

Research on the countermeasures for the financing difficulties of small and medium-sized enterprises in the context of digital finance

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Abstract: The solution to China's small- and medium-sized business financing dilemma lies in fostering the country's superior economic growth. The growth of digital inclusive finance has greatly increased small and medium-sized businesses' financing efficiency. This article offers a comprehensive solution to problems like information asymmetry, high costs, single channels, and strict financing requirements. The government must create a platform for information disclosure, strengthen oversight, play a leading and encouraging role, and develop preferential policies. Financial institutions ought to develop new financing options, streamline operations, cut expenses, and improve their partnerships with small and medium-sized businesses. Small and medium-sized businesses must fortify internal management, raise credit ratings, and improve the quality of information disclosure. Every societal segment ought to take an active role and collaborate to enhance the financial landscape. Through a variety of initiatives, we seek to support small and medium-sized businesses' healthy growth, ease their funding challenges, and advance social stability and economic expansion.

1. Introduction

Small and medium-sized businesses are a vital component of the contemporary economic system, contributing significantly to job creation, economic growth, and technological innovation. They can quickly adjust to market changes and satisfy the wide range of customer needs because they frequently possess adaptable business mechanisms, astute market insight, and quick decision-making skills. Nevertheless, despite playing a significant role in economic growth, small and medium-sized businesses still face numerous obstacles when it comes to funding. Small and medium-sized businesses are a vital component of the social economy's superior development. China's microenterprise, which has surpassed 52 million and accounts for 98.4% of all enterprises in the nation, will continue to be the backbone of the nation's economic development in 2022. The employment proportion of these enterprises is 79.4% of all total employees. Small and medium-sized businesses are crucial to the growth of the economy as a whole and have a big influence on jobs and people's quality of life. The growth of small and medium-sized businesses is critical to the development of the economic recovery. The small and medium-sized business sector's inventiveness,

competitiveness, and vitality collectively serve as the primary engines of economic growth. In the current environment of imbalanced and inadequate contradictions in economic recovery, with China's economy continuing to be in the stage of structural adjustment and transformation, the vitality of small and medium-sized enterprises can help further promote industrial structure optimization and economic diversification, alleviate the overall pressure of employment and structural contradictions, and enhance the resilience of the entire economic system from a micro perspective. Small scale, information asymmetry, and inadequate collateral are among the many challenges that SME financing has historically faced. Nonetheless, given the rapid advancement of digital finance, it appears that there are fresh approaches to these age-old issues. By introducing cutting-edge technologies like big data, cloud computing, and artificial intelligence, digital finance not only expands the reach and effectiveness of financial services but also creates previously unheard-of opportunities for financing SME loans. Financing for SMEs has benefited greatly from the emergence of digital finance. SMEs can more easily obtain financing information and lessen the degree of information asymmetry precisely because of this. While digital finance offers many new challenges to SME financing, it also offers many new conveniences. For instance, digital financial technology has high technical barriers, making it challenging for many SMEs to effectively use these technologies to obtain financing because they lack technical support and talent reserves. Risks related to data security, privacy protection, etc. exist in digital finance. SMEs' trust and usage of digital finance may be hampered by this. The advancement of SME financing may also be hampered by legislative measures, regulatory policies, and other constraints on the growth of digital finance. As a result, researching SMEs' financing challenges and solutions in the context of digital finance is crucial.

2. Literature review

2.1 Research on the financing efficiency of small and medium-sized enterprises

Researchers both domestically and internationally have primarily examined small- and medium-sized business financing efficiency from the standpoint of internal early-stage enterprise characteristics. Kapper(2002) conducted research using sample data from 15 Eastern European nations, including Estonia, Russia, and Ukraine. The study found that financing constraints impede the improvement of enterprise financing efficiency, and factors like capital composition ratio and revenue generation ability affect financing efficiency[1]. Mateev and Anasiasoy(2010) found that the efficiency of daily fund use is positively correlated with sales revenue and asset growth of enterprises[2]. Yang Fenglai and Huang Yonghang(2006) found that the small and medium-sized enterprises primarily rely on external funds to support asset growth. Small and medium-sized businesses have tightly integrated ownership and management rights, which may make debt financing more challenging[3]. Guo Lihong and Xu Xiaoping(2012) found the important variables influencing the financing efficiency of small and medium-sized businesses include the company's size, listing status, and group membership[4]. Li Rumping (2014) found that small and medium-sized enterprises in the mature stage with high credit rating are more likely to improve the financing scale[5], while Song Hua and Chen Sijie (2019) believed that the open collaborative innovation of small and medium-sized enterprises can help them improve their financing performance. Some scholars try to quantify the financing efficiency of SMEs and use quantitative models to evaluate the financing process of enterprises[6]. Fang Xianming and Wu Yueyang (2015) studied the financing process of enterprises with small size in the new third board market and found that the overall operation and production efficiency of the sample enterprises after financing with the help of the new third board had not been significantly improved[7]. Yuan Zhuomiao et al. (2018) pointed out that technology-based small and medium-sized enterprises have problems such as redundant main business costs and insufficient income promotion. The financing efficiency of small and medium-sized enterprises in

technology promotion and application services is higher than that of other types of enterprises[8]. Hu Xuwei and Ma Yilan used DEA method to study the relationship between the performance of corporate social responsibility and debt financing efficiency, and found that improving the performance of corporate social responsibility can significantly improve financing efficiency[9]. Yang Fangmei (2015) took the debt financing amount of enterprises as the intermediate output, and used the network DEA method to evaluate the overall efficiency of the debt financing process of sample enterprises and the corresponding efficiency of the sub process of fund raising and allocation. The results showed that there was a great potential to improve the debt financing link of enterprises, which was mainly due to the low utilization efficiency of integrated funds[10]. Deng Yingchun and Huang Xiaojun (2019) evaluated the financing links of 20 listed new energy companies through two-stage network DEA, and analyzed their improvement paths. In order to more comprehensively evaluate the financing efficiency of SMEs, this paper used the network DEA method to study the financing efficiency of SMEs from two aspects of fund raising efficiency and fund allocation efficiency[11].

2.2 Research on digital finance and SME financing

Through empirical research, some academics have examined the benefits of digital finance for SME financing, including increased financing channels, lower financing costs, and better financing efficiency. Simultaneously, certain academics have identified issues and obstacles that hinder the advancement of digital finance, including significant technological barriers, elevated risks related to data security, and inadequate regulatory frameworks. Researchers have looked at the connection between SMEs and digitally inclusive finance from a variety of angles. Some academics concentrate on investigating how corporate financing constraints are impacted by the development of digital inclusive finance. The external financing constraints faced by SMEs can be lessened by raising the bar for digital inclusive finance construction. Reducing financing issues also frees up funds for business innovation, which translates into lower-cost financial services for SMEs. By reducing information asymmetry and enhancing loan cycles, digital inclusive finance can boost output (Liang Bang and Zhang Jianhua, 2019)[12]. By easing financial restrictions and lowering financing costs for SMEs, digital inclusive finance can raise the bar for corporate innovation (Lang Xiangxiang et al. 2021)[13]. Bond financing has the potential to partially impede external debt financing (Zhang Jingning et al. 2023)[14]. By examining the effects of digital inclusive finance on corporate bond financing, some researchers have discovered that it can support corporate agency indicators. A system GMM model was employed to investigate the relationship between the financing efficiency of small and medium-sized enterprises (SMEs) and the development quality of digital inclusive finance. The results indicated a strong correlation between the two. Using return on net assets as a proxy for corporate financing efficiency, Wu Qingtian and Wang Qian (2020) examined the impact mechanism and discovered that the degree of expansion of digital inclusive finance modifies the financing structure, thereby influencing financing process efficiency[15]. The improvement of financial coverage and depth plays a significant role in promoting the value of enterprises, effectively broadening the sources of corporate financing and improving financing efficiency (Zhang Xiaoyan and Li Jinbao, 2021)[16]. The development quality of digital inclusive finance has a significant impact on non-state-owned SMEs and SMEs in the central and western regions.

To summarize, the research conducted by certain scholars on financing constraints is restricted to the influence of digital inclusive finance on financing constraints. Conversely, the research conducted on digital inclusive finance and financing efficiency does not have a reliable method for measuring financing efficiency, which leads to limitations in the findings of the study. Based on this, the study's objectives are to thoroughly examine the reasons behind small- and medium-sized businesses'

financial challenges and investigate financing alternatives in the context of digital finance, all in an effort to offer fresh concepts and approaches to small- and medium-sized businesses' financial issues.

3. Analysis of financing difficulties of small and medium-sized enterprises

As the vital pillar of China's economic system, small and medium-sized businesses face numerous macroeconomic challenges that have an impact on their financing environment during this crucial time of ongoing adjustments to the global economic structure and domestic economic transformation. The financing of small and medium-sized businesses is facing previously unheard-of difficulties due to changes in the regulatory, market, and financial environments.

3.1 Stringent financing conditions

Small and medium-sized businesses frequently have to deal with tight financing requirements during the financing process. High loan interest rates are the first indicator of these conditions. Owing to the considerable risk associated with small and medium-sized businesses, conventional lenders like banks frequently impose higher interest rates on loans to these entities, exacerbating their financial difficulties. Second, banks frequently have strict loan requirements and demand substantial collateral or guarantees from businesses, which makes financing more challenging for small and medium-sized businesses with few assets and a modest footprint. Furthermore, the intricate loan application process entails numerous links and approval processes, which makes it more difficult for small and medium-sized businesses to obtain funding quickly and raises the cost of financing for them. Many small and medium-sized businesses find it challenging to meet the loan requirements of traditional financial institutions like banks and to obtain adequate financial support as a result of these harsh financing conditions.

3.2 High financing costs

Exorbitant financing costs: Small and medium-sized businesses pay more for the financing process than do large businesses. Many small and medium-sized businesses find it challenging to meet the loan requirements of traditional financial institutions, like banks, and to obtain adequate financial support as a result of these harsh financing conditions. These costs include loan interest, assessment fees, and guarantee fees, among other things. Banks often set higher interest rates on loans to small and medium-sized businesses because of their bad credit ratings, which drives up the cost of borrowing money for these businesses. But small and medium-sized enterprises often find it difficult to offer sufficient guarantees or collateral; consequently, they have to be guaranteed by outside organizations or guarantee companies, which entails additional guarantee fees. In addition, banks will require enterprises to conduct asset evaluation, financial audit, etc. When approving loans, it will also incur certain evaluation costs. Exorbitant financing costs limit small and medium-sized businesses' options for financing and make it harder for them to raise capital. They also put additional strain on their operations.

3.3 Single financing channel

Currently, traditional financial institutions like banks continue to be the primary sources of funding for small and medium-sized businesses. However, many small and medium-sized businesses find it difficult to meet the loan conditions set forth by the bank and are unable to obtain bank loans as a result of the strict risk assessment that banks apply to these types of businesses. Furthermore, there are a lot of limitations and challenges associated with other financing avenues like bond issuance and

equity financing. Businesses need strong growth and profitability to qualify for equity financing; on the other hand, stable cash flow and a strong credit rating are prerequisites for issuing bonds. Many small and medium-sized businesses find it challenging to meet these requirements, which makes it difficult for them to raise capital through bond issuance or equity financing. Due to this, small and medium-sized businesses have a single, undiversified source of funding, which makes it challenging to meet their varied financing needs.

3.4 Information asymmetry

A significant issue with the financing process for small and medium-sized businesses is information asymmetry. Banks and other traditional financial institutions are small and have limited information transparency, which makes it difficult to fully understand their business and financial status. This makes it challenging to evaluate the financing risks of small and medium-sized businesses, which in turn makes it challenging to determine their credit risk and ability to repay loans. Banks frequently implement more stringent lending policies to mitigate risks. This results in elevated loan thresholds and conditions, thereby exacerbating the challenge of financing small and medium-sized businesses. Furthermore, small and medium-sized businesses struggle to adequately convey their benefits and potential to financial institutions due to a lack of efficient channels of communication and other mechanisms. This makes financing these businesses more challenging. To summarise, the financing conundrum faced by small and medium-sized businesses is a complicated matter that encompasses stringent financing requirements, elevated financing expenses, exclusive financing avenues, and asymmetry in information. To address the financing challenges faced by small and medium-sized businesses, collaboration among government agencies, financial institutions, businesses, and the broader community is essential. Various policies and initiatives should be implemented to enhance and expand the financing landscape for small and medium-sized businesses.

4. Solutions to the financing difficulties of small and medium-sized enterprises in the context of digital finance

4.1 Relaxing financing conditions

In supporting the development of small and medium-sized enterprises, the government and financial institutions need to work together. At the government level, a series of preferential policies should be formulated, such as providing loan interest discounts and reducing the proportion of loan deposits, to encourage financial institutions to provide more and more preferential loans to SMEs. At the same time, the government also needs to strengthen the supervision and guidance of financial institutions to ensure that under the premise of controllable risk, financial institutions can relax the loan conditions for small and medium-sized enterprises. At the level of financial institutions, special loan products for small and medium-sized enterprises should be established, such as "small and micro enterprise loans" and "science and technology innovation loans", to simplify the approval process and reduce the loan threshold. In addition, financial institutions also need to strengthen internal risk control management, improve the risk assessment system, and carry out accurate credit rating and risk assessment for small and medium-sized enterprises, so as to achieve more accurate lending strategies.

4.2 Reducing financing costs

In order to support the development of SMEs, the government and financial institutions need to work together. At the government level, it should provide financial support, set up special funds to

provide interest subsidies or guarantee cost subsidies for SME loans, optimize tax policies, and give preferential policies such as stamp tax reduction and income tax reduction to SME financing related taxes, so as to reduce the financial costs of enterprises. At the level of financial institutions, we should optimize the loan pricing strategy, price reasonably according to the actual operation situation and risk level of small and medium-sized enterprises, reduce the loan interest rate, and reduce unnecessary assessment, audit and other fees, so as to reduce the financing cost of small and medium-sized enterprises. This two-way cooperation will effectively promote the development of small and medium-sized enterprises.

4.3 Expanding financing channels

In order to promote the sustainable and healthy development of small and medium-sized enterprises, the government and enterprises need to work together to promote the optimization of the financing environment. At the government level, we should improve the capital market, establish and improve the multi-level capital market system, promote the development of SME board, gem and other markets, and provide SMEs with diversified financing channels such as equity financing and bond financing. At the same time, we should encourage the development of new financing channels such as Internet finance, P2P lending and crowdfunding to provide SMEs with more convenient and flexible financing options to meet their diversified financing needs.

At the enterprise level, small and medium-sized enterprises should strengthen their own construction, enhance their own strength and financing ability by improving internal management, optimizing business processes and improving business efficiency. In addition, small and medium-sized enterprises should actively seek cooperation, establish close cooperative relations with other enterprises and financial institutions, and jointly carry out financing activities, so as to reduce financing costs and risks and achieve the development goal of mutual benefit and win-win results. Through the joint efforts of the government and enterprises, it will effectively promote the improvement of the financing environment for SMEs and provide strong support for the healthy development of SMEs.

4.4 Alleviating information asymmetry

The government should actively play its regulatory role, establish an efficient information disclosure platform, and require small and medium-sized enterprises to regularly release key information such as operation, finance and ownership structure on the platform, so as to improve the information transparency of small and medium-sized enterprises and facilitate investors, financial institutions and the public to understand the real situation of enterprises. At the same time, the government should also strengthen information supervision, crack down on violations such as false information disclosure and concealment of important information, and ensure the accuracy and integrity of information disclosure. Financial institutions can set up a mechanism for exchanging information in order to better evaluate the credit risks of small and medium-sized businesses, increase the speed and accuracy of financing approvals, and improve communication with these businesses. In order to better understand small and medium-sized businesses' needs for financing and to offer them more precise financing services, financial institutions should engage in active communication with them. At the enterprise level, this means enhancing the caliber of information disclosure. Small and medium-sized businesses should raise information transparency, enhance the caliber of information disclosure, and promptly, accurately, and completely release pertinent information. To put it briefly, the goal is to solve small and medium-sized businesses' financing difficulties by establishing and improving internal management systems, raising management and operational efficiency, and strengthening their own position and credit rating.

5. Conclusion

Building a comprehensive solution involving the government, financial institutions, small and medium-sized businesses, and all societal sectors is necessary in order to address the financing challenges faced by small and medium-sized enterprises. In order to provide a more favorable financing environment for small and medium-sized enterprises, the government should play a guiding and supporting role through the formulation of preferential policies, strengthening of supervision, enhancement of the capital market, and establishment of an information disclosure platform. Financial institutions should innovate as the primary source of funding. They should also streamline loan procedures, lower financing costs, improve communication and collaboration with small and medium-sized businesses, and finance new products to raise the caliber and efficiency of financing services. To strengthen their own financing capabilities, small and medium-sized businesses must fortify their internal management, raise credit ratings, improve the quality of information disclosure, and fortify their own construction. All facets of society ought to actively engage in and work together to advance the enhancement of the financing landscape for small and medium-sized businesses at the same time. By working together, we can effectively ease small and medium-sized businesses' financial struggles and support their development in a healthy and sustainable way.

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