and draws lessons from the advanced financing experiences of some other countries and regions.

This research argues that the joint efforts of different parties are beneficial for SMEs financing. Firstly, SMEs should strengthen their own construction, standardize management and improve credit assets. Secondly, the government should introduce preferential policies and constantly enrich the financial system. Thirdly, it should be established an open credit investigation system and sound credit guarantee institutions. Fourthly, financing channels for SMEs should be broaden. Finally, it should be made full use of innovative financing methods and tools.

Key Words: SMEs; Financing; Experiences; Countermeasures

JEL Classification: D25; G32

Figures Index

Figure 2.1: Financing modes of SMEs in China	10
--	----

Tables Index

Table 2.1: Classification standards for SMEs in major countries or regions	7
Table 2.2: China's SMEs defined standards	8
Table 2.3: Sources of RMB credit funds of financial institutions, in 100 million RMB	11
Table 2.4: Use of RMB credit funds by financial institutions, in 100 million RMB	12
Table 2.5: Statistics on loans from financial institutions to China's enterprises	13
Table 4.1: Financing difficulty of SMEs by country, in percentage	23
Table 4.2: Relevant legislation support for SMEs in U.S.	25

Contents

Resumo	I
Abstract	III
Figures Index	V
Tables Index	V
Contents	VII
CHAPTER 1 Introduction	1
1.1. Overseas and Domestic Research Status	1
1.1.1. Overseas research status	1
1.1.2. Domestic research status	3
1.2. Research Ideas and Methods	4
1.2.1. Research ideas	4
1.2.2 Research methods	4
1.3. Research Contributions and Limitations	5
CHAPTER 2 Relevant Definitions and the Financing Status of SMEs in China	7
2.1. SMEs Financing Related Concepts	7
2.1.1. Definition of SMEs abroad	7
2.1.3. Definition of financing concept	10
2.2. Financing Status of SMEs in China	11
CHAPTER 3 Analysis on the Causes of SMEs Financing Difficulties in China	15
3.1. Analysis of the internal causes of SMEs financing difficulties	15
3.2. Analysis of the external causes of SMEs financing difficulties	17
CHAPTER 4 References of Foreign SMEs Financing Experience	23
4.1. Financing Analysis of SMEs in the European and American Systems--Taking the	

United States as an Example	23
4.1.1. Specialized SMEs financing institutions	23
4.1.2. Perfect legal and policy system for SMEs	24
4.1.3. Perfect credit system for SMEs	26
4.2. Financing Analysis of SMEs in the Japanese and South Korean systems -- Taking Japan as an Example	26
4.2.1. Provide legal protection and implement fiscal incentives	26
4.2.2. Establish a specialized policy-based financial system	27
4.2.3. Build a good bank-enterprise relationship	28
4.2.4. Establish SMEs Development Fund	29
CHAPTER 5 Relevant Policy Suggestions to solve the Financing Difficulties of SMEs	31
5.1. Strengthen the Self-construction of SMEs	31
5.2. Improve the Institutional Environment for SMEs Financing	32
5.2.1. Accelerate the construction of legal systems related to SMEs financing	32
5.2.2. Give full play to the supporting role of financial policies for SMEs	32
5.2.3. Give full play to the role of fiscal policy in supporting SMEs	37
5.3. Strengthen the Information and Credit Construction of SMEs	39
5.3.1. Establish an open and transparent credit investigation system	39
5.3.2. Establish a sound credit guarantee mechanism for SMEs	39
5.3.3. Make full use of the credit platform of tax agencies	40
5.4. Improve Various Financing Channels and Truly Realize Multi-channel Financing	40
5.4.1. Guide private capital to broaden financing channels	40
5.4.2. Improve capital securitization	41
5.4.3. Build bond financing system	41
5.4.4. Explore financing insurance model	41

5.5. Continuously Innovate Financing Methods and Financing Tools for SMEs	42
5.5.1. Construct an internet financing service platform for SMEs	42
5.5.2. Use financial leasing to ease financing difficulties for SMEs	42
CHAPTER 6 Conclusions and Limitations	45
References	47
Annexes	51

Introduction

SMEs play an important role in the national economy. In particular, Chinese government strives to resolve excess capacity through supply-side reforms and accelerate the upgrading of manufacturing industries. The prosperity and development of SMEs is bound to promote the sustainable development of the national economy. First of all, the low operating cost of SMEs, and the characteristics of flexible operation have created a strong adaptability. Secondly, SMEs inject vitality into the market. They challenge the monopoly of large enterprises and promote free competition in the market. Thirdly, SMEs have a stronger sense of service, and proactively designing and providing required products for customers is the starting point of their business (Chen, 2006).

However, SMEs need a large amount of capital injection to achieve new development when they continue to expand operation scales. They are unable to obtain the required capital in time, causing enterprises to miss good opportunities. Although governments and scholars around the world have paid extensive attention to SMEs, the difficulty of financing for SMEs has been a problem that plagues the world in recent decades. Chinese financial system needs to be improved, and the reform of financial system has not been completed. The policies and financing theories introduced by the government at this stage are generally applicable to large enterprises with a certain scale, and SMEs cannot raise funds under their guidance.

Based on the current policy orientation and considering the characteristics and rules of the development of SMEs in China, this research puts forward feasible and forward-looking suggestions. In order to alleviate the financing difficulties of SMEs, it is necessary to systematically analyze the internal and external aspects of enterprises, so as to put forward a guiding long-term development plan to solve their financing difficulties.

1.1. Overseas and Domestic Research Status

1.1.1. Overseas research status

Modigliani and Miller (1958) put forward the "MM" theory, which pioneers the enterprise financing theory. The theory holds that the value of an enterprise has nothing to do with the financing method adopted by the enterprise under the premise that the capital market is fully effective without the enterprise, individual income tax and bankruptcy risk.

According to the credit rationing theory of Stiglitz and Weiss (1981), in the process of credit rationing, the information asymmetry between the demand side and the supply side of capital will lead to the problem of adverse selection, which will seriously affect the efficiency and practical effect of credit rationing.

Brigham and Weston (1981) innovatively explained the phenomenon of large use of short-term debt in the operation of SMEs through the life cycle theory. This theory holds that SMEs cannot access to the capital market for financing, so the growth beyond the endogenous capital will inevitably lead SMEs to use short-term loans as much as possible.

Berger and Udell (1995) conducted an in-depth study on the role of relationship financing, and proposed that in the actual operation of a bank, if it maintains a long-term cooperative relationship with an enterprise applying for a loan, it can accumulate financial data and business information of the enterprise, which is conducive to avoiding information asymmetry and information opacity between banks and enterprises.

Douglas, Harvey et al. (1998) proved that the dependence of enterprises on internal financing increases with the development of enterprises in the early stage of life cycle. However, the trend reverses when it comes to a certain point. The dependence on external financing increases while the dependence on internal financing decreases. They believe that this is because the imperfect capital market is caused by information asymmetry. In the early stage of development, enterprises lack certain credit to obtain cheap external financing, so they need to accumulate gradually.

Stranhan and Weston (1998) believed that the size and structure of banks also had a certain impact on SMEs loans. When increase in size and complexity, banks will increase costs in operating and approving loans. Considering the cost of loans, loans to SMEs will be reduced. When banks merge with each other or expand their operation scale, the degree of asset diversification of banks will be improved, which in turn will lead to the reduction of risk management costs of banks, so that the proportion of SMEs loans in bank assets will first increase and then decrease.

Berger and Udell (2002) used NSSBF and NFIB data to analyze the current financing structure of SMEs in the United States based on the theory of corporate financial growth cycle. It finds that in the early stage of operation and development, the proportion of debt financing used by enterprises generally presents a certain trend of rise, and gradually declines after the middle stage, while the proportion of equity financing gradually starts to rise after the middle stage with the deepening of the growth cycle of enterprises, and becomes the main financing method for enterprises.

1.1.2. Domestic research status

Zhang (1999) pointed out that in the capital market, information asymmetry exists between investment and financing parties: first, the quality of investment projects; second, choice behavior; third, the management ability of enterprise operators.

Lin (2003) noted that the important technological innovation process in the development and growth of SMEs need a lot of capital support, and these aspects are closely related to the support system of relevant government departments. Government departments should give full play to their guidance and actively support the development of SMEs.

Li (2002) proposed that in a highly centralized monopoly banking economic model, SMEs are difficult to obtain credit through banking financial institutions. In a decentralized competitive banking economic model, the competition among several small and medium-sized banks will reduce the loan cost of SMEs and promote the increase of their loan amount. Therefore, the author suggests to actively develop small and medium-sized banks and gradually relax the barriers to entry in the financial and banking industries.

Lin and Tian (2003) supposed that the entry of foreign financial institutions into China's financial market will bring more financing opportunities to SMEs. However, excessive use of foreign capital tends to form a dependency effect, and cross-border capital flows are more likely to bring about huge risks of capital flow reversal. They also proposed that in order to deal with such problems, it is necessary to further establish and improve the financial organization system and legal system to serve SMEs, and actively promote the management reform of China's domestic banks.

Gao (2005) insisted that SMEs can be divided into cultivation period, growth period, maturity period and decline period according to the relationship between flexibility and controllability at different stages of their operation and development. The research also combines the characteristics of each stage in the development of the enterprise, and makes a comparative analysis from the financial characteristics and financing methods.

Yang (2008) believed that excess liquidity will have a negative impact on SMEs financing. Wang and Ye (2010) pointed out that the development of financial innovation should be accelerated continuously, the current financial system of China should be gradually changed and new financial instruments should be added. Promote the continuous acceleration of currency circulation and currency multiplier changes, thereby providing the market with more available funds.

Xu (2010) listed 36 case reports in the book *Practice of Movable Property Financing*,

discussing the importance of the types of movable property financing in promoting financial innovation of financial institutions and alleviating the financing difficulties of SMEs.

Zhu (2011) suggested that the multi-level financing system should be actively established and improved, the entry threshold of the financial industry should be relaxed, and the financial industry should be gradually opened to private capital.

Ma (2011) counted that in *Guidelines on Overseas Listing of Chinese Enterprises* that there are two modes of overseas listing of Chinese SMEs: direct listing and indirect listing. Through overseas listing, it can provide existing shareholders with a channel to cash out their investment, better avoid the impact of changes in the international economic situation on the business status of the company, and provide a way for companies to raise funds on a larger scale.

In the book *Micro-finance: International Experience and Chinese Practice*, Li (2011) considered the important role of micro-finance in solving the financing difficulties of China's large number of SMEs, and suggested that the government should give more incentives and support to the development of micro-finance.

1.2. Research Ideas and Methods

1.2.1. Research ideas

This paper first explains the concepts related to financing of SMEs, and classifies them according to different standards in China and abroad. Next, the paper analyzes the financing status of SMEs in China and points out the problems faced by SMEs in the financing process. Then it analyzes the causes of SMEs' financing difficulties from the internal and external aspects. Then it briefly analyzes the experiences of developed countries in the financing of SMEs and summarizes the enlightenment it brings to China. Finally, combined with the advanced experience of developed countries and the special development of China's SMEs, it puts forward countermeasures for the financing difficulties of SMEs.

1.2.2 Research methods

There are mainly three methods in this research. Firstly, literature research method. In the early stage of writing this paper, I consulted a large number of domestic and foreign literatures and related websites regarding the relevant theories and causes of financing difficulties for SMEs, and integrated the original research results, hoping to analyze the deeper reasons in the previous theoretical results, so as to provide strong theoretical support

for this paper. The second is the comparative study method. This research analyzes the financing experience of SMEs in the United States, Japan and Germany, and provides references and suggestions for solving the financing difficulties of SMEs in China by comparing the solutions to the financing problems in developed countries abroad. The third is the analysis of internal and external factors. This paper analyzes the financing difficulties of SMEs from two aspects of internal and external factors, and proposes countermeasures for the financing difficulties from multiple perspectives of the government and financial institutions.

1.3. Research Contributions and Limitations

1. The contributions of this work are: 1. Based on the summarizing of China's SMEs financing channels and the experience from foreign SMEs financing, through the analysis of problems in China and the realistic difficulties, this paper discusses how to improve the efficiency of SMEs financing and the development of SMEs financing pattern in China.

2. Regarding enterprises, financial institutions and the government, this paper systematically puts forward the policy support direction and suggestions to solve the financing difficulties of SMEs in China. In terms of the systematicness and operability of policies, this paper makes a further in-depth study on previous studies.

3. This research puts forward some suggestions on guiding and standardizing private capital. This paper argues that to solve the financing difficulties of SMEs, it is necessary to increase the formal financing channels and appropriately introduce private capital to meet the financing needs of SME, especially small and micro enterprises. In addition, with the development of China's private economy and private ownership economy, a large amount of accumulated private capital needs to seek investment channels. Under the guidance of the government and the intervention of new financial institutions, the capital docking between private capital and SMEs is realized. While improving credit guarantee institutions, China should also improve the construction of a credit system and establish a financial service platform for SMEs.

Although I discussed the financing of SMEs from the shallower to the deeper when writing this research, I also realized the writing meaning I expected when I wrote the thesis. However, due to my lack of practical experience and limited ability, the investigation and research on the financing status of SMEs is still lacking in depth. I have not been able to conduct field inspections and sample surveys on the representative enterprises in various industries, which is also the direction I want to strive for and improve in the future. The biggest shortcoming of this paper is the lack of data support and quantitative analysis on the

financing status, causes and solutions of SMEs. In the future theoretical research, data collection and collation should be strengthened so as to make the conclusion more convincing.

Relevant Definitions and the Financing Status of SMEs in China

2.1. SMEs Financing Related Concepts

There are many differences in the management of different types of enterprises. How to divide the scale of enterprises scientifically can effectively guide and manage the development of enterprises (Li & Lin, 2001).

Due to the different national conditions of various countries in the world, there is no uniform standard for the definition of SMEs. However, the classification standards of SMEs are mainly measured from two aspects: qualitative standards and quantitative standards. The qualitative criteria include the following three characteristics: small market share, independent management and independent ownership. However, it should be noted that qualitative standards contain many subjective components, which are difficult to grasp in the concrete implementation. The quantitative standard has three indicators: the number of employees, the scale of assets and the sales volume. At present, most countries use quantitative standards to classify enterprises (Wang, Xia & Zhi, 2014).

2.1.1. Definition of SMEs abroad

The Table 2.1 selects the classification standards of SMEs in major developed countries or regions.

Table 2.1 Classification standards for SMEs in major countries or regions

Country	Type of SMEs	Classification Standard
America	Manufacturing	Less than 500 employees in general industry; less than 1,000 employees in automobile manufacturing
	Retail	Annual sales below 80,000 US dollars
France	Small Business	Less than 50 employees
	SMEs	More than 50 employees and less than 500

		employees
Germany	Small Business	Less than 10 employees
	SMEs	More than 10 employees and less than 300 employees
Japan	Manufacturing	Less than 300 employees and less than 300 million JPY in capital
	Retail	Less than 50 employees and less than 10 million JPY in capital
South Korea	Manufacturing	Less than 300 employees or less than 500 million KRW in capital
	Retail	Less than 50 employees or less than 50 million KRW in capital
Europe Union	Medium-Sized	Less than 250 employees and no more than 50 million EUR turnover or no more than 43 million EUR on balance sheet total
	Small	Less than 50 employees and no more than 10 million EUR turnover or no more than 10 million EUR on balance sheet total
	Micro	Less than 10 employees and no more than 2 million EUR turnover or no more than 2 million EUR on balance sheet total

Source: Compiled based on the *2006 Chinese SMEs Development Report* and https://ec.europa.eu/growth/smes/sme-definition_en; 2020/3/2

2.1.2. Definition of SMEs in China

In 2011, *The Standard Provisions on the Classification of SMEs* were issued, which is the basis for the definition of SMEs in China. The regulations classify enterprises into medium, small and micro categories according to their operating income, employees and total assets. In addition, different divisions are set according to different industries, as shown in Table 2.2.

Table 2.2 China's SMEs defined standards

Industry	Type	Operating Income (in Million RMB)	Employee	Total Assets (in Million RMB)
Agriculture, Forestry, Animal Husbandry and Fishery	Medium	5-200		
	Small	0.5-5		
	Micro	Less than 0.5		
Industrial Enterprise	Medium	20-400	300-1000	
	Small	3-20	20-300	
	Micro	Less than 3	Less than 20	
Wholesale Industry	Medium	50-400	20-200	
	Small	10-50	5-20	
	Micro	Less than 10	Less than 5	
Software and Information Service Industry	Medium	50-400	100-300	
	Small	10-50	10-100	
	Micro	Less than 10	Less than 10	
Real Estate Development and Management	Medium	50-400		50-100
	Small	10-50		20-50
	Micro	Less than 10		Less than 20

Source: *The Standard provisions on the Classification of SMEs (2011)*

To sum up, China only sets the definition standard of SMEs according to the industry category; but does not subdivide the industry. For employees, the number in China's SMEs is mainly below 300, which is lower than the classification standard for SMEs in the United

States and similar to that in Japan and South Korea. For operating income, China defines the type of enterprises according to the scope of business revenue for most industries, and the defined limits are mostly similar or slightly less compared with other regions. Therefore, China sets a small limit regarding the number of employees, operating income, total assets and other indicators, and the definition of SMEs is relatively wide.

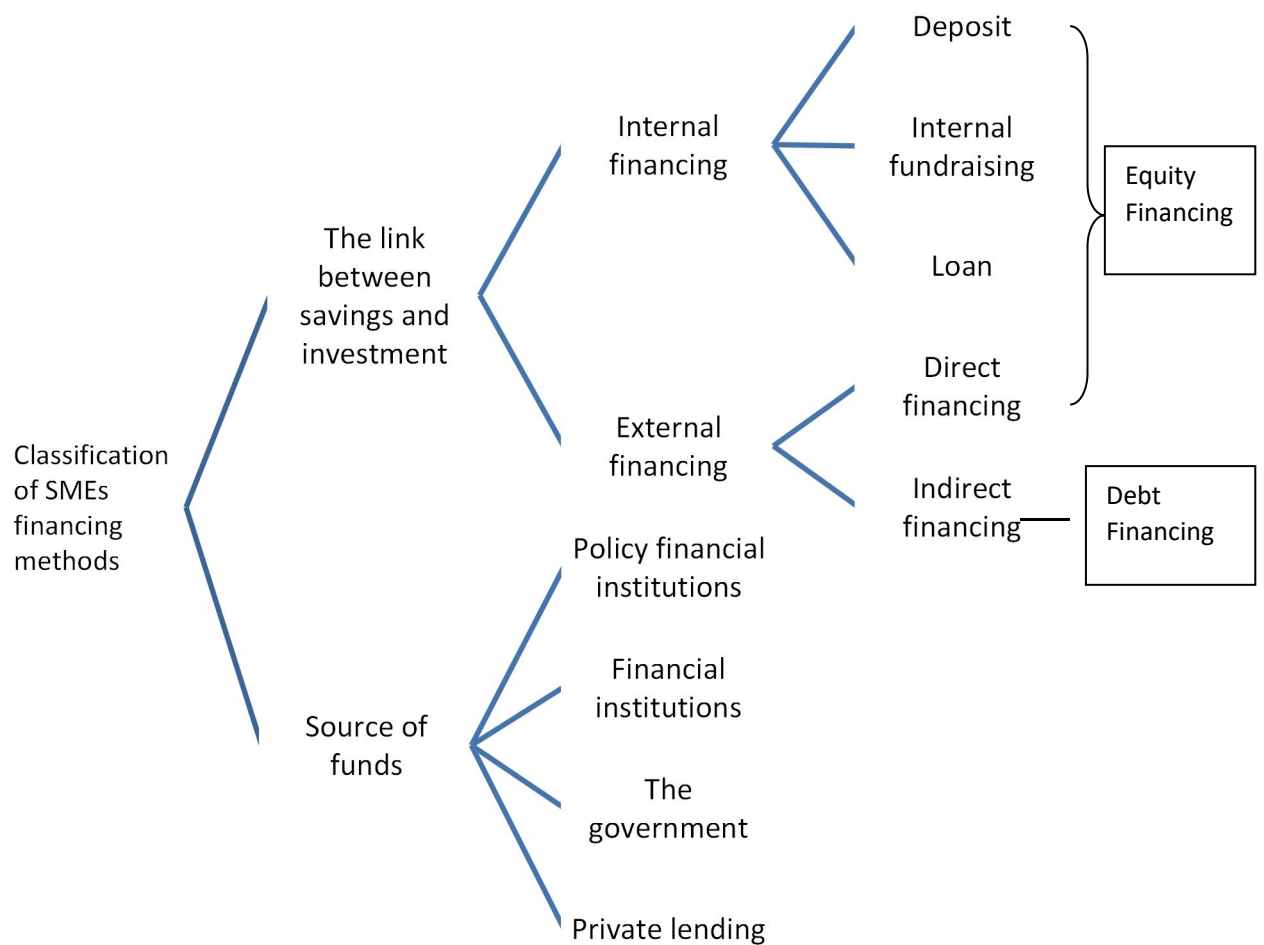
2.1.3. Definition of financing concept

In a broad sense, financing refers to the inflow and outflow of funds. In other words, it includes not only raising but also the utilization of funds. In the narrow sense, financing only refers to the inflow of funds. There is a one-way process to raise funds through the accumulation of enterprises themselves or through short-term borrowing, long-term borrowing, long-term bonds, stocks and other means in the financial market (Graham & Harvey, 2001). We usually talk about financing when companies use financial intermediaries or financial institutions to raise funds in various ways.

The financing methods of enterprises are divided into two categories: internal financing and external financing. Internal financing refers to the financing within the company. It is the retained earnings generated from the company's business activities, including depreciation (Liu, 2003). The equity capital of shareholders will not be diluted under this financing method, and the increasing net assets of the company will support it to conduct more financing methods. However, the internal financing of enterprises also has many shortcomings. The scale of internal financing is limited, and it is not attractive to dividend-preferred investors, which will also affect external financing of enterprises.

External financing means that enterprises raise funds from economic entities and financial institutions outside themselves, mainly by issuing stocks, bonds, bank loans and financial leasing. This type of financing method has a wide range of funding sources. However, the financing conditions are strict, the financing costs are high, and financing risks are following, so there are some unavoidable limitations. For instance, debt financing is a method of financing in which a company receives a loan and gives its promise to repay the loan ("Debt financing," 2020). Provided a company is expected to perform well, debt financing can usually be obtained at a lower effective cost. However, if a company fails to generate enough cash, the fixed cost nature of debt can prove too burdensome. In general, the financing modes of SMEs can be divided as shown in Figure 2.1.

Figure 2.1 Financing modes of SMEs in China



Source: Wang, J. Y. 2016. *Research on Financing Difficulties and Countermeasures of Small and Medium Enterprises in China*. [Master's dissertation, Jilin University].

2.2. Financing Status of SMEs in China

At present, the macro-financial environment of China's SMEs shows a positive trend. The government pays more and more attention to the development of SMEs and gradually gives policy preference. The supply of RMB credit funds in China's financial institutions in recent years is shown in Table 2.3.

Table 2.3 Sources of RMB credit funds of financial institutions, in 100 million RMB

Year	Sources of RMB credit funds of financial institutions	Various deposits in financial institutions funding sources	Government deposits in financial institutions funding sources
2014	1323453	1138645	221794
2015	1541204	1357022	241832
2016	1759952	1505864	270379
2017	1931934	1641044	304853
2018	2109164	1775226	325585

Source: National Bureau of Statistics. *China Statistical Yearbook*.
<http://www.stats.gov.cn/tjsj/ndsj/>

The total sources of RMB credit funds for Chinese financial institutions increases, and deposits account for the majority of the funds. Although the government deposits also gradually rises, the total amount is still low. With the development of financial products, services and financial institutions, China's financing services for SMEs have begun to play. However, the current financial system and financial supervision are still immature, and the lack of funds for SMEs cannot be resolved quickly. In particular, the downward pressure on the global economy has caused a shortage of capital liquidity, which cannot be resolved by national policies alone. And the use of RMB credit funds by financial institutions in recent years is shown in Table 2.4.

Table 2.4 Use of RMB credit funds by financial institutions, in 100 million RMB

Year	Use of RMB credit funds by financial institutions	Various loans in the use of funds of financial institutions	Securities in the use of funds of financial institutions
2014	1323453	816770	144954
2015	1541204	939540	197636
2016	1759952	1066040	247604
2017	1931934	1201321	294382
2018	2109164	1362967	333467

Source: National Bureau of Statistics. *China Statistical Yearbook*.
<http://www.stats.gov.cn/tjsj/ndsj/>.

China's financial institutions focus on various loans in the direction of the use of credit funds. As the capital market matures, the amount of funds used for securities and other investments gradually increases, and more and more capital flows into the real economy. Different official statistics have different emphasis on the financing data of SMEs, but the phenomenon of mismatch between the demand and supply of SMEs financing always exists, and the financing dilemma of SMEs has not been solved in essence. In recent years, the financial institutions' loans to various types of enterprises in China are shown in Table 2.5.

Table 2.5 Statistics on loans from financial institutions to China's enterprises

Year	Small and micro business loans		Large and medium-sized enterprise loans	
	Loan balance (in trillion RMB)	The proportion (in percentage)	Loan balance (in trillion RMB)	The proportion (in percentage)
2012	11.58	28.6	32.30	71.4
2013	13.21	29.4	31.72	70.6
2014	15.46	30.4	35.40	69.6
2015	17.39	31.2	38.35	68.8
2016	20.84	32.1	44.08	67.9
2017	24.30	33.0	49.34	67.0

Source: People's Bank of China. *Report on loans orientation of financial institutions.*

It can be seen from the table that although the loans balance of small and micro enterprises increases year by year, its proportion in the loans balance is always around 30%, and this proportion is insufficient for the funds demand of SMEs. While the loans balance obtained by large and medium-sized enterprises from financial institutions accounts for 70%. In terms of the annual new loan balance of enterprises, the average new loan balance of small and micro enterprises is 2.5 trillion RMB, accounting for about 43%, while the average new loan balance of large and medium-sized enterprises is about 57%. Obviously, financial institutions still prefer large and medium-sized enterprises. Although the financing difficulties of SMEs have improved, their financing needs still cannot be fully satisfied.

In addition, commercial banks need enterprises or third parties to provide mortgage guarantee for loans, and the amount of such mortgage guarantee is divided into three

categories according to the size of enterprises. First, mortgage guarantee line for small businesses. The average amount of loans is 215%, which is 4.1% and 6.4% higher than the Asia-Pacific level and the world level respectively. Second, mortgage guarantee quota for medium-sized enterprises. The average amount of loans is 198%, which is 8.2% and 11.5% higher than that in the Asia-Pacific region and the world respectively. Third, mortgage guarantee line for large enterprises. The average amount of loans is 170%, which is 53% and 11.3% lower than that in the Asia-Pacific region and the world level separately. China's higher bank loan mortgage guarantees also make it more difficult for SMEs to obtain financing support from banks (Ji, 2013).

At present, banks are still the main source of financing for most SMEs. Enterprises rely on loans from the four major state-owned banks and joint-stock banks as high as 70% or more, while their dependence on foreign banks is relatively low. SMEs receive one-fifth of the funds from joint-stock banks (Wang, 2016). Normally speaking, non-bank financial institutions are more efficient in lending, but their loan lines are low. Since banks and other regulated financial institutions have long loan terms and strong risk management capabilities, and their loan quotas are higher than those of non-bank financial institutions. Once a loan is obtained, the additional repayment compensation and disposal of overdue repayments are more gentle than private institutions.

In recent years, China has been drawing lessons from the design of foreign direct financing channels, establishing a multi-level capital market, allowing SMEs to raise funds by listing on the Growth Enterprise Market or listing on the New Third Board; and encouraging SMEs to issue financial products such as private placement bonds, collective bonds, and collective bills. In 2018, China have supported the registration of 306.7 billion RMB of various innovative financing products, the issuance of 124.5 billion RMB of special financial bonds by 16 banking institutions and the issuance of 10.8 billion RMB of securities for small and micro enterprises. There are more than 10,000 companies listed on the New Third Board, of which small and micro enterprises account for more than 60%, and the number of venture capital fund investment projects belonging to SMEs accounts for 78% (report). Even with rapid development, the proportion of SMEs financing through the capital market is still low. Since the direct financing system is strict and the risk control mechanism is deficient.

Analysis on the Causes of SMEs Financing Difficulties in China

The SMEs financing difficulties in China in the current stage is mainly due to both internal and external reasons. Internal factors mainly include a series of problems such as insufficient management of SMEs, imperfect financial system, lack of credit, lack of collateral and guarantors, and high financing costs caused by the characteristics of loan demand. External factors mainly include changes in the international and domestic economic environment, the current domestic legal and policy environment, insufficient government support, institutional constraints by banks and other financial institutions, high financing thresholds in the securities and bond markets, and lack of supervision of private financing channels. This chapter will analyze the above factors comprehensively.

3.1. Analysis of the internal causes of SMEs financing difficulties

1. The management is not standardized and the operation lacks long-term goals

At present, the vast majority of SMEs in China is small in scale and cannot meet the basic requirements for financing (Hu, 2016). In terms of management, they are not standardized. In terms of business philosophy, SMEs are often trapped in the pursuit of short-term interests and profit maximization, or blindly focus on the continuous expansion of enterprise scale. In terms of property rights, SMEs tend to be private enterprises, whose operators are mainly family-owned. The power of decision-making is highly concentrated, which makes it difficult to determine the business direction objectively and increases relevant risks. However, these aspects are exactly what financial institutions value when evaluating investments, which objectively leads to the increasing difficulty of SMEs financing.

2. The financing credit is insufficient and the financial information is opaque

Financing credit directly affects the difficulty and cost of enterprise financing. But at present, the vast majority of SMEs in China have the problem of lack of credit in different degrees. For example, some enterprises default and use various means to evade or even abolish the debts of banks, which greatly reduce the enthusiasm of financial institutions to provide loans. In addition, some enterprises modify their financial statements or even make false accounts in order to meet loan approval parameters, which decrease banks' trust in the information provided when applying for loans (Zhang, 2011). It is more difficult for SMEs to

obtain loans due to the decline in their credit ratings.

Compared with large enterprises, most SMEs have the problem of opaque financial information. Large enterprises, especially listed companies, have a high degree of openness and full disclosure of their business information, financial information and other information. Financial institutions can obtain relevant information at a relatively low cost, while information of SMEs is basically internalized and difficult to obtain through general channels. In addition, most SMEs' financial reports do not require external audit, and the transparency of information is insufficient. The financial management of most SMEs is in a vacuum state, which only relies on the subjective cognition of managers without standardization and institutionalization. Such financial management lacking scientific basis has greatly increased the financial risks and operating risks of enterprises and makes it impossible for banks to conduct credit review on enterprises through their statements. To a large extent, it restricts the bank's credit lending to enterprises.

3. The collateral and guarantor is deficient

When banks issue loans to SMEs, the first thing they value is the business prospect. However, for SMEs engaged in traditional industries, collateral is very important for them to successfully apply for loans. But in fact, most SMEs lack high-quality collateral and reliable guarantors when applying for loans. Since SMEs are mainly private enterprises and have strong operational independence, it is difficult for them to provide qualified loan guarantors who are willing to assume corresponding responsibilities. Therefore, SMEs with a certain economic foundation start to find their own way. For example, in recent years, many SMEs in Jiangsu, Zhejiang and other places have been buying houses feverishly, which is due to financing to some extent (Chen, 2012). On the one hand, real estate assets as fixed assets can withstand inflationary pressures. On the other hand, when companies need short-term loans, they can also be used as collateral to apply for loans from banks.

4. The loan characteristic is small and urgent

In summary, SMEs often need capital for technical transformation or business scale expansion and temporary operation capital turnover. The former has a large capital demand, while the latter has a small capital demand, but the time is tight and the demand is urgent. Generally speaking, the latter type of capital demand is more dominant. According to statistics, from the analysis of demand frequency and management cost, SMEs loans are about 5 times of the corresponding projects of large and medium-sized enterprises (Zhang, 2010). However, due to the consideration of risks, the examination procedures in China are strict and have many steps, so it is difficult to meet the urgent needs of enterprises. Besides,

the amount of a single loan application for SMEs is often small. For banks, the ratio regarding the cost of operation management and review and approval to the amount of loans issued will be significantly higher. Therefore, banks and other financial institutions lack the enthusiasm for granting loans to SMEs due to the characteristics of loan demand.

3.2. Analysis of the external causes of SMEs financing difficulties

1. International economic environment

With the increasing development of international trade, China's economic development cannot be separated from the comprehensive influence of the international economic environment. For SMEs, their production and operational activities are also inseparable from the needs and influence of the world economy. The quality of the international economic environment directly affects the corresponding policies of Chinese financial institutions, which in turn affects the liquidity of funds in the market, and thus has an impact on the financing of SMEs.

Under the condition that the world economic development is inherently unbalanced, the black swan event of the COVID-19 has brought unexpected shocks to global economic growth and employment. International trade, cross-border investment and the movement of people, the key elements of economic globalization, have been greatly affected. Many large economies are in danger of economic recession, and SMEs are no exception. Faced with the characteristics of the staged development of COVID-19 and the uncertainty and long-term nature of epidemic prevention and control, the epidemic prevention at different stages have brought different waves of impact to the real economy. The Purchasing Managers' Index (PMI) of China's manufacturing industry released by the National Bureau of Statistics showed that in February 2020, the PMI dropped by 14.3% compared with that of January, and the non-manufacturing business activity index dropped by 24.5% compared with that of January, indicating that the epidemic at this stage had a more obvious impact on non-manufacturing business activity. According to the survey data of 1509 small, medium and micro enterprises nationwide in early February, the continuing impact of COVID-19 on these enterprises is mainly reflected in two aspects: first, the revenue in 2020 is expected to be generally reduced, 59.1% of the interviewed companies expect their operating income to fall by more than 20% and 31.9% of the companies expect a drop of more than 50%. Besides, enterprises with lower operating income will be more affected by the epidemic; second, the survival pressure of enterprises has increased. 85.8% of enterprises can maintain cash balance on their books for less than 3 months, 39.1% and 36.9% of enterprises with fewer than 50 employees and 50-100

employees can maintain cash balance for only 1 month respectively. A large number of small, medium and micro enterprises are facing the risk of bankruptcy (Li, Zhang, Zhu, et al. 2020).

In March and April, when the epidemic was gradually under control in China and the number of newly confirmed cases was rapidly decreasing, it became the main policy line to encourage enterprises and public institutions in non-key areas to resume work and production. On the one hand, the precise resumption of work and production by zoning and grading has brought benefits to many companies that are in a state of shutdown; on the other hand, the rapid outbreak of the epidemic in Europe and in the United States has led to the closure of national borders. The slowdown of international shipping logistics has seriously affected industries with a high degree of outward mobility. Manufacturing companies with a high proportion of core components, technology, and overseas customers are facing severe challenges from declining orders and disruptions in the supply chain (Hong, 2020). According to foreign trade data released by the General Administration of Customs, China's exports of goods in the first quarter of this year were 3.33 trillion RMB, down 11.4 percent year-on-year. However, China's manufacturing power has emerged gradually. China's bulk Active Pharmaceutical Ingredients (API) and specialty API, protective equipment such as masks, gloves and protective suits, testing reagents, ventilators, monitors and other medical equipment for critically ill patients have started to be exported in large quantities. Pharmaceutical and medical device manufacturing companies have become the bright spot that bucked the trend during the epidemic.

In general, given the uncertain development of the global COVID-19 epidemic and the systematic shutdown of economic activities in many countries, how to relieve the survival pressure of most enterprises, especially SMEs in the short term, is a top priority.

2. Domestic policy and legal environment

The financing activities of SMEs have always been inseparable from the supervision and guidance of national laws and regulations. In fact, there is currently a series of relevant laws and regulations such as *The Regulations on Loan Contracts* formulated by the State Council, *The Interim Measures for the Management of Main Banks* and *The Law on the Promotion of Small and Medium Enterprises* issued by the People's Bank of China. However, for SMEs, it is still very difficult to obtain financing and there is a lack of targeted legal or policy support for their development. In terms of guarantee law, movable properties such as accounts receivable and inventories with good liquidity are not recognized as valuable collateral. In terms of credit system, financial institutions cannot obtain accurate and comprehensive information of SMEs, and therefore cannot accurately assess their true creditworthiness.

3. Financing system and support

In order to encourage the entrepreneurship, technological innovation and development of SMEs, relevant departments of the Chinese government have been constantly improving financing system through financial subsidies, tax reduction and exemption, administrative support and other ways. However, compared with the preferential policies for large enterprises and state-owned enterprises, the support for SMEs is still insufficient and the development environment is worrying.

First, there is the lack of specialized institutions. For a long time, China lacks policy-based financial system to support the financing of SMEs. There are three major policy banks in China, Agricultural Bank of China, China Development Bank and Export-Import Bank of China, which are respectively dedicated to their own areas of focus, but it is difficult for SMEs to become their lending targets. This is due to their relatively stringent financing conditions for SMEs, that is, relying on existing policy-based financial institutions to solve the financing difficulties of SMEs is not feasible.

Besides, small and medium-sized financial institutions for SMEs are not efficient. For instance, city commercial banks have long been rooted in cities to serve local SMEs. At the beginning of their establishment, they set up a single-bank organizational model. However, along with the expansion of their scale, most commercial banks implement cross-regional development strategies and form the general points system after shareholding reform (Shi, 2011). There are time lags and information asymmetry in the information transmission between the head office and branches, and the loan applications of SMEs will face more approvals. After the realization of mergers and acquisitions, city commercial banks are bound to provide loan services to large enterprises with more standardized corporate governance, and gradually reduce financial services tailored to local SMEs. Moreover, those slow-growing city commercial banks have no scientific internal organization, and their management concepts and operating mechanisms cannot meet the sustainable development requirements of the market economy. Therefore, they have difficulty in providing timely and sustainable credit services to SMEs.

In addition, rural credit cooperatives' loan service targets are mainly farmers, and the return of funds is inseparable from the production cycle of farmers. There is a maturity mismatch between the periodic funding and the capital needs of SMEs. Especially after the growth period of SMEs, a large amount of long-term funds is needed for technological transformation to upgrade products, but rural credit cooperatives can only provide short-term funds for the sake of capital security.

Second, the specificity of the support policy is slightly insufficient. Supportive policies for enterprises issued by the government are often formulated based on the operating conditions of state-owned enterprises or large enterprises (Kong, 2007). Such policies and systems may not be effective for most SMEs. In foreign countries, there are Company Diagnostics in Japan and Business Incubator in the United States, which are specialized auxiliary institutions for the development of SMEs, but there is not enough specialized auxiliary system in China at the present moment.

Third, the management of private lending is slightly weak. Due to the high entry barriers for small and medium guarantee companies, it is difficult for private capital to enter the financial industry. At the same time, due to the rising inflation rate, private capitals' bank deposits are at risk of negative interest rates, so private lending is increasingly active (Zhang & Zhu, 2008). However, relevant laws and regulations are not very strict. On the one hand, private lending market has a high risk of default and lacks the necessary supervision. On the other hand, there is no uniform standard for the execution of the transaction interest rate and the transaction price. A considerable proportion of funds do not enter the real economy but engage in speculative activities. Therefore, there is a huge potential crisis in the market, and the illegal private lending activities are more likely to form mass incidents, which will directly affect the social stability. It was not until the outbreak of large-scale private lending in 2011 that relevant government departments began to attach great importance to the supervision of private lending. How to guide and make good use of private funds to serve the development of SMEs is a subject worthy of attention.

4. Banks and financial institutions

At present, China's SMEs have difficulty in obtaining credit from banking financial institutions for the following reasons: first, the status is unequal. Due to the relative shortage of funds and the suppliers' monopoly market position, the funding supplier often occupies an absolute dominant position. In contrast, SMEs as the demand side are extremely vulnerable. As a result, bank financial institutions tend to select customers, which further reduce the space for SMEs to apply for loans.

Second, information is asymmetry. The financial system of SMEs is not sound, and the financial data is difficult to complete. Even some SMEs will deliberately modify their financial statements and other application information due to concerns that their qualifications or related financial data parameters do not meet the banks' loan conditions. This kind of information asymmetry makes it difficult for financial institutions to accurately screen information and assess loan risks.

Third, the principles are inconsistent. Banks have the principles of security, efficiency and liquidity when approving and issuing loans. In contrast, SMEs often have the characteristics like urgent, frequent, low, complicated and risky. Therefore, banks are often unwilling to take a high risk to invest funds in SMEs. In addition, the loan demand of SMEs is often time-sensitive while the authority of state-owned commercial banks to grant loans needs to be reviewed and approved according to redundant procedures. This often makes it impossible for SMEs operators to wait patiently for the banks' approval process for weeks or even months, thus giving up choosing bank credit methods to solve financing problems.

Fourth, the ability does not match. Small and medium-sized financial institutions are of great significance in supporting the development of SMEs. However, the overall strength of such institutions is weak and the scale is limited, so the financial support for SMEs is restricted. At the same time, due to the lack of strict control on the market access threshold, they also have the problem of overdevelopment, resulting in a serious shortage of self-owned capital, and their ability to resist risks is poor. Also, local nature makes them vulnerable to administrative intervention by local governments (Xiao, 2010). Thus, their ability to provide services does not match the actual needs of SMEs financing, and the effect is quite limited.

5. Qualification for direct financing

Direct financing refers to the financial behavior in which the fund supplier and the fund demander directly form the debt-equity relationship through certain financial instruments (Liu & Wu, 2007). Due to the very strict requirements for listing and financing, although the SMEs Board Market was successfully opened in Shenzhen Stock Exchange in 2004, the New OTC (Over the Counter) Board Market was gradually improved in 2006, the Second Board Market was successfully opened in October 2009, and the Regional Equity Market was re-established in 2012, there are still irreconcilable contradictions between the limited listing resources and the huge listing demand.

The SMEs Board Market and the Second Board Market mainly serve SMEs in the high-tech industry, but most SMEs are family-type and extensive. Therefore, they cannot fully perform the financing service function for SMEs. The amount of capital raised by the few listed companies on the Second Board Market is limited, and the quality of enterprises is generally low compared with those in the First Board Market, which also hinders its own development. In addition, China's Second Board Market does not carry out institutional innovation design in accordance with the development of China's economy and the reality of SMEs, and lacks strong supervision over the capital market with high returns and high risks, which kills the development of the Second Board Market (Wang, 2012).

The Third Board Market is positioned to provide a new listing platform for SMEs. It has indeed relaxed many restrictions on enterprises, and many local governments have given corresponding policy incentives to encourage more SMEs to list. However, the functional positioning of the Third Board Market is still relatively narrow. Companies that do not host securities companies have almost no transactions, and the amount of financing for companies that have successfully listed on the Third Board are deficient. The trading system of China's New Third Board Market is very consistent with that of the Main Board Market but lacks liquidity (Cui, 2011). The corresponding price adjustment mechanism, supervision mechanism and other supporting mechanisms are still not sound enough.

The OTC Regional Market mainly provides equity trading and partial financing services for small, medium and micro enterprises in specific regions. However, there are currently limited participants in the capital market at this level. Investment institutions and companies are mostly recommended by exchanges. A market structure that fully trades between the demand side and the supply side of funds has not been established.

In terms of debt financing, for SMEs, due to their own characteristics such as small scale and high credit risk, they will still be excluded from the list of candidates for the securities firms for a certain period of time.

References of Foreign SMEs Financing Experience

SMEs all over the world have difficulties in financing to varying degrees, as shown in Table 4.1. While many countries and regions have largely solved the problem of financing difficulties for SMEs and accumulated rich experience for the development of SMEs.

Table 4.1 Financing difficulty of SMEs by country, in percentage

Countries	No Difficulty	Minor Difficulty	Medium Difficulty	Major Difficulty
Canada	34.2	26	19.2	20.5
China	10.7	8	12	69.3
France	30.3	10.5	21.1	38.2
Germany	14.3	28.6	46.4	10.7
Italy	40.8	15.5	26.8	16.9
Malaysia	28.2	26.9	19.3	25.6
Singapore	44.1	14.7	29.4	11.8
Thailand	4.3	18.1	33.5	44.1
United Kingdom	29.5	28.2	28.2	14.1
United States	34	36	9	11

Source: World Business Environment Survey, Database, Drcnet.com

4.1. Financing Analysis of SMEs in the European and American Systems--Taking the United States as an Example

4.1.1. Specialized SMEs financing institutions

In 1941, 1942 and 1951, the Department of Commerce and the Department of Justice established the corresponding SMEs management institutions, which were independent in 1953 and called the Small and Medium-sized Enterprise Administration. It is now

headquartered in Washington, DC, with large bureaus and branches in each city. The main function of the headquarters is to determine the general idea of the development of SMEs, and guide the work of the branch; the sub-bureau is mainly responsible for the management and control of its subordinate branches; the branch has a professional team of talents to provide real-time guidance and assistance to SMEs in development planning, investment and financing, market development and other aspects (Li, Wang, Zhang & Zhang, 2013). It also provides loan assistance to SMEs to meet their financial needs. The Loan Program, Microloan Program, Disaster Loan Program and other Loan Programs proposed by SBA constitute the unique policy support system for SMEs financing in the United States. As a national guarantee system, SBA is responsible for the control and implementation of the SMEs guarantee loan program. It sets up a community-based guarantee system and a regional guarantee system to guarantee small business loans at different levels.

There are already tens of thousands of small financing institutions in the United States, which account for a significant proportion of venture funds. In addition, there are more than 500 small business investment companies in the United States, whose business content is mainly to provide financial support for high-growth SMEs engaged in high-tech (Ruan, 2008). At the same time, in order to encourage the enthusiasm and initiative of R&D and innovation of SMEs, government departments often set up R&D and innovation subsidies. The Small Business Development Center has been established in California, which is the technology center for supporting innovation activities of SMEs in the state. It unites investors, government departments, sellers and high-tech developers to build an information network, which plays a good role in integrating resources.

4.1.2. Perfect legal and policy system for SMEs

Since the 19th century, the United States has incorporated the promotion of small business development into the legislative process. In 1890, the federal government passed the first statute to protect the interests of small businesses, *The Sherman Antitrust Act*, whose main purpose was to oppose monopoly and protect competition. After that, it passed a series of amendments and supplementary bills, such as *The Clayton Act of 1937*, *The Miller-Tedin Act of 1937*, *The Thaler Kefauver Act of 1950*, etc. In the mid-twentieth century, the United States legislation aimed at providing protection and support to small businesses. The typical representative is *The Small Business Act* passed by Congress in 1953, which clarified the identification standards for SMEs and determined that the direction and field of support (Lv, 2008). For a long period of time, in the face of various problems in the development of small

businesses, the United States issued a number of correspondingly targeted bills. The United States has formulated a variety of targeted laws and regulations based on the practical problems exposed at different stages of economic development to provide strong guarantees for the financing of SMEs, thereby ensuring their healthy development. As shown in the Table 4.2:

Table 4.2 Relevant Legislation Support for SMEs in U.S

Release Time	Act Name	Main Support Direction
1953	Small Enterprise Financing Law	Lays the Foundation for the Financing System of SMEs
1958	Small Business Investment Company Law	Provides SMEs Venture Capital Financing Support
1975	The Fair Credit Opportunity Act	Ensures Fair Access to Financing for SMEs
1977	Community Reinvestment Law	Supports Vulnerable Groups to Obtain Financing Services
1980	Small Business Economic Policy Act	Annually Submitted by the President of the United States of SMEs Competitiveness Development report
1980	Small Business Investment Promotion Act	Venture Capital Company is Redefined as a Commercial Development Company
1992	Small Enterprise Equity Investment Promotion Law	Equity Investment of SMEs are Guaranteed
1993	Credit Guarantee Law	Reduces the Risk of Commercial Banks Issuing Loans to SMEs
2010	Small Business Loan Fund Law	Provides Tax Cuts and Loan Support to SMEs

Source: Wang, J. Y. (2016). *Research on Financing Difficulties and Countermeasures of Small and Medium Enterprises in China*. [Master's dissertation, Jilin University]. www.cnki.net.

Regarding P2P supervision and management, The Securities and Exchange Commission implements a registration system for P2P online lending platforms. Through the registration system, the credit certificate sold to the fund provider in P2P lending is classified as securities. Based on this model, the financing needs of SMEs are still provided by the original network banks. Network banks transfer the creditor's rights of SMEs to P2P platforms, which then transfer these creditor's rights to the fund provider in the form of credit voucher, thus making the fund provider change from the original creditor of SMEs to the unsecured creditor of P2P platforms (Li, 2005). In the event of default of SMEs, the fund provider does not need to directly seek recourse to SMEs, which not only guarantees the stability of SMEs' funds, but also guarantees the fund provider to recover its investment.

4.1.3. Perfect credit system for SMEs

The SMEs Administration Bureau established not only provides financial support but also provides credit guarantees. There are three kinds of guarantee methods or contents of the SMEs administration. The first is the general loan guarantees. It provides guarantees for general-purpose loans of SMEs, and at the same time collects handling fees from lenders, but this fee will eventually be paid to SMEs that obtain loans. The second is a special loan guarantee, mainly includes: short-term capital revolving loans for SMEs, with a loan amount of up to 2 million USD and a guarantee amount of 1 million USD; short-term export working capital loan guarantees for concluded export transactions, with a guarantee ratio up to 90% of the loan amount or 1 million USD; guarantees for SMEs engaged in and preparing to engage in international trade. The third includes small loan guarantees. The regional intermediary lending institution guarantees small loans for SMEs, with such small loans not exceeding 35,000 USD (Yang, 2015).

4.2. Financing Analysis of SMEs in the Japanese and South Korean systems -- Taking Japan as an Example

4.2.1. Provide legal protection and implement fiscal incentives

Japan's SMEs financing system is dominated by the government. In order to enable SMEs to better meet the requirements of national economic growth, the Japanese government has promulgated a series of laws. In 1963, Japan promulgated *The Basic Law of SMEs*, which became a programmatic document for the development of SMEs. Subsequently, Japan

promulgated *The Small and Medium-sized Enterprise Investment Limited Company Law*, *Small and Medium Enterprise Rejuvenation Funding Law* and other regulations, forming a relatively complete legal system for SMEs, and more effectively promoting the standardization of SMEs financing. Legal provisions such as *The Law on SMEs Financial Public Treasury* and *National Financial Public Treasury Law* regulate the loan object, the use of funds and the operation process (Suo, 2001).

In addition, Japan's credit guarantee system plays a significant role in SMEs financing. Japan's SMEs credit guarantee agency is responsible for financial examination of borrowing companies. The SMEs Credit Insurance Corporation and the SMEs Credit Guarantee Association jointly provide loan guarantees for enterprises. When loan occurs, the SMEs Credit Guarantee Association provides insurance for the enterprise, and the premium is 40% of the guarantee. When the loan is due to risk, 70% of the loan will be repaid by the SMEs Credit Insurance Treasury, and the SMEs Credit Guarantee Association is responsible for recovering the funds and paying them to the Credit Insurance Treasury. This kind of credit insurance unlocks the financing channels of SMEs and promotes the virtuous circle of credit guarantee system of Japanese SMEs (Li, 2011).

In addition to legislation, Japan also adopts fiscal subsidy policies and implements tax preferences for SMEs. Every year, Japan implements more than 200 fiscal policies, such as providing more than 8 billion JPY in subsidies to support SMEs to explore overseas markets, and directly supporting various guarantee institutions to improve their guarantee capacity for SMEs (Elias, 2000). In order to encourage technological innovation, develop national industries and enhance the market share of products in the international market, the Japanese government carries out a series of targeted tax reduction policies, such as special depreciation and exemption of important products. In terms of fixed asset depreciation rates, Japan shortens the service life of equipment in emerging industries to 4-5 years. For equipment purchased or rented by new industries, an additional 30% depreciation allowance is granted in the first year of production and operation, or a 7% tax exemption is directly granted. In terms of tax reduction, Japan stipulates that for ordinary legal persons with a capital of more than 100 million JPY, the corporate tax rate is 37.5%. For ordinary legal persons with a capital of less than 100 million JPY, their annual total income of less than 8 million JPY will be taxed at 28%, and the excess part will be taxed at 7.5% (Li, 2002).

4.2.2. Establish a specialized policy-based financial system

Japan has established a multi-level service organization for the national management of SMEs,

mainly consisting of three levels. The first level is the Department of Small and Medium Enterprises, which is directly responsible to the central government of Japan. It mainly designs macro-control policies for SMEs and supervises their implementation effects; assists the Japanese government in dealing with SMEs procurement arrangements; and guide the macro development direction of SMEs across the country.

The second level is the guidance section, which is the implementation agency and mainly serves local SMEs. Mainly include: (1) Industrial and Commercial Portfolio Central Treasury. It is a semi-official institution set up in 1936 by a joint venture between the government and the private sector, financed by the government and SMEs. And it is equivalent to the small and medium enterprise bank, mainly providing loans for SMEs collaborative portfolio and SMEs group. The guild members' financing limit is 2 billion JPY, and the trade association's funding limit is 20 billion JPY. The repayment period is generally longer, divided into 10 years and 15 years. (2) National Life Finance Public Treasury. The institution was fully funded and established by the government in 1949. It mainly targets small-scale enterprises, especially self-employed individuals, for whom the Public Treasury provides loans of working capital to maintain production without guarantee to a large extent. The equipment loan limit is 60 million JPY and the turnover loan limit is 40 million JPY. (3) SMEs Financial Public Treasury. Established in 1953, it is responsible for providing equipment loans and revolving loans to SMEs. However, the loans focus on supporting key industries and high-tech enterprises, and mainly provide long-term funds for medium-sized enterprises. Apart from loan business, it also provides serialized financial services such as loan securitization, credit insurance, investigation and research, consultation and operation guidance, etc. It is a comprehensive financial service institution for SMEs (Gao, 2002).

The third level is the civil small and medium-sized financial institutions, such as the Credit Treasury, and Credit Portfolio. Their objects basically are local small business and individual industrial and commercial door. Such multi-level policy-based financial support institutions greatly promote the financing of SMEs in Japan.

4.2.3. Build a good bank-enterprise relationship

Under Japan's main bank management model, the bank can arrange its staff in the senior management of the credit enterprise to directly grasp the first-hand data of the business operation. In addition, it directly owns shares in the credit enterprise, on which basis it provides debt financing for the enterprise. Theoretically, the main bank is both the creditor and the major shareholder (Bai & Xue, 2001). By locking the borrower in the relationship

with the relevant main bank, it can grasp the business and financial information of the enterprise in real time, which, to a large extent, solves the problem of information asymmetry. However, cross-ownership leads to unclear property rights, which to some extent hinders the further development of the economy.

4.2.4. Establish SMEs Development Fund

Japan promulgates *The Act on Promoting the Creative Activities of SMEs*, providing SMEs with an annual subsidy of 30 billion JPY to support their technological development and 10 billion JPY to support the upgrading of their equipment. In addition, the government provides a large amount of financial support for SMEs in the basic and application stages of technology research and development, such as providing low-interest loans or low-price equipment rental and sales. At the same time, the government encourages SMEs to cooperate with research institutions to jointly develop and apply new technologies, the results of which will be shared by enterprises and the state. Meanwhile, the government allocates more than 2 billion JPY to establish an Intellectual Property Center to support SMEs to introduce new technologies. The Japanese government generally adopts the direct subsidy form of low interest rate loans at the stage when SMEs are relatively weak, and indirect subsidy form such as the payment of a margin when SMEs become stronger (Kong, 2009).

Relevant Policy Suggestions to solve the Financing Difficulties of SMEs

5.1. Strengthen the Self-construction of SMEs

It is a common sense that the internal development force of anything is a decisive factor, which is also applicable to the financing plight of SMEs in China. In order to obtain financing demand, SMEs should enhance the credibility and social status of themselves and gain recognition from social and financial institutions. First, SMEs must establish a modern enterprise management system, clear business operations, improve internal governance and promotion procedures, and promote the reform of property rights system, which can bring hope and confidence to investors and promote the development of SMEs financing in a virtuous circle.

Second, SMEs should improve their financial management. SMEs should not abuse false financial statements and project blueprints to obtain loans when raising funds. If SMEs can take the initiative to establish a transparent information platform and actively disclose their true and reliable financial information, it will not only help to reduce the cost of bank information acquisition, but also send a positive signal to the outside world, which is conducive to get more loan preferences. Firstly, SMEs must strictly follow the national accounting standards and accounting treatment to ensure the authenticity and completeness of accounting information; secondly, SMEs should establish a scientific financial budget system, and build internal financial management measures in accordance with relevant state regulations; thirdly, SMEs should strengthen capital management, not only to hold a certain amount of capital to maintain operational needs, but also to invest in the production of fixed assets, paying attention to the balance between profitability and liquidity.

Third, SMEs should pay attention to the concept of credibility. The practice of enterprise credibility construction covers all aspects of enterprise operation, including not only the internal institutional management norms, but also the continuous communication and improvement with relevant stakeholders (Wang, 2011). The first step to take is to strengthen quality management and provide customers with qualified products and services. Enterprises should also adhere to the legitimate commercial competition, maintain the market competition order, strengthen self-discipline and participate in public welfare undertakings. In addition, the following preparations shall be made before financing: (1) Prepare the financing business

plan; (2) Develop financing strategies; (3) Improve profitability and management; (4) Choose the right way of financing; (5) Plan the cost and structure of expected financing.

Last but not least, SMEs should actively introduce new technologies and enrich product categories. Technological innovation is an inexhaustible driving force for the development of an enterprise. Although the introduction of new technologies needs a large part of financing in the short term, it can maintain certain competitiveness in the long run. Historically, banks are more willing to lend to SMEs with fast technology updates and rich product categories (Di & Gu, 2004).

5.2. Improve the Institutional Environment for SMEs Financing

5.2.1. Accelerate the construction of legal systems related to SMEs financing

In the process of formulating laws for SMEs, the following guidelines should be observed: first, the durability and timeliness of laws and policies should be guaranteed, and the government's support should be sustained. At the same time, laws and regulations should be adjusted constantly with the change of the actual situation; second, ensure the practical feasibility of the policy; third, appropriately give the legislative power to local governments based on the economic environment of the region and the development of SMEs, so as to rapidly develop local and regional financing system. Besides, the Chinese government should strengthen the law enforcement, not to make the existing laws and regulations become a piece of paper, but to make full use of them in practice.

The development of SMEs also depends on a sound social service system. According to foreign experience, a sound social service system mainly includes SMEs service centers, consulting companies, accounting firms, law firms, asset appraisal companies, tax agency companies and other social intermediary services, as well as SMEs whose main contents are loan evaluation, management consulting and technical cooperation (Wang, 2010). China should adopt the method of joint construction in which government gives priority to the establishment, mobilizing social forces and giving full play to the functions of industrial organizations. Firstly, participate in and coordinate the establishment of service agencies. Secondly, mobilize all social forces to independently establish various service organizations according to the needs of SMEs. Finally, give play to the function of industry organizations.

5.2.2. Give full play to the supporting role of financial policies for SMEs

1. Improve the bank's SMEs investment and loan linkage model

The existing general mode of bank investment and loan linkage in China is the "bank +private equity/venture capital" linkage mode with the separation of loan entities. *Guiding Opinions on Supporting Banking Financial Institutions to Increase Innovation and Carry out Pilot Projects of Investment and Loan Linkage for Sci-tech Innovation Enterprises* issued on April 21,2016 allows banks to establish investment-loan linkage models in which investment and lending entities are not separated by setting up subsidiaries with investment functions and technology financial institutions in China (Li, 2015). The introduction of relevant policies has a great promotion effect on the smooth development of investment and loan linkage of banks, but the design of the policy is still in the exploratory stage. Based on the guidance, this research puts forward the following suggestions:

Firstly, amend as soon as possible the restrictions on commercial banks' direct equity investment in enterprises, and lay the foundation for supporting banks' investment and loan linkage business from a legal perspective. The supervisory authority needs to be clearer about the implementation rules and access standards of the investment-loan linkage business, as well as the support policies of governments at all levels.

Secondly, regulate the development of investment and loan linkage business in the banking group's investment function subsidiaries. The risk weight of the investment equity should be set reasonably to avoid occupying the excessive capital of the pilot bank, and gradually expand the scope of the pilot under this model. It is necessary to restrict the investment weight and investment leverage of venture capital institutions, guide banks to incorporate equity investment income and loan income into the same evaluation system, and formulate reasonable and feasible incentive mechanisms.

Finally, emphasize the independence of investment loan approval. Since SMEs have high risks, even if the current relevant policies are supported, it is still necessary to gradually pilot commercial banks to lend to companies they own shares or holdings to avoid excessive liberalization of policies that will cause rescue behavior and put creditors' interests into a disadvantageous situation.

2. Explore the establishment of SMEs development funds

It may be considered that the government departments and banks jointly establish an equity investment fund - SMEs development fund - to support the development of SMEs in China. There are two investment modes for the fund to invest in SMEs. One is to invest directly in SMEs in the form of parent fund. The other is to invest in unlisted SMEs in the form of equity, warrants or options, participate in their operation and management, and complete the investment exit by transferring equity after their listing, so as to ensure capital

appreciation (Zhu, 2012).

First, clearly define the objectives of SMEs development fund in the process of formulating policies. In the short term, clarify the investment management model and integrate related resources. In the long term, follow the guidance of government departments and promote its development through market-oriented operations. Second, control the scale of investment during the fund operation. For example, it is recommended to use less than 3% of the bank's Tier 1 capital raised from high-net-worth clients for the bank's capital investment; and the investment ratio of a single fund should be controlled within 20%. For commercial banks engaged in equity investment, they can set a loan allocation rate of 12%-18% according to foreign experience (Yue, 2015).

3. Optimize the role of banks in SMEs supply chain financing

Commercial banks should vigorously develop supply chain financing for SMEs, and provide flexible and systematic financing policy arrangements for core enterprises and upstream and downstream enterprises by reviewing the entire supply chain. In industries with a supply chain finance model dominated by core enterprises, commercial banks should gradually transform from a leader to a fund provider. The main body of business development is undertaken by the core enterprise, which is the intersection of industry experts and information flow. Since the core enterprises in the chain have good credit and have good cooperative relations with banks, the supply chain finance model will transform the advantages of the core enterprises into the profits of the banks and innovate the credit concept of the banking industry to a certain extent.

At present, some of the original drawbacks of supply chain finance still exist. Therefore, the following suggestions are made from the perspective of banks:

(1) Increase the infrastructure construction of commercial banks' supply chain financing. China's commercial banks should consider giving full play to their own characteristics and policy advantages, improving financial operation capabilities to enhance their capital strength. The backward information acquisition and processing capacity seriously restricts the multi-dimensional expansion of customers and business information network. Therefore, banks should pay more attention to the construction of information platform and other infrastructures. What's more, they should focus on core customers, grasp their main information, and find out the needs of their upstream and downstream enterprises. After screening the core customer resources, design the overall plan for the selected target, and then analyze and design the specific supply chain loan plan.

(2) Accelerate the construction of financial services for the Internet of Things supply

chain. Combining the Internet of Things with supply chain finance, business models regarding financing application, approval and issuance of requirements shall be more online; the internal system of the bank should be effectively channeled with external systems such as logistics and customs; with the development of big data technology, the Internet of Things should be fully utilized for data analysis of participants in the chain, so as to design different financing products and provide better services for SMEs.

(3) Set hierarchical access to supply chain finance. The supply chain financial loan model has shifted from aiming at a single enterprise to an industry, which increases the length of the chain and interdependence and influence between nodes (Chen, 2015). Therefore, there must be a better risk control mechanism. When formulating policies, the selection criteria of core enterprises should be clarified first, then the chain should be selected according to the industries involved by the core enterprises, and the demander on the chain should be stratified by setting a rating mechanism. On the basis of stratification, the post-loan tracking should be timely and continuously, and finally, the guarantee scope should be set for SMEs of different levels according to the quality of enterprises.

4. Bank product innovation and service innovation

Improving the indirect financing system with banks requires banks to innovate and make changes. Product innovation can start from three aspects: (1) Warehouse receipt pledge loan business. Those in need of funds can submit a pledge application to the bank with the warehouse receipt, and only after the bank's review can they obtain funds. The required period of this pledge method is generally three months or half a year, which can better meet the need of short-term funds of SMEs. (2) Working capital revolving loans. Banks can sign a one-time loan contract with SMEs. The contract stipulates that funds can be withdrawn and recycled multiple times within the loan period (usually 1 year). This business meets the needs of customers for daily liquidity turnover or SMEs whose products have seasonal characteristics. (3) Account overdraft loan. Its function is similar to the credit card. When an enterprise needs temporary funds and the account balance is insufficient, it can overdraw the credit product with a certain amount of funds within the bank credit line. Banks require mortgage and guarantee according to the use of the loan and the credit status of the enterprise, and grant the corresponding loan amount (Yang, 2014).

There are two points regarding services improvement: (1) Increase the authority of primary commercial banks. At present, China's commercial banks have insufficient authorization and credit lines, especially the grassroots commercial banks that are closely related to the majority of SMEs, which is extremely incompatible with the wide range of

service targets. As for the cumbersome loan approval procedures, it is caused by the inter-generational power flow of commercial banks (Ding & Zhang, 2009). Therefore, only by enhancing the power and status of grassroots commercial banks can the application and approval procedures of SMEs loans be simplified, and this trend is inevitable.

(2) Improve the ability of credit personnel and establish a sound and scientific evaluation mechanism. Many commercial banks in China implement the principal responsible person system for approval, and pay more attention to errors than merits in the assessment of loan responsibilities (Hu, 2010). Undoubtedly, the loose appraisal mechanism in commercial banks will increase the risk of bank loans, but the excessively strict appraisal mechanism will also miss many financing opportunities for SMEs with growth potential. Therefore, only by raising the selection threshold, strengthening the business training and establishing a sound scientific evaluation mechanism, can credit personnel have the ability to optimize the selection of SMEs loan business.

5. Establish local small and medium banks or community banks

At present, the reform of state-owned banks will still take time, and they will not be able to provide sufficient funds for SMEs within a short period of time. In addition, overseas banks that enter China only provide services for large enterprises and do not provide financing for SMEs (Ma, 2007). Local small and medium-sized banks can make full use of local information resources, which can reduce information costs and reduce unnecessary and cumbersome procedures in the financing process.

6. Promulgate laws and regulations related to P2P online lending

P2P network lending has information disclosure problems such as opaque fund operation, incomplete asset information disclosure, and undisclosed platform operation status. At present, only the *Interim Measures for the Management of Business Activities of Online Lending Information Intermediaries* promulgated on December 28, 2015 have made relevant regulations on P2P online lending, and no more detailed rules related to P2P information disclosure (Lai, 2014). Therefore, P2P network lending should focus on platform construction, supervision, and information disclosure to support SMEs financing. First, dock with the central bank's credit investigation system to reduce operating costs and exempt guarantees for high-quality SMEs. Second, classify and supervise the platform operations, lending products and funds. Third, disclose platform information such as governance mechanisms, operating models, risk control mechanisms and their borrowing information. Fourth, strengthen technical investment to ensure customer information security.

7. Promote the establishment of exclusive management organizations for SMEs

At present, the National Development and Reform Commission and the Ministry of Industry and Information Technology have respectively set up the department of SMEs, responsible for the relevant work of SMEs. On the surface, the management functions of SMEs are relatively sound, and relevant departments are responsible for each part. However, in fact, such decentralized management organizations cannot form a cohesive force, and they try to shift blame on each other when encountering problems, resulting in the weakness of decision-making and execution (Wang & Wu, 2010).

The government should establish a unified SMEs management organization - SMEs Administration - ; to change the current overlapping situation of SMEs management functions, and form a comprehensive network organization. The SMEs Administration can proceed from the following three aspects: provide financing services such as special loans and loan guarantees; support commercial guarantee agencies to create special guarantee services; create a database to dynamically track relevant data in a timely manner. The establishment of SMEs management agencies shall be allowed first, and then relevant laws and regulations could be formulated in terms of the organization's structure, management mode, funding sources and operating mechanisms. Then, branches of SMEs management agencies in various localities should be set up, responsible for implementing macro policies of the higher-level agencies, and supervising the daily management of local SMEs.

5.2.3. Give full play to the role of fiscal policy in supporting SMEs

1. Improve the special fund policy of SMEs financing

With the increasing diversification of the financing needs of China's SMEs, the existing special fund types can no longer meet their financing needs (Sun, 2015). We can construct special funds for SMEs based on special fiscal funds. Firstly, integrate and combine special funds with similar purposes, and concentrate efforts to solve the financing gap of SMEs one by one. The funds will be separately allocated into the central and local budgets each year and linked to the growth of fiscal revenue in a certain proportion. Secondly, policy banks should be regarded as the transitional link of special financial funds for SMEs, aiming at the examination, supervision, bidding and other matters. Thirdly, commercial banks should be taken as the undertaking objects, and the professional credit risk assessment mechanism and information acquisition capability of banks should be used to ensure the accurate grasp of credit risks of SMEs, so that the special funds can be used reasonably and effectively.

2. Increase financial subsidies for SMEs

At present, the form of financial subsidy for SMEs financing in China is relatively

unitary compared with that in foreign countries. For example, South Korea gives strong financial subsidies to SMEs, such as assisting 75% of the development cost for SMEs that develop new products or improve existing products. In addition, the local government will provide supporting funds for SMEs that cooperate with academic research and development (Hu, 2015). It is indispensable for China to establish diversified financial subsidies. First of all, provide financial subsidies and enjoy shares in a certain proportion after reasonable risk assessment for SMEs in the initial stage. It can not only meet the funding needs of SMEs, but also increase the investment enthusiasm of other investors. Second, select SMEs with development potential in key areas and provide financial subsidies to them in the technology research and development stage. Third, provide a certain percentage of consulting fees to SMEs, who cannot acquire the key information in a timely and accurate manner due to the limitation of capital and technology, to help them improve their information systems and seize business opportunities.

3. Diversified financial subsidy mechanism to reduce rent-seeking behavior of enterprises

In order to properly solve the rent-seeking behavior that occurs when financial subsidies are provided to SMEs, the following suggestions are put forward: Firstly, improve the policy of protecting SMEs' intellectual property and other intangible assets. Otherwise the utility of government subsidy for enterprises' industrial structure upgrading will be greatly reduced.

Secondly, give some financial support to SMEs whose market share of the new products reaches a certain proportion of the overall product market. The market share can be measured according to the proportion of tax payments. In addition, when SMEs meet the preferential policies of financial subsidies for several consecutive years, they can withdraw and enjoy preferential policies in advance.

Finally, ensure the full use of government R&D subsidies. First, evaluate the plan and layout of innovative business of SMEs. SMEs with strong rent-seeking motivation tend to invest in those projects with strong short-term profitability and low investment risk (Huang, 2010). Second, monitor SMEs' use of government R&D subsidies to prevent government subsidies from being misappropriated. The government can distribute subsidies in batches according to the actual R&D situation of enterprises through supervision. While the supervision frequency should be controlled, and random inspection and supervision should be conducted according to the R&D stage of the enterprise. Third, motivate SMEs that effectively use subsidies or succeed in R&D through increasing the number of subsidies in the future or reducing tax.

5.3. Strengthen the Information and Credit Construction of SMEs

5.3.1. Establish an open and transparent credit investigation system

To improve the credit investigation system of SMEs, the government can organize social security, taxation bureaus, industrial and commercial administrations, real estate administrations, customs departments and other social public service industries to open data exchanges with banks and other financial institutions, providing a full set of information query services. In addition, China's administrative authorities should comprehensively publicize a series of information such as the basic information of an enterprise (including its name, industry, asset size, business content, etc.), financial status, credit information, judicial information, tax payment situation, environmental protection penalty, administrative penalty, etc., grant banks and other financial institutions the right to inquire, and set laws and regulations to clarify the scope and use of the information. Regulatory authorities should establish a blacklist system for SMEs that violate market competition principles and infringe on consumer rights. Once the enterprise appears with a bad record, everywhere is restricted; it loses its trust and is always passive in economic activities. Enterprises will inevitably pay attention to their own credit construction after rational weighing and reduce dishonest behavior.

5.3.2. Establish a sound credit guarantee mechanism for SMEs

To reduce information asymmetry, we should not only improve information transparency, but also take the establishment of credit guarantee mechanism as a breakthrough point. China can set up special policy-based financing guarantee institutions to provide guarantee for SMEs, and build special service windows and network service platform in the institutions to ensure the standardized operation of guarantee business. Local governments at all levels should determine corresponding departments to be responsible for the supervision of financing guarantee institutions at the corresponding level. At the same time, we should pay attention to guarantee the conveying and training of professional talents.

In addition, different credit approval procedures and loan lines can be provided for enterprises with different credit ratings and development prospects. And in the selection of collateral, financial institutions can relax the scope, not only target tangible assets but also target production technology, product patents and other intangible assets as collateral according to the characteristics of different regions and industries. For example, it is specialized in ship guarantee and export letter of credit guarantee for export enterprises.

Moreover, SMEs can enhance their innovation guarantee capabilities. The upstream and downstream enterprises can establish guarantee institutions with mutual benefit and assistance, and use the overall credit of industrial cluster funds and scale as guarantees to increase the investment willingness of financial institutions. Besides, when repaying loan funds, the special fund source can be used as the main source of compensation (Xiong, 2010). This form of joint liability compensation will effectively reduce the credit risk of financial institutions.

5.3.3 Make full use of the credit platform of tax agencies

Tax authorities shall provide professional services for SMEs in the following aspects:(1) Strengthen publicity of tax law, tax consultation and guidance. Taxation departments could carry out diversified publicity on taxation procedures, key difficulties, common problems, and policy preferences. Also, they should improve and standardize the taxation consulting and guidance service. (2) Optimize the taxation process and broaden the taxation channels. Tax agencies shall streamline the approval process for SMEs to improve efficiency and reduce costs, promote the use of tax agents by SMEs and utilize the power of intermediary agencies. (3) Establish tax service center for SMEs. Taxation institutions may establish a tax service center with special service websites and tax consultation hotlines. (4) Improve online taxation services, such as collection of opinions and suggestions, acceptance of complaints and reports. (5) Found specific credit evaluation standards for SMEs and build a credit information database to dynamically monitor and share the tax credit of SMEs in real time. Besides, it is beneficial to construct a joint punishment mechanism for untrustworthy behavior and strengthen the application of credit results.

5.4. Improve Various Financing Channels and Truly Realize Multi-channel Financing

5.4.1. Guide private capital to broaden financing channels

At the present stage when domestic capital and transnational capital are insufficient to support the financing development of SMEs, China can standardize the private capital and find a way for the private capital to flow into the real economy, so as to alleviate the financial repression (Zhu, 2011). The government can actively lead private capital into the legal system, nurture financial organizations to collect and manage private capital, and create small and medium-sized institutions as a link between private capital and SMEs. In addition, by standardizing the operation of emerging loan companies, the dispersed private capital can be effectively guided to SMEs.

5.4.2. Improve capital securitization

China's current capital market presents an "inverted pyramid" structure, that is, the number of enterprises that have been listed on the Main Board is larger than the number of enterprises that have been listed on the Second Board Market and the New OTC Market (Liu & Yuan, 2008). As a result, large companies that have already been listed are flush with cash and can continue to issue additional shares or even issue bonds through the capital market even if they run out of capital. However, a large number of innovative SMEs are unable to obtain financing. Even those companies that have been listed on the Second Board Market and the New OTC Market have very limited financing scale. It is urgent to expand the capital market of the New OTC Board. First of all, it is imperative to establish of an auxiliary system for SMEs to go public, promote SMEs to enter the capital market, and provide some listing financing opportunities to those with high growth and in line with the industrial policy. Moreover, it is necessary to promote the development of regional OTC markets, which is a great benefit to the majority of high-quality SMEs and investors.

5.4.3. Build bond financing system

China must construct a multi-level bond market system if it wants to establish a financing channel suitable for the development of SMEs (Huang, 2008). Regarding examination and approval standards, a system for the issuance of enterprise bonds suitable for their characteristics shall be established. For SMEs with high development potential, they can be allowed to finance from the whole society. As for issue scale, it can be set within a controllable range at initial stage. After a certain period (it can be proposed to be one year), if the income is good and sustainable, the issue scale can be increased. What's more, policies should allow eligible SMEs to issue corporate bonds, and allow them to circulate freely in the multi-level bond market, so that investors with different needs and SMEs can make investment and financing docking. Furthermore, corporate bond portfolios can be used for financing. For example, companies with a high degree of correlation and similar geographic areas can be combined to form a joint stock limited company and issue common corporate bonds or do financing.

5.4.4. Explore financing insurance model

The financing difficulties of SMEs are often due to the lack of corresponding mortgage collaterals and low credit ratings. The intervention of insurance products will increase the

credit rating of SMEs and increase the possibility of banks providing financing services to SMEs. At the same time, insurance companies usually have professional personnel for risk prevention and control, which can help banks to conduct prior investigation and help SMEs to control and reduce risks (Guo & Ni, 2009).

Currently, banks and insurance companies shall cooperate to develop loan guarantee insurance, which can be purchased by SMEs from insurance companies. After insurance companies accept the insurance request through the risk assessment, SMEs can use the insurance as collateral to make a loan from banks, and the insurance companies are responsible for the compensation when SMEs cannot repay the loan. At the same time, guarantee agencies and insurance companies may cooperate to develop loan liability insurance. That is, SMEs make a guarantee request to guarantee agencies, and then guarantee agencies apply to the insurance company for insurance. When SMEs fail to repay bank loans, the insurance company shall pay compensation, and the guarantee agency shall be responsible for recovering the SMEs.

5.5. Continuously Innovate Financing Methods and Financing Tools for SMEs

5.5.1. Construct an internet financing service platform for SMEs

Internet financing platform should be supported by the participation of the state and various government departments. By organically connecting the capital demand side and capital supply side, and opening the enterprise information obtained by insurance companies and guarantee companies, the information exchange among financial institutions, government departments and SMEs can be realized. On the one hand, the platform will comprehensively analyze the credit conditions of all parties and perform efficient financing match. On the other hand, the platform will effectively reduce the search cost of the government and investment institutions and facilitate government's special credit funds to eligible SMEs. However, we should pay attention to supervise risks and develop business on the basis of law and integrity.

5.5.2. Use financial leasing to ease financing difficulties for SMEs

Financial lease has many advantages. First, purchase equipment in the form of financing. Second, the independent risk control system can flexibly arrange guarantee methods according to the strength of SMEs. Third, approval process is simple, and cooperation time is long. SMEs can not only obtain the long-term use right of the equipment, but also relieve the financial pressure by paying in installments (Wang & Ye, 2010).

Financial leasing companies are weakly affected by the country's macro-monetary policy, and the stability of funding sources is relatively guaranteed (Xia, 2014). Moreover, they set a lower threshold for enterprises, which is more flexible than the credit mechanism of banks. When choosing a leasing company, SMEs can select the lease object and lease term according to their needs and capital situation. Meanwhile, leasing companies can accelerate the depreciation after leasing business with enterprises, so as to ease their tax burden and gain the benefit of deferred tax payment. In short, making full use of the advantages of financial leasing will effectively alleviate the capital needs of SMEs and promote the harmonious development of the market economy.

Conclusions and Limitations

As an important part of China's national economy, SMEs have strong economic and social significance. But at the same time, SMEs will more or less face shortage of funds and financing difficulties during their development, which has become one of the bottlenecks restricting the development of SMEs.

This research believes that SMEs financing difficulties in China are not only attributed to the shortcomings of SMEs' own operations, but also to the weak government policies and imperfect financial system. First, the financing channels of SMEs are narrow, bank loans are limited and the threshold is high; private capital lacks standardization and the cost is high; the level of capital market is insufficient and the entry is difficult. Second, there is a strong information asymmetry between SMEs and financial institutions. There is a lack of open and transparent credit information systems to provide SMEs with credit information, and a lack of professional platforms to provide SMEs with financing guarantees. Third, extensive business model, deficient credit concepts and random governance model makes SMEs exposed to excessive business risks. Fourth, there is a lack of laws related to financing for SMEs, and many details lack legal guidance, restraint and protection.

This research argues that the financing problems of SMEs should be solved through the joint efforts of all parties. First, SMEs should improve their operating and management capabilities, establish good credit concept, and standardize the production and development of themselves. Second, government should actively introduce relevant financial preferential policies to vigorously support SMEs, and introduce systemic laws and regulations to restrict all parties involved in SMEs financing. Third, improve the credit information system of SMEs, and understand the financing obstacles caused by information asymmetry. Fourth, improve the structure of China's financial system, guide and regulate private capital, and provide more channels for SMEs to raise funds. Fifth, actively use innovative financing methods and tools, and make full use of the new opportunities that Internet finance and financial leasing bring to SMEs financing. Under a standardized production, operation and management structure, and a sound financial system, SMEs will eventually get out of financing dilemma and prosper.

Hope that the analysis and research on this thesis can clarify the current predicament and causes of SMEs financing in China. It can also play a role in promoting extensive thinking from which perspectives to comprehensively formulate and implement policies to improve the

financing scope, financing channels and financing efficiency of SMEs. However, in the process of preparing and writing the thesis, it was difficult to obtain relevant empirical data to be included in the analysis, which led to limitations in the construction of the thesis framework and system, with no empirical analysis being performed. Further research is need, using empirical data to consubstantiate the main conclusions put forward in this thesis.

References

- Bai, Q. X., & Xue Y. H. (2001). *Comparison of policy-based financial systems for SMEs in various countries*. China Finance Press.
- Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: the importance of bank organizational structure. *Economic*, 112, 32-53.
- Berger, A. N., & Udell, G.F. (1995). The economics of small business finance: The role of private equity and debt markets in financial grow cycle. *Journal of Banking and Finance*.
- Brigham, E. F., & Weston, J. F. (1981). *Managerial finance*. Dryden Press.
- Carroll, R., Douglas H. E., Harvey S. R., & Mark R. (2000). Income taxes and entrepreneurs' use of labor. *Journal of Labor Economics*, 18(2), 324-351.
- Chen, H. T. (2006). Try to talk about the position and role of SMEs in the national economy. *Journal of the Public Science and Technology*.
- Chen, J. (2015). The impact of the development of supply chain finance on the financing of SMEs. *Market Modernization*, (31), 238-239.
- Chen, X. W. (2012). *Analysis of difficulties in financing China's SMEs and related suggestions*. [Master's dissertation, Fudan University]. www.cnki.net.
- Cui, Y. (2011). Analysis of the causes and countermeasures of the financing dilemma of SMEs. *Journal of Modern Economic Information*, (12), 182-183.
- Debt financing. (2020, August 25). In Entrepreneur AISA PACIFIC. <https://www.entrepreneur.com/encyclopedia/debt-financing>.
- Di, N., & Gu, Q. (2004). China's SMEs financing status, problems and countermeasures. *China Economic and Trade Herald*.
- Ding, Y., & Zhang, Y. Q. (2009). The construction of local policy support for SMEs financing. *Journal of Hubei Administration Forum*.
- Elias, S. (2000). *Working on the organization of SMEs and economic growth in the USA and Japan*. [Master's dissertation, University of Wollongong]. www.cnki.net.
- Gao Z. Y. (2005). *Talking about the improvement of Chinese corporate financing system from the perspective of corporate life cycle*. [Master's dissertation, Southwestern University of Finance and Economics]. www.cnki.net.
- Gao, S. Z. (2002). Japan's SMEs financial policy. *Journal of Financial Research*.
- Graham, J. R., & Harvey, C. R. (2001). The theory and practice of corporate finance: Evidence from the field. *Financial Economics*, (60), 187-243.
- Guo, X. L., & Ni, K. Q. (2009). Financing dilemma of SMEs and endogenous mutual aid financing. *Journal of Southwest Finance*.
- Hong, W. (2020). Analysis of the impact of the epidemic on the manufacturing supply chain and policy orientation in the "post-epidemic era". *Journal of Southwest Finance*, 1-10.
- Hu, C. J. (2010). Discussion on the construction of social environment for governing the financing difficulties of SMEs. *China Economic and Trade Guide*.
- Hu, F. Y. (2015). Research on fiscal and tax policies supporting the development of SMEs. *Journal of Enterprise Herald*, (3), 5-6.
- Hu, G. C. (2016). Financing difficulties and solutions for domestic SMEs. *Finance and Economics*, (2), 35-36.
- Huang, J. P. (2008). Talking about the construction of multi-level system of China's capital

- market. *Journal of Fujian College of Commerce*.
- Huang, M. F. (2010). *Survey on China's small business financing*. China Financial and Economic Publishing House.
- Ji, R. 2013. The development trend and policy enlightenment of SME financing in the Asia-Pacific region. *Journal of Northeast Normal University*, (2), 36-39.
- Kong, S. D. (2007). *Foreign SMEs financing experience and inspiration*. China Finance Press.
- Kong, S. D. (Ed.). (2009). *Foreign SMEs financing experience and enlightenment*. China Finance Press.
- Lai, C. C. (2014). The new internet finance model to solve the financing difficulties of SMEs. *Chinese Commerce and Trade*, (15), 067.
- Li Z. H. (2002). Bank structure and SMEs financing. *Journal of Economic Research*.
- Li Z. X. (2011). *Microfinance: International experience and Chinese practice*. China Finance Press.
- Li, P. F., Zhang, P., Zhu, W. X. et al. (2020). The plight of SMEs and the improvement of policy efficiency under the impact of the Epidemic - based on the analysis of two national questionnaires. *Journal of Management World*, 36(4), 13-26.
- Li, Q. S. (2011). Japanese technology - based SMEs financing experience and enlightenment. *Journal of Technology Management Research*.
- Li, X. J. (2005). U.S., Japan, and Germany SMEs financing experience and reference. *Journal of Beijing University of Technology*, (9), 31-35.
- Li, X., Wang, Q., Zhang L., & Zhang, S. (2013). Research on financial services supporting SMEs financing in the United States. *Asia Pacific Economics*.
- Li, Y. J., & Lin, Y. F. (2001). Development of small and medium financial institutions and financing of SMEs. *Economic Research*, (6), 10-18.
- Li, Y. T. (2002). *Japanese, American and European SMEs theoretical policies*. Jilin Human Studies Press.
- Li, Z. (2015). Explore how supply chain finance can ease the financing difficulties of SMEs. *Journal of Finance and Economics*, (18), 127.
- Lin H. C., & Tian D. S. (2003). *Research on the development mechanism of China's SMEs*. Commercial Press.
- Liu, M. H. (2003). *Research on the financing issues of China's SMEs*. Renmin University Press.
- Liu, T. X., & Wu, Q. Z. (2007). *Financing of China's SMEs—Theory, reference, and establishment of financing system*. China Social Science Press.
- Liu, W. G., & Yuan, S. M. (2008). Multi-level capital market and SMEs financing. *Journal of Friends of Accounting*.
- Lv, X. Y. (2008). International comparison of SMEs financing and its reference. *Journal of SMEs Management Research*.
- Ma R. Q. (2011). *Guidelines for overseas listing of China's enterprises*. China Finance Press.
- Ma, X. Q. (2007). Interaction between small and medium-sized financial institutions and SMEs. *Economist*, (7), 52-56.
- Modigliani, F., & Millier, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48 (3), 261-297.
- Ruan, Z. (2008). *Research on financial support for SMEs in the United States*. China Finance Press.

-
- Shi, J. P. (Ed.). (2011). *Report on the development of financial services for SMEs in China*. China Finance Press.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393-410.
- Stranhan, P., & Weston, J. (1998). Small business lending and the changing structure of the banking industry. *Journal of Banking and Finance*, 22(8), 21-45.
- Sun, J. (2015). Innovation of fiscal and tax policies for SMEs in the new economic environment. *Journal of Modern Business Industry*, 36(7), 175-176.
- Suo, J. (2001). *International comparison of SMEs development*. China Social Sciences Press.
- Wang J., & Ye S. J. (2010). Looking at China's SMEs financing issues from financial innovation. *Journal of China Business*.
- Wang, B., & Wu, Y. M. (2010). Difficulties in financing SMEs in the construction of a diversified financing service system. *Journal of Zhejiang Finance*.
- Wang, C. J. (2010). International comparison of SMEs financing. *Journal of Industrial Technology Economy*, 29(7), 52-54.
- Wang, E. Z. (2011). Research on the status and optimization construction of China's credit information system. *Journal of Chinese Market*, (29), 78-80.
- Wang, S. J., Xia, E. J., & Zhi, H. J. (2014). Current status and prospects of SMEs financing. *Journal of Technology and Industry*.
- Wang, Y. (2012). Causes and solutions of financing difficulties for SMEs. *Finance and Economics*, (1), 56-58.
- Wang, Y. T. (2016). *Innovation research on the financing policy support of SMEs in China*. [Master's dissertation, Tianjin Business University]. www.cnki.net.
- Xia, Y. (2014). *Research on innovation of financing channels of China's SMEs*. [Master's dissertation, Shandong University]. www.cnki.net.
- Xiao, S. W. (2010). Causes and legal countermeasures of financing difficulties for SMEs. *Journal of Southwest University of Political Science and Law*, 73.
- Xiong, Z. S. (Ed.). (2010). *Study on innovation of credit financing system for SMEs*. China Finance Press.
- Xu S. F. (2010). *Movable property financing practice - a new financing model for SMEs*. China Finance Press.
- Yang J. B. (2008). Research on excess liquidity and financing of SMEs. *Journal of Zhejiang Finance*.
- Yang, C. (2014). Research on paths and strategies of commercial banks to improve the financing environment of small and micro enterprises. *China Economic and Trade Guide*, (33), 027.
- Yang, Y. (2015). Research on the financing of SMEs using multi-level and diversified capital markets. *Journal of Managers*, (19), 005.
- Yue, Y. X. (2015). Research on the strategic transformation of commercial bank supply chain finance in the big data era. *Journal of Logistics Engineering and Management*, (3), 177-180.
- Z. Q. Yue. (2009). Research on the risks of city commercial banks' loans to SMEs. *Business Manager*, (02), 78-79.
- Zhang W. Y. (1999). *Enterprise theory and China's enterprise reform*. Peking University Press.
- Zhang, H., & Zhu, K. L. (2008). Research on China's SMEs financing policy support. *Journal of Northern Economy*, (4), 7-8.

- Zhang, X. (2011). Viewing the development path choice of China's SMEs credit guarantee system from the comparison of international experience. *Journal of Financial Theory and Practice*, (9), 20-22.
- Zhu H. R. (2011). Establish and improve the multi-level financing system for small and medium-sized enterprises. *Journal of Innovation and Technology*.
- Zhu, Q. (2012). Research on the construction of SMEs financing support. *Journal of Business Economics*.

Annexes

Annex A Complete Chinese SMEs defined standards in various industries

Industry	Type	Operating Income (in Million RMB)	Employee	Total Assets (in Million RMB)
Agriculture, Forestry, Animal Husbandry and Fishery	Medium	5-200		
	Small	0.5-5		
	Micro	Less than 0.5		
Industrial Enterprise	Medium	20-400	300-1000	
	Small	3-20	20-300	
	Micro	Less than 3	Less than 20	
Construction Industry	Medium	60-800		50-800
	Small	3-60		3-50
	Micro	Less than 3		Less than 3
Wholesale Industry	Medium	50-400	20-200	
	Small	10-50	5-20	
	Micro	Less than 10	Less than 5	
Retail	Medium	5-200	50-300	
	Small	1-5	10-50	
	Micro	Less than 1	Less than 10	

Annex A Complete Chinese SMEs defined standards in various industries (continued)

Transportation Industry	Medium	50-400	300-1000	
	Small	10-50	20-300	
	Micro	Less than 10	Less than 20	
Warehousing Industry	Medium	50-400	100-200	
	Small	10-50	20-100	
	Micro	Less than 10	Less than 20	
Postal Industry	Medium	50-400	300-1000	
	Small	10-50	20-300	
	Micro	Less than 10	Less than 20	
Accommodation Industry	Medium	50-400	100-300	
	Small	10-50	10-100	
	Micro	Less than 10	Less than 10	
Catering	Medium	50-400	100-300	
	Small	10-50	10-100	
	Micro	Less than 10	Less than 10	
Information Transmission Industry	Medium	50-400	100-2000	
	Small	10-50	10-100	
	Micro	Less than 10	Less than 10	
Software and Information Service Industry	Medium	50-400	100-300	
	Small	10-50	10-100	
	Micro	Less than 10	Less than 10	

Annex A Complete Chinese SMEs defined standards in various industries (continued)

Real Estate Development and Management	Medium	50-400		50-100
	Small	10-50		20-50
	Micro	Less than 10		Less than 20
Property Management	Medium	50-400	300-1000	
	Small	10-50	100-300	
	Micro	Less than 10	Less than 100	
Leasing and Business Services	Medium	50-400	100-300	80-120
	Small	10-50	10-100	1-80
	Micro	Less than 10	Less than 10	Less than 1
Other Unspecified Industries	Medium	50-400	100-300	
	Small	10-50	10-100	
	Micro	Less than 10	Less than 10	