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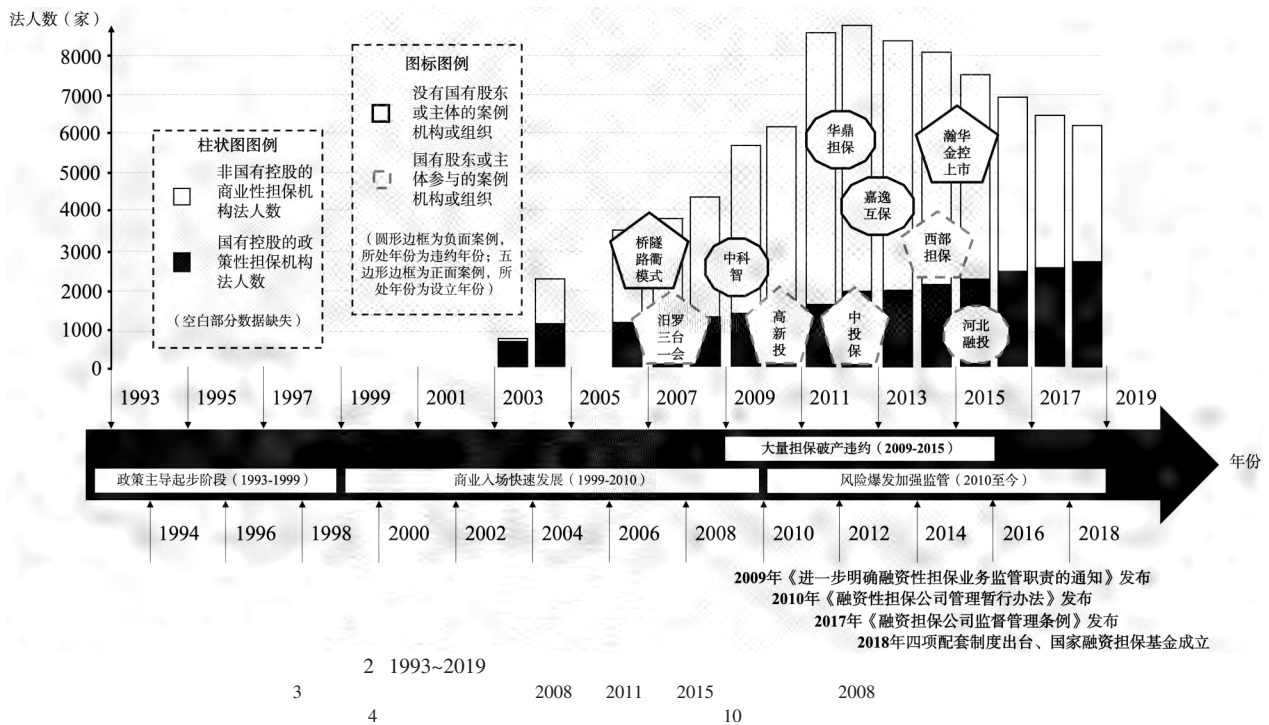
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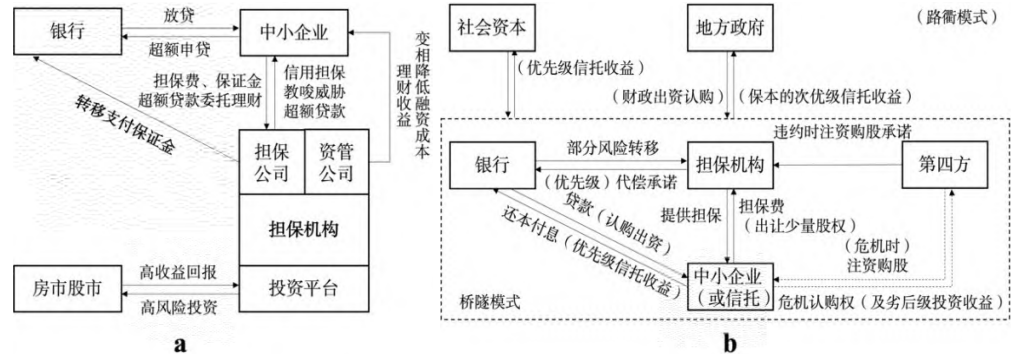
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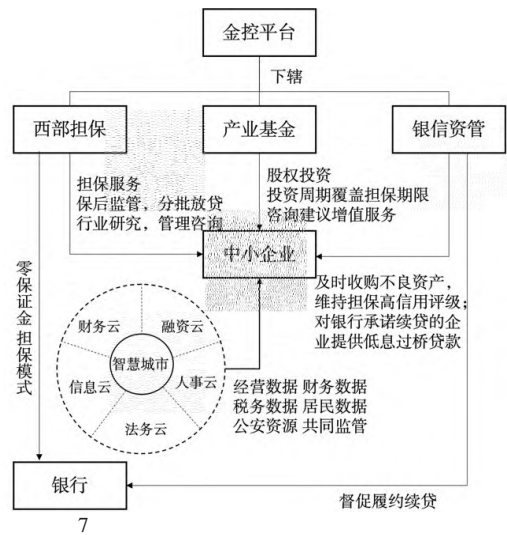
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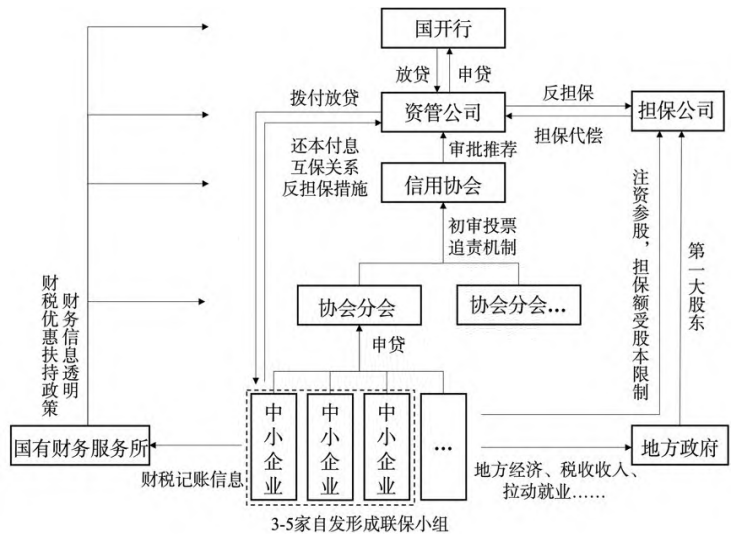
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## From Financial Institutions to Industrial Firms: The Contagion Mechanism and Prevention of Liquidity Risk: A Multi-Case Study of SME Credit Guarantee Industry

Tan Zhijia, Zhang Qilu, Zhu Wuxiang and Li Haoran

(School of Economics and Management, Tsinghua University)

**Abstract:** During the economic downturns, the catalysis of risk contagion effects on economic shocks has brought challenges to the financial system in China. Extant studies neglect liquidity risk contagion from financial institutions such as banks and guarantee institutions to real enterprises, the amplification and acceleration effects in the process of contagion caused by financial institutions, and the relevant risk prevention mechanisms or suggestions. Based on a multi-case study of the different risk management models and stability of 10 credit guarantee institutions for SMEs in China, this paper explores mechanisms behind the liquidity risk contagion effects and the corresponding risk management strategies. Our paper finds evidence that (1) liquidity risk can be transmitted through transaction relations, (2) the risk can be transmitted from financial institutions to real enterprises, and (3) the risk transmitted via financial institutions can be magnified, exacerbated, and accelerated. Effective solutions to the risk contagion problem include the behavioral risk reduction strategies and the operational risk management strategies. The former includes looking for related stakeholders to share risks and timely disposal of non-performing assets, while the latter includes balancing bargaining positions and the allocation of risks and returns among entities in the transaction, and constructing an early-warning system based on daily operational data. This paper enriches the risk contagion theory, and also contributes to the regulation of financial innovations in the credit guarantee industry.

**Keywords:** SMEs; credit guarantee; risk contagion; risk management; case study

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## Transportation Infrastructure and Industrial Structure Upgrading: Evidence from China's High-speed Railway

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(a. School of Economics, Central University of Finance and Economics; b. Hang Lung Center for Real Estate and Department of Construction Management, Tsinghua University; c. Institute of World Economy, Fudan University)

**Abstract:** This paper presents the first systematic generalization of three effects of transportation infrastructure affecting industrial structure from the perspective of inter-city interactions: division of labor, convergence effect and learning effect. Using the panel data of 280 cities in China from 2005 to 2019, this paper assesses the extent to which the construction of China's high-speed rails (HSR) has contributed to the industrial structure upgrading. Empirical estimates indicate that, firstly, HSR connections significantly promote cities' industrial structure upgrading, and the effect contributes to 3.75%~4.84% of the overall structural upgrading during the period. Secondly, there is significant heterogeneity in the HSR effect: (1) If two cities connected by HSR feature different industrial structures but similar economic development stages, the labor division effect dominates and leads to the polarization of industrial structures—the difference in industrial structure index between the two cities becomes larger; (2) If two cities connected by HSR feature both different industrial structures and different economic development stages, the convergence effect dominates and the industrial structures between the cities become more similar; (3) Influenced by the "structural slowdown" during China's economic transition period, the phenomenon that cities with more advanced industrial structure leaning from cities with lower industrial structures is more obvious. Thirdly, HSR reduces the difference in the leading industries of industrial parks between connected cities, and encourages patent cooperation and cross-citation, which empirically verifies the three HSR effects. These results have important theoretical and policy implications for understanding the role of transportation infrastructure networks in promoting industrial structure transformation, economic integration, and regional division of labor.

**Keywords:** High-speed Rail; industrial structure upgrading; division of labor; convergence effect; learning effect



# From Financial Institutions to Industrial Firms: The Contagion Mechanism and Prevention of Liquidity Risk: A Multi-Case Study of SMEs Credit Guarantee Industry

Tan Zhijia, Zhang Qilu, Zhu Wuxiang and Li Haoran

(School of Economics and Management, Tsinghua University)

**Summary:** The economic development and innovation of China are dominated by SMEs. The Chinese government has made great efforts to develop the credit guarantee industry to help SMEs to finance and grow. Different from the credit guarantee industry in developed countries which is dominated by policy guarantee institutions, mutual guarantee institutions and CDS, numerous commercial guarantee institutions have emerged in China, but triggered three default waves during the economic downturns in 2008, 2011 and 2015. The default of one guarantee institution could affect hundreds of SMEs and cause huge economic losses. Extant literature reveals risk contagion effects among real enterprises, among financial institutions, and from real enterprises to financial institutions, but neglects the possibility of risk contagion from financial institutions to real enterprises. Moreover, existing theories, including the information spillover mechanism and the counterparty mechanism behind liquidity risk contagion, cannot explain the facts that in the three default waves, liquidity risk spread within unrelated enterprises. Those enterprises did not belong to the same industry or hold similar assets, and they were not connected via upstream transaction relations, debt or contingent debt-holding relations. According to the risk contagion theory, it is believed that the financial system can absorb and insulate risks from real economy, which contradicts both the characteristics of the China's credit guarantee industry and the ideas of financial accelerator theory.

In this paper, we conduct a multi-case study on risk contagion effects and its governance mechanisms by selecting