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Does informal finance promote firm growth:

Evidence from China

Master Thesis

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Executive Summary

The effect of formal and informal finance has caught academia's eye for a considerable time. Numerous studies have proved the salience of finance development in promoting the growth of development economies (Levine, 2005). Researchers, however, have failed to concur with the role played by these financial activities in China, one of the largest transition countries in the world (Cheng and Degryse, 2010). On one hand, a main reason argued by researcher to explain this diverge is China's weak legal system and less sophisticated financial system, implying that informal finance cannot benefit higher end of marker due to their insufficient monitoring and enforcement mechanisms and disproportional extent of financial reform (Ayyagari et al., 2010; Cheng and Degryse, 2010). On the other hand, there is a long list of studies helping to shed light on the difference results during the past decade, showing that informal finance functions well as complements of formal finance in developing countries, such as China and India (Allen et al., 2005; Ayyagari et al., 2010; Degryse et al., 2016; Allen et al., 2006). The uniqueness of China's non-bank financial institutions (Cheng and Degryse, 2010), fast changing China's financial environment and continuously improved legal system call for an updated and further research on the following questions: Does informal finance promote firm growth, with respect to heterogeneous firm size? Does co-funding, the joint use of formal and informal finance, have the similar effect? Is there a threshold of interest rate to give firm growth a boost or harm firm growth?

Informal finance, and formal finance have their own strong points, which have been well documented. Informal finance alleviates financing obstacles facing by Small and Medium Enterprises (SMEs) by granting them better access to finance (Cheng and Degryse, 2010). By exploiting the benefit from competition among formal and informal lenders, firms with sound financial background can also avoid hold-up problem (Guiso and Minetti, 2010). The mainstream view towards reasons why informal finance has such benefits is that informal finance lenders can obtain superior information or have lower monitoring cost than those of formal finance lenders, thus reducing moral hazard problem or adverse selection (Lee, and Persson, 2016; Semenova and Rodina, 2013). Second, a robust finding shows that for SMEs, firms that suffer more from credit constraints (Beck et al., 2005), banking competition can alleviate this problem (Chong et al., 2013). Third, social ties lessen the probabilities of default through the treat of social sanction (Lee and Persson, 2016). Last, the absence of regulation and small scale of operation of informal lenders further lower transaction cost relative to that of formal finance.

As evidenced by many studies, Informal finance, however, is characterized by higher interest rates compared to that of formal finance (Rhyne and Otero, 1992; Aleem 1990). These high interest rates are the joint effect of need to cover the cost of the supply of financial services to risky agent (Schreiner, 2001; Robinson, 2001) and scarce of fund resources in banking system (Beck et al., 2005). Another drawback of informal finance is that informal finance may not scale up along with the growth of firm size and are possibly unable to satisfy large-scale credit demand as a result (Madestam, 2014; Degryse et al., 2016).

Therefore, firm's debt placement structure leans towards a structure of co-funding, which allows not only firms but also formal and informal lenders to benefit from this structure. Jain (1999) has shown that a monopolistic bank can optimize its profits by offering two kinds of contract-one with higher competitive interest rate for full formal financing and another one with partial funding contract at a lower rate. Based on Jain's assumption that borrowers turn to informal finance for residual financing only after sourcing finance from formal lender, formal lender can screen risky borrowers. An extension of this literature has recently worked by Anderson and Moller (2006). The authors argue that if formal lender can seize the value of the borrower in failure state, co-funding ends up achieving higher profits and higher total rent for both formal and informal lenders (Andersen and Moller, 2006). Along the demand side of financing, Degryse et al. (2016) reveals that co-funding promotes sales growth, differing in terms of firm size: small firm enjoys a higher growth rate than does large firm.

Many literatures document that high interest rates are one of the main obstacles confronted by SMEs. Demigruc-Kunt and Maksimovic (2005) reported a negative and significant relationship between high interest rates and firm growth, based on a survey database covering 54 countries (Beck et al., 2005). Firm's investment might be influenced by interest sensitivities: an increase in cost of capital would prompt a decrease in investment plans, while a decrease in cost of capital would motivate firms to

expand business (Aramonte et al., 2013). According to financial accelerator theory, because SMEs firms usually have a weak balance sheet position and thus bear relatively high agency costs, they are more likely to be affected by economic shocks, which in turn deteriorates their balance sheet positions (Bernanke et al., 1994; Guariglia et al., 2016; Vermeulen, 2000). Therefore, a high interest rate is expected to affect firms' growth rate negatively.

This thesis aims to examine the association between firm growth and informal finance verified by Ayyagari et al. (2010) and Degryse et al. (2016) and to establish a novel association between firm growth and interest rates in terms of heterogeneous financing sources.

The empirical results lead to conclusions that informal finance is negatively associated with sales growth for large firms, but small firms are immune to it; furthermore, positive effect of co-funding associated with sales growth for small firms, which proves that informal finance can complement formal finance to boost sales before firms grow large; lastly, the effect of interest rate on sales growth differs across source of finance. High interest rates of formal finance are associated with a lower probability of sales growth, while low interest rates of that are associated with a higher probability of sales growth. Although traditional corporate scholars argue about the harmful interest rate burden caused by costly informal finance, there is no evidence that interest rates of informal finance from both private lending and delegated monitors are in accordance with this rule, which may help to explain the paradox that high-interest-rate informal loan is pervasive in China.