



भारतीय प्रबंध संस्थान बेंगलूर
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Three essays on the financial characteristics of Indian private firms

By

Sesha Sai Ram Meka

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Contents

1.	Introduction	4
2.	The financial health, investment, and financing practices of private firms in India.....	11
2.1	Introduction	11
2.2	Data and Methodology	14
2.2.1	Universe data	15
2.2.2	Sample data	16
2.3	Literature review and discussion of matched sample results.	18
2.3.1	Investments.....	18
2.3.2	Leverage	23
2.3.3	Cost of financing	25
2.3.4	Dividend policy.....	26
2.3.5	Cash.....	27
2.3.6	Trade credit.....	29
2.4	Conclusion.....	31
3	Determinants of lending sources and their relation to growth.....	32
3.1	Introduction	32
3.2	Literature review.....	34
3.2.1	Sources of debt	34
3.2.2	Debt maturity.....	35
3.2.3	Collateral	35
3.2.4	Determinants of lending	36
3.3	Data	39
3.3.1	Description of data.....	39
3.3.2	Descriptive statistics	40
3.3.3	Correlation plots	43
3.3.4	Mean difference tests	43
3.4	Multivariate tests	44
3.5	Determinants of choice of debt	45
3.6	Relation between growth and lending	47
3.7	Conclusion.....	49
4	Financing costs of public and private firms in India.....	50
4.1	Introduction and Literature review	50
4.2	Data	53
4.2.1	Proxy for financing costs	53

4.2.2	Data for the matched sample and multivariate tests	54
4.2.3	Data for the difference in differences tests	54
4.3	Methodology.....	54
4.4	Results and Discussion	55
4.4.1	Matched sample test results.....	55
4.4.2	Multivariate logit regression results	56
4.4.3	Difference in difference tests.....	57
4.5	Caveats.....	57
4.5.1	Debt heterogeneity	57
4.5.2	Interest rate proxy	58
4.6	Conclusion.....	58
5	List of Figures	59
5.1	Density plots of firms in the universe and cleaned sample	59
5.2	Distribution of public and private firms in the cleaned sample.....	60
5.3	Firm performance and sources of lending.....	61
5.3.1	Sales growth vs. Public debt	61
5.3.2	Sales growth vs. Bank debt	62
5.3.3	Sales growth vs. Non-Bank debt	63
5.3.4	Sales growth vs. Related party debt	64
5.3.5	Sales growth vs. Other sources of debt	65
5.4	Return on assets vs. proportion of debt by source.....	66
5.4.1	Return on assets vs. Public debt	66
5.4.2	Return on assets vs. Bank debt.....	67
5.4.3	Return on assets vs. Non-Bank debt.....	68
5.4.4	Return on assets vs. Related party debt	69
5.4.5	Return on assets vs. Other debt sources	70
5.5	Difference plots.....	71
5.6	Term structure plots	72
6	List of Tables	73
6.1	Distribution of firms and their mean paid up capital in the universe of firms.	73
6.2	Sample size and filters for the cleaned data.....	74
6.3	Distribution of firms and their mean paid up capital in the cleaned sample.	75
6.4	Descriptive statistics of private and public firms in the cleaned sample.....	76
6.5	Financial ratios of the private and public firms in the cleaned sample.	78
6.6	Descriptive statistics of the private and public firms in the matched sample.....	79
6.7	Financial ratios of the private and public firms in the matched sample.	81

6.8	Investments.....	83
6.9	Leverage.....	86
6.10	Cost of finance	89
6.11	Dividends.....	92
6.12	Cash and cash equivalents.....	95
6.13	Trade payables.....	98
6.14	Descriptive statistics	101
6.15	Correlation plots	104
6.16	Mean difference tests.....	107
6.17	Logit regressions–debt.....	109
6.18	Logit regressions–long term debt.....	110
6.19	Logit regressions–short term debt.....	111
6.20	Logit regressions–secured debt.....	112
6.21	Logit regressions–unsecured debt.....	113
6.22	Fixed effects regressions.....	114
6.23	Fixed effects regressions.....	115
6.24	Cost of finance	117
6.25	Logit regression.....	120
6.25.1	Matched sample of private and public firms.....	120
6.25.2	Matched sample of private and public firms and unmatched private firms.....	121
6.26	Descriptive statistics for the sample of listed and de-listed firms.....	122
6.26.1	Listed firms.....	122
6.26.2	De-listed firms.....	125
7	References	128
8	Appendix	137
8.1	Company as a form of business organization.....	137
8.2	Identification of industry and listing status.....	138
8.3	Categorization of public and private firms.....	139
8.4	Appendix: Annual statements.....	140
8.4.1	Balance sheet format as per govt. guidelines.....	140
8.4.2	Profit and Loss format as per govt. guidelines.....	141
8.5	Construction of variables.....	142
8.6	Definition of long–term borrowings as per the Companies Act, 2013.....	143
8.7	Definition of short–term borrowings as per the Companies Act, 2013.....	143
8.8	Finance costs.....	143

1. Introduction

Debt and equity are the two major sources of financing for public and private firms. In India, equity financing is facilitated by stock markets and debt financing by several financial institutions, banks, and individuals. The first two chapters in this thesis explore the implications of stock exchange markets, and the third chapter focuses on how debt markets in India contribute to this process.

Stock exchange markets and debt financing contributes to financial development, which in turn leads to economic growth. Existing literature documents the theoretical motivation and the empirical evidence for the relationship between financial development and economic growth. Levine (2005) summarizes the theoretical motivation for the role of financial development in economic growth in producing information and capital allocation (See: Boyd and Prescott (1986), Allen (1990), Bhattacharya and Pfleiderer (1985), and Ramakrishnan and Thakor (1984)), monitoring firms and exerting corporate governance (See: Grossman and Hart (1980), Grossman and Hart (1986), La Porta et al. (1998), Stulz (1988), and Jensen and Meckling (1976)), risk amelioration (See: Acemoglu and Zilibotti (1997), King and Levine (1993), Allen and Gale (1997), and Diamond and Dybvig (1983)), and pooling of savings (See: Sirri and Tufano (1995) and Acemoglu and Zilibotti (1997)) and easing exchange (See: King and Plosser (1986) and Williamson and Wright (1994)).

Several empirical papers document this relation between financial development and economic growth (See: Levine and Zervos (1998), Atje and Jovanovic (1993), Levine (1991), Holmström and Tirole (1993), and Bencivenga, Smith, and Starr (1995)). Some papers are specific to studying the role of stock markets in economic growth (See: Goldsmith (1969), King and Levine (1993), King and Levine (1993), and King and Levine (1993)) and La Porta et al. (2002)).

As a precursor to understanding the relation of the stock market to growth, it is important to understand how the listed firms are different from the unlisted firms. It is typical in many economies for a small fraction of the universe of firms to be listed on the stock market while the majority of them stay private. Emerging economies, in particular, are characterized by weak rules with the consequent

evolution of alternative forms of organization (Coase (1937)). In India as well, close to 99.4 percent of the firms remain private, primarily because of the evolving nature of the business climate. Allen et al. (2012) provide a perspective on the interactions between law and the business environment. Demircuc-Kunt and Maksimovic (1998) also show that legal and financial systems can alleviate the effects of market imperfections. Many such economic systems operate under fairly weak investor protection environments, resulting in higher agency costs than their developed counterparts (Kalcheva and Lins (2007)). India differs in that its investor protection laws are stronger than most of its cohort, but the implementation record of the law is rather poor (Allen et al. (2012)).

In tandem with weak investor protection laws is the emergence of business groups (Khanna and Yafeh (2007)). Business groups are prominent among Asian countries like Japan, Korea, Malaysia. A recent report by Credit Suisse claims that close to 67% of the listed firms are family-owned. Likewise, listed firms in India are predominately family-owned. This institutional feature is in contrast to developed countries like the UK and US, which have diverse ownership. Business groups are supposed to have a long-term view, and short-term pressures are perceived to be less compared to their diversely owned cohort firms.

Again, as is well known, the existence of business groups creates different types of conflicts of interest. The classical principal-agent relationship studies conflicts between owners of firms and their managers. With business groups, agency issues additionally require investigations of conflicts between controlling shareholders and minority shareholders. The former examines issues of under-investment, while the latter focuses on the appropriation of resources by the majority shareholders from minority shareholders.

For these reasons, understanding private firms along with public firms is central to the design and the impact of economic policies. First, the sample of public firms is not a representative sample of the universe of firms due to self-selection and is biased. Second, a comparison of public firms with private firms illuminates the different roles that agency costs play in corporate decisions. Because of the

higher ownership concentration in private firms, the decisions made by their managers are less affected by the agency. In contrast, because of agency, many decisions of the public firms may deviate from the first best solution. Several studies have examined the differences between public and private firms in their choice of operating, investing, and financing decisions. Prior literature has shown that decisions related to investments (Asker, Farre-Mensa, and Ljungqvist (2015)), cash holdings (Gao, Harford, and Li (2013)), trades receivables (Abdulla, Dang, and Khurshed (2017)), dividend payments (Michaely and Roberts (2012)), managerial remuneration (Gao and Li (2015)) and innovations (Acharya and Xu (2017)) of the public firms differ significantly from those of private firms.

Financial statement information in Indian firms is typically reported to the Ministry of Corporate Affairs (MCA). To the best of our knowledge, we are the first to obtain a time-series (2011-16) of this data for a sample of about 300,000 firms. With this data, we document differences between public and private firms for a comprehensive set of financial variables such as short-term liquidity, long-term solvency ratio, capital turnover ratio, profit margin ratios, and return to investment ratios for private firms and a matched sample of public firms.

On some dimensions, the difference between private and public firms is similar to what is reported in the literature from other geographical locations. In keeping with Brav (2009), Indian private firms have higher leverage ratios like those from the UK, which he studies. Asker, Farre-Mensa, and Ljungqvist (2015) report that US private firms invest more in capital expenditures, Michaely and Roberts (2012) for the U.K, show that private firms pay fewer dividends as compared to public firms, Abdulla, Dang, and Khurshed (2017) show that for the private US firms take more trade credit than the public firms - we find the same pattern with Indian private firms. However, compared to their public cohorts, Indian private firms appear to be more profitable (higher ROE and ROA), have similar financing costs and hold more cash.

The second chapter of my thesis studies the determinants of lending sources and their relation to growth using data on detailed lending sources for a large sample of private as well as public firms in

India. First, we study the determinants of debt by the debt characteristics, and then we show that the relation between firm growth and bank lending is positive and significant. Several papers examined the determinants of corporate lending for developed countries (See, for example, Denis and Mihov (2003), Carey, Post, and Sharpe (1998), and Berger and Udell (1990), and Jimenez, Salas, and Saurina (2006)). Few papers (see: Menkhoff, Neuberger, and Rungruxsivorn (2012)) have extended these studies to developing countries primarily due to the availability of detailed data on the sources of financing.

Although the positive relation between firm growth and bank growth is found for US and other developed countries, it has been shown with limited data, that this relation doesn't hold for Indian firms. We examine this question using a large and detailed data set and provide evidence counter to Allen, Chakrabarti, De, Qian, and Qian (2012) (or Allen et al. (2012)) which show that bank financing is not related to growth. Allen, Qian, and Qian (2005) show China as a counterexample to the law-finance-growth literature, which views institutional and personal inter-linkages are crucial requirements for economic growth. Despite its weak laws and institutions, China has exhibited phenomenal growth in the last two decades. In the absence of strong laws and capital markets, their view is that reputation and relationship play a central role. This view has been further extended to India by Allen, Chakrabarti, De, Qian, and Qian (2012) (hereafter ACDQQ (2012)). More narrowly, the literature on the relationship between growth and bank lending for developing countries offers conflicting evidence. For instance, Ayyagari, Demirgüç-Kunt, and Maksimovic (2010) (hereafter ADM (2010)) show that the relationship is positive between bank lending and growth of firms, while ACDQQ (2012) show that non-bank financing is associated with greater growth as compared to the bank lending. Accordingly, the aim of this paper is to examine the role of alternate finance in the growth of firms in India.

My study of the relationship between growth and bank financing and deviates from ADM (2010) and ACDQQ (2012) in significant ways. First, while both recognize that private firms are the dominant form

of business organization in both regions, with only a small fraction of total firms registering as "public" firms, the sample sizes used in their studies are small. In contrast, the number of private firms registered with the Ministry of Corporate Affairs in India is close to 20 million as of 2018. Second, debt is heterogeneous and can be categorized based on source, type of usage, maturity, seniority, and security. While in developed countries, the dominant form of financing choice is either bank debt, public debt, or internal sources. In emerging economies, non-banking sources like financial institutions and related parties also play a key role. Large samples with detailed classification on the source of financing can resolve the relation between bank finance and growth.

Further, the growing emergence of fintech companies and alternate finance is crucial for understanding the health of the economy. A recent report by Omidyar and Boston Consulting Group (BCG) claims that with the emergence of fintech there is a large scope for lending to small and medium scale enterprises that are not routed through banks. It is important to understand the penetration of bank finance in the context of lending to firms and the choices of borrowers of the bank and non-bank financing firms. I expect to conduct such investigations in the future.

In the third chapter of the thesis, I study the difference in financing costs of public and private firms and document that private firms have lower financing costs as compared to public firms. This result is counter to the evidence found in developed countries like the U.S, for which private firms have higher financing costs as compared to public firms. We examine the literature and provide plausible explanations for this observed phenomenon.

Several papers studied the impact of legal and financial systems on a firm's capital structure. For example, Mayer (1990) shows that developing countries' financial decisions are different from those of developed countries. Booth et al. (2001) show that financial institutions are important in explaining the capital structure across countries. Demircuc-Kunt and Maksimovic (1998) show that countries with a strong legal system are associated with increased long-term debt usage. Allen, Qian, and Qian (2005) show that alternative financing channels are important in the absence of traditional financing options.

Along with the capital structure, the cost of debt is important in understanding firms' financing choices.

Pagano, Panetta, and Zingales (1998), Schenone (2010), and Saunders and Steffen (2011) provide empirical evidence for lower cost of debt of public firms among public firms. For a sample of Italian firms that went public from being private, Pagano, Panetta, and Zingales (1998) show that the cost of debt decreases post IPO. Saunders and Steffen (2011) study the difference in debt cost between public and private firms and show that private firms have a lower cost of debt in the U.K. Schenone (2010) shows that the bargaining power of banks decreases after being listed on the stock market and results in a lower cost of debt. As examined by Saunders and Steffen (2011), the loan cost disadvantage of private firms is due to the higher cost of information production, lower bargaining power, and higher ownership concentration of private firms.

We propose several explanations for the lower cost of debt for private firms in India. The first is due to inflated ratings of private firms by the credit rating agencies. Gopalan, Gopalan, and Koharki (2019) observes that Indian unlisted firms have no traded securities and receive less coverage by information intermediaries. It is documented in the literature that credit rating agencies are more stringent for firms that attract more media coverage. We extend this line argument by saying that lax credit ratings result in lower debt costs for private firms.

The second is due to greater manipulation of accounting data by private firms. It is plausible that the lenders do not rely on the credit rating agencies and make assessments based on their own internal evaluation of reported financial statements. Ball and Shivakumar (2005) show that the financial reporting quality is lower for private firms. To the extent that lenders do not accurately adjust for this characteristic, the cost of debt for private firms can be lower. Closely related to this hypothesis are the findings from the literature on investor attention and media coverage (See, for example, Bonsall, Green, and Muller (2018)). Market disciplines lenders like banks. This disciplining mechanism can be biased towards public firms, which attract much media attention as compared to private firms.

Therefore, lenders might demand more premium from public firms, although we are not able to find empirical evidence on why banks go easy on private firms. While some of the above theories predict a higher cost of debt for private firms and others predict a lower cost of debt, there is little evidence in the emerging market and indeed the Indian setting.