The Impact of Policy Uncertainty on the Credit Risk of SMEs in China

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Abstract. In recent years, the intensification of global policy uncertainty has presented significant challenges to enterprise operations. Small and medium-sized enterprises (SMEs) in China which was characterized by limited financial capacity and weak risk resilience, are particularly vulnerable to such uncertainty. This paper systematically reviews existing literature and explores how uncertainty in monetary, fiscal, and trade policies affects SMEs by raising financing costs, delaying investment decisions, and disrupting operational strategies. It finds that traditional credit risk assessment models, which often rely solely on static financial indicators, fail to considerate the dynamic impact of external policy shocks—particularly in volatile economic environments. As a result, they tend to underestimate credit risk during periods of heightened uncertainty. Given the growing exposure of SMEs to macro-level policy changes, this paper advocates for the development of a more adaptive, policy-sensitive credit risk evaluation framework. Such a model should incorporate external policy indicators to improve early warning capabilities, better capture real-time risks, and support decision-making by financial institutions, regulators, and SMEs themselves. This research contributes to a more comprehensive understanding of credit risk in uncertain environments and offers a theoretical basis for enhancing financial resilience among SMEs.

1 Introduction

In recent years, due to the increasing uncertainty of the global economy, the impact of policy uncertainty on SMEs has become particularly evident. Moreover, the global economy fluctuates frequently, and policy adjustments are frequent and unpredictable. When facing these uncertainties, the credit risk of Chinese SMEs continues to increase. Moreover, China's SMEs are relatively fragile. A large part of these enterprises cannot resist risks and do not have enough funds to bear risks, which will affect their credit risks. Changes in monetary policy, fiscal policy, and international trade policy have brought huge challenges to SMEs that rely on a stable policy environment.

Policy uncertainty often increases the credit risk of small and medium-sized enterprises by affecting their financing costs, project investment, operating models and market demand [1]. Gulen & Ion found through empirical research that economic policy uncertainty significantly inhibits corporate investment activities, and this inhibitory effect is more

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prominent in small and medium-sized enterprises because they have weaker capital and risk tolerance. In addition, Pastor and Veronesi further pointed out that policy uncertainty is an important source of corporate risk pricing and will cause an increase in capital costs in the financial market [2]. However, most traditional credit risk assessment models are based on relatively stable market assumptions and fail to effectively consider the dynamic impact of external factors such as policy changes. Traditional credit risk assessment methods often have certain limitations, especially in the context of rapid changes in the global policy environment.

This paper aims to explore how policy uncertainty, especially changes in monetary policy, fiscal policy and international trade policy in the Chinese economy, affects the credit risk of small and medium-sized enterprises. In the context of China, the research by Han and Wang indicates that monetary policy uncertainty has a significant impact on the cash holding behavior of enterprises. When policy expectations are unclear, enterprises usually reduce expenditures to maintain liquidity, which indirectly reflects the increase in credit risk [3]. By reviewing and analyzing existing research results and literature, this paper finds that policy uncertainty has a profound impact on the financing, risk resistance and debt repayment ability of SMEs, leading to an increase in the risk of default and credit risk of enterprises. This study explores the impact of policy uncertainty on corporate credit risk by combining the special background of Chinese SMEs, and provides a useful reference for SMEs in similar economies around the world. By comparing the research results of different countries and regions, this study further enriches the academic discussion on the impact of policy uncertainty on corporate credit risk.

2 Literature review

In recent years, policy uncertainty has become a key external variable affecting the credit risk of SMEs. Policy uncertainty affects the cash flow and debt repayment ability of enterprises by increasing financing costs and suppressing corporate investment willingness [4]. For SMEs, their resources and risk tolerance are relatively weak, and they are more vulnerable to the impact of macro policy changes [5].

Tang and Wei found in an empirical study of Chinese SMEs that fiscal policy uncertainty will affect the financing expectations and loan default rates of SMEs by exacerbating the fluctuations in corporate expectations of government support [6]. Under the condition of unstable local government fiscal expenditure, the financial stability of small and medium-sized enterprises has declined significantly. And policy uncertainty will also have an impact on the strategic decision-making of enterprises, making enterprises more inclined to short-term business behavior and weakening their long-term credit status [7].

In the field of Chinese academic research, Li Jia and Ma Hongbing explained that in an environment with frequent policy changes, small and medium-sized enterprises cannot often judge the macro environment, resulting in an unstable financing structure and increased credit risk [8]. Du Junsong et al. conducted a quantitative analysis on the relationship between the index of policy uncertainty and the default rate of small and medium-sized enterprises in my country from 2008 to 2020, confirming that there is a positive correlation between the two [9]. In addition, Zhu Lin pointed out that most traditional credit rating models do not consider the variable input at the policy level, and the accuracy is poor when assessing the credit status of enterprises in high uncertainty periods [10]. Enterprises need to seriously consider policy uncertainty and adjust and change their business behavior according to policy changes.

From the current literature, although some studies have focused on the impact of policy uncertainty on corporate business behavior, there is still limited research on the perspective of systematic focus on credit risk and combined with the context of Chinese small and medium-sized enterprises. In the future, it is still necessary to establish a credit risk

assessment framework that includes policy uncertainty. This article is based on the existing literature review and provides an explanation.

3 Theoretical analysis and empirical mechanism

3.1 The transmission mechanism of policy uncertainty on credit risk

Policy uncertainty will affect the credit risk of small and medium-sized enterprises through three main channels, namely, tightening of financing channels, delayed business decision-making, and deterioration of market expectations. At the financing level, when banks and other financial institutions face unclear monetary or fiscal policies, they will often raise risk review standards and tighten loan quotas, which will increase the difficulty and cost of financing for small and medium-sized enterprises. As financing costs continue to rise, the financial pressure on small and medium-sized enterprises in daily operations and debt repayment arrangements has also increased. On the one hand, the increase in interest expenses will directly erode the company's profit margins and compress its disposable cash flow; on the other hand, in the absence of revenue growth, the company's ability to repay short-term loans will decline significantly.

Because of their unstable financial situation and lack of collateral, small and medium-sized enterprises (SMEs) face higher financing thresholds, makeing their cash flow is more vulnerable to squeezed. Relevant studies have shown that during periods of rising policy uncertainty, financial institutions are more conservative in lending, and the credit acquisition rate of enterprises, especially small and medium-sized enterprises, has dropped significantly [11]. Financing restrictions not only raise the financial costs of enterprises, but also compress the sources of funds needed for their daily operations and expanded reproduction, further leading to tight capital chains and liquidity crises for enterprises [12]. In this context, small and medium-sized enterprises usually show a stronger tendency to avoid risks in business decisions. Because external financing is limited and borrowing costs are rising, many companies choose to postpone or even cancel originally planned investment and expansion projects to retain working capital. This decision-making delay is not only a passive response to short-term funding pressure, but also reflects the company's concerns about future uncertainties and declining confidence. So, it can be seen that financing difficulties directly lead to the delay of business decisions, forming a chain reaction, further weakening the company's growth potential and debt repayment ability.

Policy uncertainty will also make companies conservative in investment and expansion, postpone or cancel originally planned projects, slow down revenue growth, and affect debt repayment ability. To maintain liquidity, companies may take measures such as cutting costs and reducing manpower, but this will reduce the company's operating efficiency and accumulate credit risk. The increased uncertainty in corporate investment decisions not only reduces capital expenditure willingness but also weakens medium- and long-term profit expectations [13]. At the same time, the company's financial leverage management strategy also tends to be conservative, and the overall capital structure is adjusted slowly, resulting in a lack of dynamic adjustment capabilities under external shocks.

Small and medium-sized enterprises are highly sensitive to policies and cannot obtain and judge information. When the market has doubts about fiscal spending, subsidy policies, or import and export rules, business expectations will deteriorate rapidly. Although this "confidence shock" is not obvious in the short term, in the long run, if the policy is unstable, it will continue to weaken the trust foundation of enterprises and trigger a chain of credit default problems. The decline in business owners' confidence may even precede the deterioration of actual financial indicators, causing a preemptive impact on their credit status

[14]. Since investors and supply chain partners will also adjust their evaluation of corporate credit simultaneously, policy risks can be further amplified through the market feedback mechanism [15].

3.2 Applicability of credit risk assessment models

Although credit risk, as a core variable in financial risk management, has been widely used in theoretical models and regulatory practices, the existing system still has relatively prominent deficiencies in the assessment of small and medium-sized enterprises under high policy uncertainty. The existing model structure lacks sensitivity to macro variables. Most of the current mainstream models are based on the financial data of enterprises to build models, ignoring the dynamic interference of external environmental factors. Relevant research points out that the risk rating system of commercial banks generally does not consider the uncertainty of government policies, which makes it difficult for the model to respond reasonably when facing sudden fiscal tightening or trade policy changes, and the risk warning function is weakened [16].

The frequency of risk indicator updates lags behind the speed of policy changes. For example, macro policy changes generally affect the market and corporate behavior in a very short period, and the annual or quarterly update frequency of traditional models makes it difficult to capture changes in risk indicators promptly. In addition, some SMEs have not achieved complete financial information disclosure, which limits the integrity and effectiveness of model evaluation. In addition, some SMEs have been in a non-listed state for a long time, and their financial information is not transparent, making it difficult for rating agencies to accurately assess their true risk level. Studies have found that in years with high policy risks, such as trade frictions or the early stage of post-epidemic recovery, the default rate of such enterprises is significantly higher than the model estimate, and there is a systematic bias in the rating system [17].

In recent years, some scholars have tried to introduce natural language processing technology to analyze text data such as policy documents, media news, and government bulletins, quantify policy expectation fluctuations in real time, and incorporate them into the risk assessment framework. Although this direction has the potential for theoretical innovation, it still faces challenges in data cleaning, model interpretability, and regulatory acceptance, and it is difficult to replace existing methods in the short term [18]. The existing credit risk model has not yet established a "policy-sensitive" assessment mechanism, which has become a key institutional gap in assessing the credit risk of China's SMEs.

3.3 Applicability of credit risk assessment models

China's SMEs are widely distributed throughout the country, and there are relatively prominent differences in the policy environment faced by different administrative regions and different industries. From the perspective of regional differences, small and medium-sized enterprises in the eastern coastal areas generally enjoy more financial resources, have better financing channels, and have stronger policy acceptance capabilities. Eastern coastal areas such as Shanghai, Jiangsu, Guangdong and other places have a relatively complete policy support system. Taking Guangdong Province as an example, the Guangdong Provincial Government has launched the Guangdong-Hong Kong-Macao Greater Bay Area Science and Technology Innovation Industry Investment Fund since 2016, and it aims to provide financial support and loan guarantees for innovative projects for small and medium-sized enterprises through cooperation between government funds and financial institutions. Guided by these policies, financial institutions in the eastern region are generally more

willing to provide loans with lower interest rates, and the guaranteed products and risk mitigation measures are more abundant.

However, due to the relatively low fiscal self-sufficiency rate and weak local government execution in the central and western regions, enterprises face higher policy gap risks. Research shows that in areas with low policy implementation efficiency, enterprises are more sensitive to uncertain policies, and their credit spreads fluctuate more violently [19]. For example, although Guizhou Province has issued relevant SME financing guarantee policies, many local SMEs have not actually benefited due to the low local fiscal self-sufficiency rate and low allocation and execution efficiency of funds during policy implementation. Compared with the eastern region, SMEs in the western region tend to rely more on government fiscal appropriations and loan subsidy policies, which makes them more responsive to policy uncertainty, especially when the fiscal situation of local governments deteriorates, the continuity and execution of policies will be greatly reduced, resulting in financing difficulties and increased credit risks for enterprises. Against the backdrop of reduced infrastructure construction funds and temporary adjustments to industrial policies, enterprises in the central and western regions are more dependent on policies, and their credit risks have risen more significantly.

At the industry level, capital-intensive industries such as manufacturing and construction are highly dependent on fiscal investment plans. Once policies change and projects stagnate or are delayed, it will directly affect capital reflux and increase credit risks. Manufacturing companies are more sensitive to export tax rebates, energy subsidies, and environmental protection tax policies. Manufacturing companies are more sensitive to export tax rebates, energy subsidies, and environmental protection tax policies, while service and technology companies are more affected by policies such as intellectual property protection and innovative financial support.

While service and technology companies are more affected by policies such as intellectual property protection and innovative financial support. The service and technology sectors are more affected by policies on intellectual property protection and financial support for innovation. For example, in the technology industry, companies rely heavily on government support for research and development (R&D). Any changes to the R&D tax credit policy or suspension of funding for technology startups will significantly hinder innovation activities and cash flow management. For example, the US ban on chip exports to China has greatly affected China's technology sector. The US government's export restrictions on high-end chips and related technologies have caused China's semiconductor companies, especially those that rely on imported advanced chip technology, to face huge production bottlenecks. Due to the lack of access to key technologies, these companies have not only suffered from production delays and rising costs, but also lost their market competitiveness in the short term. When the policy direction is unclear, project advancement will be hindered, and the risk of funding interruption will increase. Different industries have different response mechanisms to policy fluctuations, which also determines the change path of their credit risk [20].

The company's own governance structure and resource capacity are also key variables that affect policy responsiveness. Large SMEs, such as some leading private enterprises, generally have higher compliance capabilities and policy adaptability, while micro-enterprises or start-up SMEs lack the means to cope with them. Once they encounter policy uncertainty, they are prone to default, closure, or even bankruptcy. In addition, some policy-dependent industries expand rapidly under policy support, but if policies shift or subsidies are cut, their credit risks will be concentrated. Policy changes affect financial expectations through corporate profit models and have an impact on credit ratings and financing rates, forming a closed loop of risk transmission. In general, the impact of policy uncertainty on the credit risk of SMEs is a complex system process, which is reflected in the financial

pressure at the micro level and also includes the linkage of multi-level variables such as macro expectations, industry cycles and policy implementation effects. It is urgently needed to be studied at the theoretical and model levels.

4 Conclusion

Based on existing literature, this paper explores how policy uncertainty affects the credit risk of Chinese SMEs through tightening financing channels, deteriorating expectation management, and industry heterogeneity. Research shows that the currently widely used credit risk assessment models generally do not take policy uncertainty into account as a risk variable, which may lead to a tendency to underestimate risk during periods of high policy volatility. At the same time, the impact of policies on the credit status of SMEs varies significantly between regions and industries. Regional and industry differences lead to more prominent credit risk impacts on western regions, export-oriented industries, and policy-dependent industries.

The government should enhance policy continuity and transparency, strengthen prior communication and evaluation when formulating policies, and stabilize market expectations. At the same time, financial institutions should introduce macro variables, especially policy-related uncertainty indicators, into credit assessment models to improve the forward-looking nature of the models. The country should provide targeted financial support and financing facilities to small and medium-sized enterprises in the central and western regions and in highly sensitive industries, such as establishing risk buffer funds, improving the credit guarantee system, promoting multi-source data integration, strengthening the ability to utilize unstructured data, exploring the mechanism of immediate impact of policies on the credit market, forming a more responsive credit assessment system, and improving the model and system of credit risk assessment.

Although this study provides an initial exploration of how policy uncertainty affects the credit risk of SMEs, several important avenues remain for future research. First, future studies could incorporate high-frequency economic policy uncertainty indices along with firm-level microdata to conduct empirical modeling and investigate the dynamic temporal effects of policy shocks. Second, natural language processing (NLP) techniques may be further integrated into credit risk assessment systems to quantify policy expectations through real-time sentiment analysis of policy texts, providing more forward-looking indicators. In addition, researchers may consider developing region- or industry-specific “policy sensitivity” indices to more precisely capture the heterogeneous responses of SMEs to policy changes. Further analysis of how these effects vary across different corporate governance structures and firm life-cycle stages would also help build dynamic and policy-responsive credit risk models, enriching the theoretical and methodological toolkit of financial risk assessment.

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