The Relationship between Financial Intermediations and Firm Performance: An Empirical Study on Financial Constraints of Chinese Firms

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摘要

A comprehensive examination of diversity aspects of China’s financial intermediations and firm performance where data are available and provided in this dissertation. This dissertation examines the issue that Chinese non-state owned firm’s productivity is a key determinants of the capital structure. On the other hand, this dissertation studies how financial intermediations contributes to firm performance, including firm productivity, profitability and innovation investment activities. These findings illustrate that there is a virtuous circle between financial intermediations and firm performance in China.

We draw several conclusions about China’s financial intermediations and firm performance. First, we investigate the relationship between Total Factor Productivity (TFP) and capital structure in Chapter 2, and demonstrate that TFP is another firm performance measure and a positive capital structure determinant in China’s case, as Chinese firms have experienced an enormous productivity growth, and the country has transformed from a virtually closed economy into a global manufacturing center in only three decades. Yet its financial sector is largely underdeveloped compared to developed countries. Firms, especially non-listed ones in China, struggle procuring financing. Chapter 2 shows that TFP is an important factor which restricts a firm’s capital structure choices. Neither the pecking order theory nor the static trade-off theory mentions the role of TFP in determining capital structure choices. Particularly, this relationship remains unknown in China. Chapter 2 tells that although TFP cannot drive SOEs’ capital structure, it plays a positive and significant role on non-state owned and foreign owned firms’ capital structure. The leverage sensitivity driven by TFP is larger for highly financial constrained enterprises. An underdeveloped institutional environment makes high TFP firms demand more leverage because that an underdeveloped institutional environment prevents healthy financing for firms. Firms prefer to afford the relative high cost of leverage when TFP is more sensitive to leverage.

Our second conclusion concerns the links between financial intermediations and firm growth. In this dissertation, we find that the most successful part of the financial system, in terms of supporting the growth of Chinese firms, is the sector of alternative financing channels, such as informal financial intermediations, internal financing and trade credit, and coalitions of various forms between firms and investors. China therefore offers an opportunity to study trade credit in a state-dominated banking environment notorious for misallocating credit. The case of China, a typical transitional and developing economy, provides a special perspective for other developing countries to study the relation between trade credit and firm productivity in order to understand the mechanism of Chinese firms’ growth better. Chapter 3 tells that trade credit is typically regarded as a short-term informal financing instrument. Trade credit is more likely to be significant in explaining firm growth in China, while there is a relatively weak and capricious enforcement of contracts and discrimination in formal financing. We find that there is a significantly positive relationship between trade credit and firm productivity for collective, private and foreign firms but not for SOEs. Specifically, whereas Chinese manufacturing firms face severe financial constraints, trade credit is still positively associated with firm productivity, which helps firms that have severe financial constraints grow. Trade credit shows more significant effects on young and small-sized firms, and more financially constrained firms benefit more from trade credit. Last but not the least, trade credit is more productive in a better institutional environment, where the market works more efficiently. Additionally, the benefits of trade credits increase with the level of financial constraints.
As trade credit is one of the working capital elements, the aggregate impact on firm performance needs to be examined. Thus, Chapter 4 further focuses on the link between working capital management and firm performance. Working capital management is particularly important in the Chinese context, where firms have limited access to long-term capital markets, or firms are facing financial constraints. Such firms therefore need to rely on internally generated funds, short-term bank loans, and trade credit to finance their activities. In addition to the findings about trade credit, we also find that SOEs always exhibit insignificant relationship between TFP/ROS and working capital, suggesting that the performance of SOEs are not determined by working capital. This can be explained by these firms’ needs to fulfil political and social objectives, as well as economic objectives and the priority that central and local governments and the (predominant) state-owned banks accord to SOEs. On the other hand, private and foreign firms exhibit strong and significant relation between firm performance and working capital, indicating that firms tend to adjust working capital to make firm perform better. The smoothing effect of working capital management works significantly on non-SOEs’ growth. Furthermore, more financially constrained (both internally and externally), firms measured are particularly active in adjusting working capital. Firms in under-developed marketization regions are more financial constrained and adjust working capital more actively. And compared to large sized firms, small sized firms’ financial constraints level is higher, and these firms are particularly active in maintaining their TFP and ROS level by adjusting working capital. Active working capital management may contribute to the explanation of the Chinese growth puzzle.

The eminent role of innovation in the course of China’s economic growth has long been emphasized. China has been consistently emphasizing the critical importance of innovation in the manufacturing sector and viewing technology development as an engine for the process to catch up with advanced industrial economies and industrialization. Chapters 5 and 6 give evidence on innovation and financial intermediations.

Chapter 5 finds out that non-state and foreign owned firms exhibit positive and precisely determined sensitivities of innovation investment to cash flow, while SOEs do not. Short-term banking finance and ∆NWC are also significant for innovation investment for all groups. This can be explained considering that firms can use their net liquidity to smooth innovation activities. In addition, highly externally financially constrained, non-export, high-tech and non-government subsidized SOEs’ innovation investment is significantly driven by short-term banking finance and the smoothing influence of ∆NWC, while lowly externally financially constrained, export, non-high-tech and government subsidized SOEs rely on external finance, especially long-term financing positively and significantly.

Chapter 6 introduces the government-controlled business associations and corruption to explore whether the social relations impact on the relationship between bank loans and R&D investment in Chinese private firms or not. It argues that corruption acts as the proverbial grease for the bureaucratic wheels of an unmotivated banking system. Corruption can help firm access bank loans to invest in R&D activities. Specifically, firms in less financially constrained, more financially developed and relative well-developed marketization and institutional environment regions can combine R&D investment with bank loans through corruption, indicating that corruption plays a grease-the-wheel role on financing R&D through bank loan.