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Corporate Debt and Outsourcing in India

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Executive Summary

The structure of firms' activities, as to whether they should be undertaken internally or performed wholly or partially with the help of external firms, has been important. The issue of outsourcing has generated interest among academics and practitioners. Simultaneously, how firms' capital structures influence behaviour is important, because the divergent goals and preferences of different providers of capital can manifest themselves in the form of differences in strategies pursued by firms.

This article uniquely evaluates whether variations in Indian firms' capital structures, and more specifically, the quantity and type of debt chosen by firms, have influenced firms' outsourcing decisions. Governance mechanisms in Indian organizations have been unique when compared to that elsewhere, with government playing a big role in the financing of firms since banks and financial institutions are, in the main, government-owned. Also, the legal environment is unique and different from those in advanced economies. The link between capital structure and strategy, thus, can become quite unusual in India. The evaluation is based on a large sample of firms for which debt data were available.

The main finding noted is that as the proportion of funds borrowed by Indian firms from commercial banks and financial institutions rise, these firms engage in greater levels of outsourcing and are less inclined to vertically integrate. In the presence of financing by government-owned banks and financial institutions, industry has been able to engage in strategies that may not be compatible with asset and property rights protection and performance enhancement. This is due to the collective action problem banks and financial institutions may face in monitoring lenders. As far as corporate debentures are concerned, where debentures rise as a proportion of borrowings, firms continue to engage in outsourcing. Possibly they can ignore the pressures from bondholders, who in India have not yet had a significant presence as the corporate debt market in India is still relatively under-developed and inadequate as a source of funds. By that same logic, firms can ignore pressures from fixed deposit holders to adopt performance-enhancing or property rights protecting strategies. Yet, fixed deposit holders show an ability to influence firms to lower outsourcing as their presence in the debt structure of firms enhances. This may be not due to fixed deposit holders' influencing abilities but because the relative costs of fixed deposits are high, with interest rates on fixed deposits five to ten percentage points more than that for other debt. The enhancement of fixed deposits in firm' debt profiles will cause margin pressures. To obviate these, firms may resort to potentially cost-saving integration strategies.

KEY WORDS

Corporate Debt

Debentures

Firm Strategy

Government Ownership

Indian Industry

Institutional Finance

Outsourcing

Political Economy

Property Rights

Vertical Integration

The structure of firms' activities, as to whether they should be undertaken within the corporate system, or performed wholly or partially with the help of external firms, has been of considerable importance. Organizational reliance on external sourcing has increased dramatically in recent years. Hence, the issue of outsourcing has generated interest among academics and practitioners.

While the added interest on external sourcing of activities is relatively recent, research on the boundaries of the firm has a very long history. Commencing with the work of Coase (1937) that was conceptually extended by Williamson (1975) and Bolton and Whinston (1993) among others, the evidence on make *vs* buy decisions provides the foundation for contemporary analysis. More recent models have integrated transaction cost reasoning with property rights theory to enable a detailed examination of the boundaries of the firm issue (Grossman and Helpman, 2002).

A more fundamental issue, however, relates to the nature of the property being protected (North, 1990). In dealing with this issue, the resource-based view is relevant. Engendering external activities involves the interaction of a firm with other firms to access resources and competencies that are, otherwise, not available within companies. Simultaneously, an extensive body of research has emerged on how capital structures influence firm behaviour. Based on the recognition that the divergent goals and preferences of different providers of capital manifest themselves in the form of differences in strategies pursued by a firm, research indicates that capital structures influence firms' strategies.

The relationship between a firm's capital structure, including the structure of equity and its strategic behaviour has been a topic of considerable recent interest. Titman (1984) evaluates liquidation; Phillips (1995) examines output and pricing decisions, Chevalier (1995) and Kovenock and Phillips (1997) assess exit and investment decisions, Khanna and Tice (2000) look at strategic responses, and Zingales (1998) and Campello (2003) highlight the links between capital structure, firm performance, and survival.

Also, in the literature, starting with Myers (1977), a number of pieces have evaluated the choice of borrowers or different types of debt by firms. Houston and James (1996), Krishnaswami, Spindt and Subramaniam (1999), Cantillo

and Wright (2000), and Denis and Mihov (2003) are some of the recent contributors in this field. An issue that remains unexamined is how lending structure variations influence the boundaries of the firm.

This study seeks to address this research gap in the context of a sample of firms operating in India. The rationale for choosing India is twofold. First, India represents one of the world's most important emerging economies, one that is rapidly transitioning towards becoming a 21st century economic powerhouse. Second, governance mechanisms in Indian organizations may have been unique when compared to that elsewhere (Booth, *et. al.*, 2001). Most notably, in India, the government plays a pivotal role in controlling banks and key financial institutions.

So far much of the literature on the relationship between financial structure and corporate strategy has concentrated on advanced economies such as the United States. We do not know much about the implications of lending structure for corporate strategy in emerging economies, such as India (Luce, 2006), where the legal environment can be very different from that prevailing in the advanced economies (Morck, Wolfenzon and Yeung, 2005; Zweibel, 1996). Such legal differences are important in explaining inter-country differences (Gershenkron, 1962) and in fact have been responsible for substantial variations in cross-country performance measures.

In particular, there have been weaknesses in formal legal institutions and in the enforcement of the formal rules and regulations in many emerging economies. These suggest that it is important to understand the strategic implications of financial structure in such economies. Since firms from emerging countries have progressively formed a major part of the global economy, and of global financial markets, it is important to understand the impact of differing financial structures on their management practices.

Institutional forces affect how firms compete and economies grow (Acemoglu, Johnson and Robinson, 2006; Milgrom, North and Weingast, 1990; Olson, 1996), and therefore analysis of the role of institutional factors in influencing strategic behaviour is important. In India, institutional factors have extensively shaped the strategic decision making of firms (Chandra, 1988; Das, 2002; Haksar, 1993; Marathe, 1989; Ray, 1999). They have also been important influences on industrial behaviour (Rudolph and Rudolph, 1987).

An important contribution of the study is the insights into the motivations of lenders to Indian firms. Heterogeneous influences are at work for each type of lender category. Hence, the impact of each category warrants separate investigation. The data on detailed lending structures within publicly listed Indian firms enables a comprehensive evaluation of how the significant variations in lending structures prevalent among the Indian firms impact their 'boundaries of the firms' decisions.

THE THEORY OF FIRMS' BOUNDARIES

The general consensus is that outsourcing relates to the decision by a firm to utilize the services of other firms to perform activities that otherwise would have been conducted in-house. Traditionally, transaction cost explanation (Coase, 1937; Williamson, 1975) has been used for outsourcing. The use of markets creates economic value within the supply chain through the reduction of costs by tapping into specialized supplier capabilities (Mowery, Oxley and Silverman, 1996).

Nevertheless, there are significant costs associated with the contractual inter-organizational relationships between firms and external suppliers in outsourcing. There is potential for opportunistic behaviour. Consequently, firms are exposed to the possibility of opportunistic expropriation if external suppliers choose to capitalize on outsourcing transactions (Klein, Crawford and Alchain, 1978).

When the risk of opportunistic behaviour by market firms is significant, firms internalize transactions in an effort to manage the risks and costs. In the presence of these costs, internal sourcing is preferable given lower coordination costs. Whether outsourcing creates value depends on whether or not the costs associated with affecting transactions exceed the benefits of increased flexibility and lowered costs resulting from the superior efficiency of specialized market firms.

Arguments associated with the theory of property rights and asset ownership assist in understanding integration *vs* outsourcing decisions. The property rights approach posits that vertical integration is a way to mitigate asset hold-up problems (Grossman and Hart, 1986; Lafontaine and Slade, 2007). In this theory, property is conceptualized as *things* (Munzer, 1990), a view synonymous with the notion of the firm as a bundle of resources (Penrose, 1959) or as a set of tangible or intangible assets (Hart,

1995; Hart and Moore, 1990).

In the corporate context, this definition would include resources and links to the notion of the firm as being a collection of tangible and intangible investments (Rajan and Zingales, 1998) and capabilities (Teece, Pisano and Shuen, 1997). Property rights relate to the rights to use, consume, and obtain income from resources; the behavioural dimension of property rights expresses itself as a set of expectations that an owner has about the things possessed. The importance of property rights lies not just on the property rights held by the owner but also on how well such rights can be protected.

A basic definition of property views property as *relations* between persons or entities with respect to things (Hohfeld, 1913). Such a relation may be expressed as a claim or right, when a person has a legal right over property to alter his position or that of someone else. Some of these claims or rights involve possession, usage, and management of property to receive income. These expectations are construed as abilities to predict or hypothesize that certain events occur and that outcomes are associated with their occurrence. An associated assumption in the context of rights is that ownership of property will give rise to legal expectations that predicted states of nature or outcomes will ensue.

Therefore, property rights provide an owner with a set of forecasts that things owned would be used in particular ways and such usage would lead to benefits from utilizing the assets of the firm (Munzer, 1982). Economic activities, including outsourcing, can be viewed as the sharing of bundles of property rights (Alchian and Demsetz, 1973; Furubotn and Pejovich, 1972). The decision to outsource is the assignment of a bundle of property rights to an external firm. Outsourcing represents an arrangement involving the reallocation of property rights such that the resource owners, the outsourcing firm, transfers the control over some attributes of the resource to another firm.

The uncertainty associated with the behaviour of the contracting party, however, poses tangible risks to the efficient implementation of the outsourcing contract. This leads to agency problems. By changing asset ownership, vertical integration affects risks (Helfat and Teece, 1987) and later sharing of rents. Hence, this method shapes the incentives of various parties (Grossman and Hart, 1986).

When activities are internalized, it gives control over operations and an assurance that expectations would be met. Outsourcing, representing a reduction in control, can be accompanied by divergence in the parties' interests. The supplier firm might engage in activities not benefiting the outsourcing firm, because they do not have to bear the full cost of their actions.

When property rights are relatively insecure, and there is possibility of appropriation, struggle between the outsourcing firm and its supplier for capturing rent, can ensue. Frictions in the development of property rights in an outsourcing arrangement can result in unrealized value. Thus, contractual hazards associated with outsourcing, such as ex-post opportunism on the part of the external firm, might induce firms to locate activities and assets within the boundaries of their organization.

CORPORATE DEBT IN INDIA

Types of Debt Raised by Firms in India

In India, firms borrow using several instruments. Term-lending institutions are the primary borrowing source for long-term purposes. Borrowings from this category of lender are called institutional borrowings. A second important form of borrowing is in the form of debentures which are long-term corporate bonds that in some cases convert to shares after a specific lock-in period.

Credit and bond markets have existed in India for a long time. Modern banking began in the country in the eighteenth century with the founding of the English Agency House in Calcutta and Bombay, followed by the establishment of three Presidency banks (Banerjee, Cole and Duflo, 2004). With the introduction of limited liability in 1860, private banks appeared. Joint stock banks came into being in the beginning of the twentieth century. Commercial banking grew very rapidly in the colonial period (Roy, 2000). The Indian capital market, for equity and corporate debt, also dates back to the colonial period with the establishment of the first stock market in India in Bombay in 1857. During the colonial period, many Indian firms adopted debentures as a source of financing (Roy, 2000).

In 1969, the principal commercial banks, making short- and medium-term working capital loans to industry, were almost fully nationalized; they continue to remain under state-ownership. While barriers to entry of private banks have been relaxed since 1991, and there has been signifi-

cant entry of domestically-owned and foreign-owned private banks in India, commercial banks in India are still predominantly state-owned (Sen and Vaidya, 1997; Sarkar and Agarwal, 1997). This is consistent with the trends noted for other emerging economies (La Porta, Lopez-de-Silanes and Shleifer, 2002).

The mid-to-late 1960s can also be considered as the tipping point for the very rapid growth of the public sector financial institutions in India. The expansion of state-owned financial institutions, many of which were already in existence, took place during this period so that the state could exercise the levers of power over the financing of industrial enterprises, irrespective of whether these enterprises were in the private or the public sector.¹ Term-lending institutions had been established, *de novo*, by the government after independence. For example, the Industrial Finance Corporation of India (IFCI) was set up in 1948 and the Industrial Development Bank of India (IDBI) in 1964. These are the two major suppliers of long-term loans to Indian industry.

There are a number of other government-owned long-term lenders, such as the Industrial Investment Bank of India (IIBI), the Small Industries Development Bank of India (SIDBI), and the Shipping Credit and Investment Corporation of India (SCICI). For the agriculture sector, two institutions, the Agricultural Finance Corporation (AFC) and the Agricultural Refinance Corporation (ARC), were set up. They were later merged to form the National Bank for Agriculture and Rural Development (NABARD). Similarly, a National Housing Bank (NHB) was set up as an Export-Import Bank of India (EXIMBANK). Also, the state-owned Life Insurance Corporation of India (LIC) and the operating subsidiaries of the state-owned General Insurance Company (GIC) possess substantial liquidity with which they provide funds to companies.

A major quasi private-sector financial institution, the Industrial Credit and Investment Corporation of India (ICICI), was established in 1955. In establishing this unit, the government's role was paramount. Eventually, the government holdings in this financial institution were over eighty per cent through various indirect means. Hence, as in the case with commercial banks, government-owned term-lending institutions have a long his-

¹ See Sapienza (2004) for ideas that relate to developed country contexts.

tory of lending to the Indian corporate sector, dating back to the late 1940s.

Thus, unlike in most advanced market economies, long-terms loans to Indian firms are principally provided by especially created state-owned financial institutions. Unlike commercial banks, which have been controlled by the Reserve Bank of India, an autonomous body, institutional lenders have been managed by the Ministry of Finance, a unit of the Government of India. Control rights for these institutions have resided unambiguously with politicians, rather than with professionals, and there is a substantial amount of soft money provided to industrialists by these financial institutions. In addition, almost all of the twenty-eight states in India have bodies such as a State Financial Corporation or a State Industrial Investment Corporation providing funds for industry.

There is also an important distinction between commercial bank borrowings and borrowing from financial institutions, or development finance companies as they have often been called, because of the nature of regulations that banks are subject to and the control over interest rates that banks have had to face.

Unlike commercial banks, financial institutions as such have not accepted deposits from the public and their funds for lending purposes have, typically, come from the government via budgetary allocations; the government itself might have raised money for these allocations via the issuance of debt using treasury bills as instruments.

This distinction between debt from banks and debt from non-bank financial institutions applies in the developed economies (James, 1987; Johnson, 1997; Carey, Post, and Sharpe, 1998) as well as in India. In the Indian case, the non-bank debt is provided by government financial institutions. As financial institutions are not deposit-taking bodies, they have not been subject to the monetary policy norms of the Reserve Bank of India, and their reporting requirements have followed the norms and regulations established for the corporate sector rather than those for the banking sector. These features have enhanced the ability of the financial institutions to advance a greater quantum of loans relative to their capital base.

Financial institutions also supply credit cheaper than banks, because of the implicit subsidy element involved in their operations as government development finance bodies charged with the industrialization of India. Since

financial institutions have not been subject to the cash reserve ratio (CRR) and statutory liquidity reserve (SLR) requirements that commercial banks are subject to, which constrains the amount of funds banks have to lend, more of the financial institutions' funds are available for lending purposes and this feature has promoted the support of a lower lending rate for their customers.

Since independence, in line with the Indian government's policies, there had been strict control on the pricing and new issues of capital, including corporate bonds. This was done via the office of the Controller of Capital Issues (CCI), a unit in the Department of Economic Affairs of the Ministry of Finance. CCI controlled the quantity and price of both debt and equity that companies could issue (Marathe, 1989).²

In 1991, the pricing of new issues was freed from restrictions, along with a relaxation of the restrictions on firms to approach the capital market for funds. In 1992, the government allowed Indian firms with good track record to issue debentures in foreign capital markets. In the post-1991 period, there was some growth in the bond market with the introduction of many new and innovative types of bonds (Sen and Vaidya, 1997). The issuance of corporate bonds and the development of a secondary bonds market, was expected to become an important mechanism for raising external funds for many Indian firms during this period.

Lending and Outsourcing in General

What are the expected relationships between types of borrowed funds and Indian firms' outsourcing behaviour? In general, firms borrow from two types of lenders: private lenders consisting of banks and financial institutions, and arm's-length lenders including corporate bonds, debentures, and fixed deposits to which the public at large subscribe.

In the presence of information asymmetry, banks and financial institutions are expected to be more effective in monitoring than the arm's-length lenders. As private debt holders are likely to be more informed through monitor-

² The insights of the late Mr. P D Kasbekar, a former Chief Secretary (CS) of the Government of Maharashtra, who had also been a former Controller of Capital Issues (CCI), and had held the position of Chief Controller of Imports and Exports (CCIE), besides being the Director of the National Institute of Bank Management (NIBM), all critical positions in the economic governance of India, have been very useful.

ing and screening, and private debt is usually senior to public debt in terms of repayment order (Welch, 1997), it would be safer than the arm's-length debt.

Will different types of debt holders have varying impacts on the firms' outsourcing decisions? In economies such as India, where institutional development might not have reached the levels achieved in developed countries, high levels of outsourcing can very often lead to a fall in firms' profits, because of the inherent weaknesses of outsourcing that have been discussed. Additionally, the compromise of property rights remains a real threat to business. A set of hypotheses are developed on why some suppliers of external funds may be better able to monitor managers of firms and prevent them from engaging in outsourcing.

The literature, as applied to financial markets, has emphasized the advantage of monitored debt such as bank borrowing in reducing informational and monitoring costs as compared to arm's-length debt (Rajan, 1992). According to this view, financial markets are characterized by moral hazard problems and asymmetric information between lenders and borrowers, as lenders cannot distinguish between good borrowers and bad borrowers (Stiglitz and Weiss, 1981).

The argument rests on the distinction between '*insiders*,' the firm's owners or managers, who have full information about the firm's investments and other activities, and '*outsiders*,' who may correctly perceive the prospects for an industry but cannot distinguish the quality of individual firms in an industry.

Among suppliers of funds to the firm, banks and other financial intermediaries have access to information about the firms. This allows them to monitor these firms more closely than other suppliers of funds. The access to information that banks and other financial intermediaries have of firms' strategies is due in part to the long-term nature of the relationship between financial intermediaries and firms (Fama, 1985). It is also partly due to bank and financial institutions' representation of firms' supervisory boards. Banks and other large lenders are more efficient and effective monitors of firms than the arm's-length investors (Leland and Pyle, 1977; Diamond, 1984).

The superior information allows banks and financial institutions to monitor management effectively to ensure that neither the firms' property rights nor the value of their debt is compromised. In addition to representation

on supervisory boards, banks have substantial voting power obtained either directly through ownership or indirectly through proxies, borrowings, or investment companies. Consolidated power over firms and long-term relations combine to provide banks with the potential to influence firms substantially (Chirinko and Elston, 2006).

The fact that lenders face significant information asymmetries that create possibilities for opportunism by better-informed firms, banks, and other financial intermediaries, can play an important role in governing firms. This implies that the greater the reliance by firms on monitored debt such as borrowing from banks and financial institutions, the less likely it is that firms will engage in higher levels of risky outsourcing within institutionally underdeveloped contexts.

In contrast, arm's-length lenders, such as bondholders, will have to rely on publicly available information or expend significant resources to obtain privately held information about the firm. Unlike banks and financial intermediaries that may appoint representatives in the board of directors for monitoring these firms, arm's length lenders do not have the same governance mechanisms with the firms they lend to. Arm's-length debt is associated with higher information costs and less possibilities of monitoring than debt held by financial intermediaries. This implies that firms with a greater reliance on arm's-length debt would face lax external monitoring mechanisms. Thus, the greater the reliance by firms on arm's-length debt, the more likely it is that firms will engage in higher levels of outsourcing.

In general, in economic environments where institutional development has been adequate, the hypotheses should be that the higher the proportion of borrowing from banks and term-lending financial institutions, the lower will be the extent of outsourcing, and the higher the proportion of borrowing from arm's length lenders such as via bonds and from fixed deposit holders, the higher will be the extent of outsourcing.

Link between Lending and Outsourcing in India

Will the standard predictions apply to Indian firms? The predictions made above are subject to the exigencies of the institutional environment. Since the data relate to the 1988 to 1993 period, the expectations for this analysis are grounded in the institutional reality of this time period. India's institutional development has been classified as

asymmetric (Srinivasan, 2004), possibly warped (Bhagwati, 1993), and subject to collective action problems (Bardhan, 1984).

Definition and protection of property rights has been particularly dubious (Guha, 1996). Countries differ considerably in the extent to which their legal system protects property rights. India has often been visualized by foreign investors as a country with relatively weak property rights protection (Jalan, 1991). The difficulties associated with doing business in India are not trivial in spite of liberalization (Forbes, 2002).

If the hypotheses are conditioned on these realities that certainly were in place during 1988 to 1993, then opposite expectations follow. The structure of ownership of commercial and institutional banking in India, where 83 per cent of the banking business is in the hands of government (Banerjee, Cole and Duflo, 2004), is important. While state-owned banks and financial institutions are owned by the public, the *de facto* control rights have belonged to the managers of these banks.

While managers have concentrated control rights, they have no cash flow rights because the cash flow rights of the firm are effectively dispersed amongst tax payers (Shleifer and Vishny, 1997). In addition, the number of loans granted by these banks is numerous. This creates a portfolio management problem as not all customers will get adequate or continuous scrutiny. In India, banks and financial institutions have also been used, via loan fairs up to the late 1980s, to make grants to certain sections of the economy that the government has wanted to appease (Jalan, 2005).

The separation of control and cash flow rights in publicly-owned banks and financial institutions, plus the number of loans in their portfolio, implies that the managers of banks and financial institutions in India have less incentives to monitor actions of managers of the firms that funds have been lent to. Thus, the specific institutional environment for the financial sector in India, with a high presence of public ownership of banks and financial institutions, would generate a significant positive relationship between banks' and financial institutions' borrowing and outsourcing.

Furthermore, commercial banks typically engage in short-term lending. Loans are renewed annually. These loans are often collateralized against readily realizable debtors

and inventories, *vs* the fixed assets collateral that financial institutions obtain and which may take time to realize if necessary. For commercial banks, there is a lower risk of loss that might dampen motivation to actively engage in corporate strategy monitoring and dissuade firms from outsourcing.

In fact, this presence of bureaucratic lethargy in state-owned financial institutions has been noted in previous studies, which have found that countries with higher government ownership of banks are associated with lower financial development and lower growth of per capita income and productivity and that the lending behaviour of state-owned banks is politically determined (La Porta, Lopez-de-Silanes and Shleifer, 2002; Sapienza, 2004). Indian lenders with monitoring ability may behave in ways that do not mirror practices in the West. A higher level of monitored lending will be associated with higher outsourcing levels.

Arm's-length lenders in India, such as bondholders, may be prey to the collective action problems that beset numerous small-holders of debt certificates. They will have to rely on publicly available information. Or, they may have to expend significant resources to obtain privately held information about the firm. In India, the arm's length lenders will not have the ability to deal meaningfully with the firms they lend to. Hence, their debt will be associated with higher information costs and less monitoring possibilities. This implies that firms with a greater reliance on arm's-length debt will also experience laxer external monitoring and thus engage in outsourcing activities.

EMPIRICAL ANALYSIS

Data

To evaluate the effect of lender variations on outsourcing behaviour, this study uses firm-level data for 880 Indian firms listed on the *Bombay Stock Exchange*. In addition to debt structure details, the data set includes information extracted from the profit and loss account and the balance sheet of firms. The data were collected from multiple sources, with the Centre for Monitoring of the Indian Economy (CMIE) providing the base data. Data with ownership and debt details simultaneously available are extremely rare. These data have details of ownership and debt structure of firms.

Details on financing and aspects of firm behaviour were

supplemented with information collected from the Bombay Stock Exchange, and the office of the Registrar of Companies in the Department of Company Affairs of the then Ministry of Law, Justice and Company Affairs of the Government of India. These data are reliable and have been used in the prior studies of Indian firms. The dataset, with detailed decomposition of borrowings, covers the period 1988-1993.

Measures

The level of internal sourcing has been computed as the ratio of value added to total sales. This is a standard measure of the extent to which firms' boundaries are extended, and as a measure has been very widely used in prior research on vertical integration.³ Value added is defined as the value of sales less the value of bought out goods and services. It measures the portion of a firm's business revenues generated by activities conducted within the firm. A firm with a high ratio has brought many of the value-creating activities associated with its business inside firm boundaries. In contrast, a lower value indicates greater use of external sourcing.

The independent variables of interest are the types of debt held by firms in India. With respect to this, there are five types of debt: (1) bank borrowings (*BANK*); (2) borrowings from term-lending financial institutions (*INSTITUTION*); (3) debentures (*DEBENTURE*); (4) fixed deposits (*DEPOSITS*); and (5) other borrowings (*OTHER*). The last category is the base case in the model. The variables are measured as proportions of total debt. This detailed level of information on the debt structure of firms is unique, as data on the composition of debt for firms in emerging economies are quite difficult to obtain.

In assessing the impact of corporate debt structure on the level of outsourcing, several factors are controlled for. The first of these is for *firm diversity* (*DIVERSITY*) with an index variable that takes on values of '0', '1' and '2,' with '0' denoting no diversification, '1' denoting some diversification, and '2' representing substantial diversification.

Then there is control for *firm size* (*SIZE*). Size, measured as the natural logarithm of sales, can influence the level

of external sourcing because smaller firms are likely to face higher search costs. Moreover, larger firms with greater market power are likely to incur lower bargaining costs in external sourcing contracts. On the other hand, smaller firms are constrained in their ability to internalize and thus out of necessity, would seek external sourcing. The size variable also controls for capital constraints, since for the period of analysis, firms could not issue equity freely.

In addition to size, a dummy variable is used to denote whether the firm belongs to a *business group* (*GROUP*). Business groups are important in emerging markets (Leff, 1978) and have been an important part of India's industrial development (Tomlinson, 1993). Group firms can be expected to display greater levels of internal sourcing as a greater number of activities can be conducted within the group. This obviates the need for external sourcing. The variable has been coded as '1' if a firm has belonged to a business group, or '0' if it has not.

Finally, a dummy is added to control for time-specific shocks due to changes in regulatory policies that may have occurred during the period under consideration. The *time* (*TIME*) variable is a dummy variable taking on the value 0 if the observation is for the years prior to liberalization and 1 if the observation is for 1991 and all later years.

Descriptive Statistics

Firms in India are very highly leveraged, with the mean debt-equity ratio of the firms evaluated exceeding twice the nominal equity values. This phenomenon is a function of the soft-budget constraints perpetrated in Indian industry over several decades (Jalan, 1991). However, there is a wide variation in the debt-equity ratio among Indian firms.

For the firms, average bank borrowing accounts for 41 per cent (standard deviation 24%), borrowing from financial institutions 31 per cent (standard deviation 25%), corporate debentures 10 per cent (standard deviation 16%), fixed deposits 5 per cent (standard deviation 11%), and other borrowing 13 per cent (standard deviation 18%) of the total borrowings of the firms. Thus, 72 per cent of these Indian firms' borrowings are from banks and financial institutions, of which a significant majority is government-owned.

³ See Adelman (1955), Balakrishnan and Wernerfelt (1986), Buzzell (1983), Crandall (1968), Etgar (1977), Laffer (1969), Lafontaine and Slade (2007), Levy (1985), Lindstrom and Rozell (1993), MacMillan, Hambrick and Pennings (1986), Majumdar and Datta (2009), and Tucker and Wilder (1977).

The coefficients of variation for banks and institutional borrowings are 0.60 and 0.81 respectively and for corporate debentures, fixed deposits, and other borrowings 1.57, 2.25, and 1.35 respectively. The low value for banks and financial institutions imply that Indian firms have primarily partaken of borrowed funds from these two sources, and are less exposed to borrowing from arm's-length sources such as corporate debentures and fixed deposits, or other sources.

Indian banks and financial institutions, primarily government-owned, have provided the bulk of industrial financing and these sources have been made full use of by firms relative to other sources. Also, the market for arm's length debt was limited in India and firms would have found it difficult to raise arm's-length debt.

Estimation and Results

Heteroscedastic-corrected robust standard errors calculated using maximum-likelihood estimation techniques are reported in the regression results presented in Table 1. Initially, an ordinary least squares (OLS) regression has been estimated. However, tests carried out on the OLS results have revealed the presence of heteroscedasticity. The null hypothesis of homoscedasticity was rejected under the Godfrey (1978) and Glejser (1969) and Harvey (1976) tests. It is inappropriate to carry out the White (1980) test since there are dummy variables as regressors in the models. Thus, heteroscedastic-corrected robust standard errors are reported.

A subsidiary estimation issue relates to treating the *SIZE* variable as endogenous. Treating the size variable as endogenous allows the issue of firms' heterogeneity to be dealt with. Large firms are likely to have become larger because of specific managerial capabilities or the possession of unique intangible skills. These attributes may motivate or, in some cases, deter lenders from the larger firms. On the other hand, instrumental controls need to be incorporated for some of the factors that, while not really related to outsourcing, help determine firms' size patterns.

The empirical complexities motivate the use of a two-stage least square (2SLS) instrumental variable method, in which part of the explanatory variables may be pre-determined and all the parameters of the model are estimated jointly. Four variables are used as instruments: the age of the firm (*AGE*), the ratio of advertising expenses to total

expenses (*ADVERTISING*), the ratio of marketing expenses to total expenses (*MARKETING*), the ratio of distribution expenses to total expenses (*DISTRIBUTION*), and the ratio of net fixed assets to sales which captures capital intensity of a firm (*CAPITAL*). These variables are expected to be positively correlated with firm size.

Older firms, by sheer efflux of time, would have grown larger. Advertising enables product differentiation, which can lead firms to grow, relative to others, while marketing expenditures lead to information about firms' products being available. Distribution expenditures widen the physical range of coverage and the variable proxies for geographic market heterogeneity (Caves and Barton, 1990). Larger firms, with more resources at their command, are more likely to incur expenditures on advertising, marketing, and distribution activities in order to maintain or increase their market share. Capital intensity can enhance the minimum efficient scale requirements and lead to larger firms.

The use of these variables as instruments also helps in taking industry-related factors into account. Industry characteristics are captured by variables that measure advertising, marketing, and distribution intensities, and these industry features simultaneously influence how large a firm can become. Since the *SIZE* variable, *per se*, reflects both heterogeneous firm-specific influences as well as external industry-related features at work, the instruments also help account for some of these influences within the regression framework.

The OLS and 2SLS regression estimates are given in Table 1.⁴ The primary dependent variable is the value added to sales ratio and the key independent variables are borrowings from commercial banks (*BANK*), borrowings from financial institutions (*INSTITUTION*), corporate debentures (*DEBENTURES*) and fixed deposits (*FIXED*), as proportions of total debt raised by the firm; the additional independent variables are an index measure of diversity (*DIVERSITY*), firm size (*SIZE*) which is the log of sales, a dummy to denote membership of business groups (*GROUP*), and a liberalization dummy variable (*TIME*).

⁴ Tests for exogeneity show that the instrumental variable specification is valid and the null hypothesis of exogeneity is rejected. It is correct to treat the variable *SIZE* as endogenous. The Hausman (1978) χ^2 test statistic is 29.60 (significant at 1 per cent with $p < 0.001$). The critical value of the χ^2 test statistic with 1 degree of freedom, at the 5 per cent level, is 3.841.

Table 1: Ordinary Least Squares and Two-Stage Regression Estimates with Outsourcing as the Dependent Variable Included

	OLS		2SLS	
	Estimate (Standard Error)	t Statistic	Estimate (Standard Error)	t Statistic
Intercept	13.796*** (2.543)	5.43	-20.410*** (2.919)	6.99
<i>BANK</i>	-0.136*** (0.032)	4.20	-0.131*** (0.023)	5.71
<i>INSTITUTION</i>	-0.0723** (0.031)	2.30	-0.076*** (0.022)	3.40
<i>DEBENTURES</i>	-0.085** (0.040)	2.08	-0.117*** (0.029)	3.90
<i>FIXED</i>	0.033 (0.042)	0.79	0.043 (0.037)	1.15
<i>DIVERSITY</i>	3.908*** (1.307)	2.99	2.577** (0.996)	2.59
<i>SIZE</i>	8.910*** (0.531)	16.79	11.187*** (0.676)	16.55
<i>GROUP</i>	1.433** (0.646)	2.22	0.011 (0.857)	0.01
<i>TIME</i>	1.310*** (1.003)	1.31	0.780 (1.107)	0.71
<i>R</i> ²	0.545	0.524		

***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively; standard errors in parentheses

Five variables are used as instruments in the 2SLS equation: the age of the firm which is the number of years from incorporation till the observation data (*AGE*), the ratio of advertising expenses to total expenses (*ADVERTISING*), the ratio of marketing expenses to total expenses (*MARKETING*), the ratio of distribution expenses to total expenses (*DISTRIBUTION*), and the ratio of net fixed assets to sales capturing capital intensity (*CAPITAL*).

The results for the *BANK*, *INSTITUTION*, and *DEBENTURE* variables are remarkably similar in both equations. The estimates for the *BANK* and *INSTITUTION* variables are negative and significant, in accordance with expectations based on the institutional reality of India, and firms that have a higher proportion of borrowings from these two sources do engage in higher levels of outsourcing and are vertically less integrated.

For the *DEBENTURES* variable, the estimate is negative and significant. Since these suppliers of funds are less crucial, and face collective action problems in organizing so as to ensure that firms adopt appropriate property-rights protection means and strategies to enhance value, firms can ignore this constituency. The *FIXED* variable is positive but not significant.

Regression Quantiles

The quantile regression approach is a useful technique allowing the unpacking of the impact of heterogeneity. Standard regression estimates denote changes at the mean of the dependent variables for a unit change in the independent variables. Ordinary least squares estimation assumes that the conditional distribution of the outsourcing variable will be homogeneous. This implies that irrespective of which point on the conditional distribution of the dependent variable is analysed, the estimates of the lending variables are the same. In other words, the intensity of the relationship imputed from an OLS estimate remains the same across the entire distribution of the dependent variable.

The estimate obtained using the OLS approach is a single number summarizing the relationship between the dependent and the independent variables. Instead, there can be substantial heterogeneity (Heckman, 2001), with skewness and departures from normality present within the data (Mata and Machado, 1996). Thus, the relative importance of the ownership variables at different points of the conditional distribution of the outsourcing variable, will differ. These denote that the intensity of the lending relationships of various types differ at different levels

of outsourcing.

For example, the intensity of the relationship between bank lending and the level of outsourcing may be smaller for a firm with a lower level of outsourcing, while the intensity of relationship between bank lending and the level of outsourcing may be larger for a firm that has a higher level of outsourcing.

An exploratory examination of whether there are such differences in the intensities of the relationship between the different lending levels of conditional distribution of the outsourcing variable is based on an alternative estimation technique known as the quantile regression approach.

A discussion of the details of quantile regression goes beyond the scope of this article, but the pioneering work is by Koenker and Bassett (1978). Buchinsky (1994) and Koenker and Hallett (2001) survey the recent field while Majumdar and Datta (2009) offer an application.

Quantile regression is used to estimate the impact of the various lending or debt categories at five quantiles of the distribution of the outsourcing variables, namely the 0.10, 0.25, 0.50, 0.75 and 0.90 quantiles, separately for each debt variable. Quantile is a general term synonymous with

percentiles, and the 0.50 quantile is the median of the distribution. Intuitively, the estimates generated imply the following: For an estimate at the 0.10 quantile, the marginal change in the quantum of outsourcing is estimated, given a marginal change in the specific ownership variable. In case of heterogeneity and difference in the intensity of preference, at the 0.50 quantile, the marginal change in the quantum of outsourcing, given a marginal change in the specific debt variable, will be different. It could be larger or smaller given the specific debt category that is the regressor.

Estimating quantile regressions is not the same as estimating separate standard ordinary least squares regression on the various subsets of the data that make up each of the quantiles. If that approach is used, it means not using all the data for estimation. Rather, robust regression techniques, which are weighted least squares techniques, minimizing the least absolute deviation from the mean, are used for estimating the regressions, at each of the quantiles simultaneously for all quantiles. The estimated coefficients from the quantile regressions are displayed in Table 2. The primary dependent variable is the value added to sales ratio and the key independent variables are borrowings from commercial banks (*BANK*), borrowings from financial institutions (*INSTITUTION*),

Table 2: Quantile Regression Estimates with Outsourcing as the Dependent Variable

	Estimates at the Mean		Quantile Estimates				
	Estimate (Standard Error)	t statistic	Quantile Estimate at $\theta = 0.100$	Quantile Estimate at $\theta = 0.250$	Quantile Estimate at $\theta = 0.500$	Quantile Estimate at $\theta = 0.750$	Quantile Estimate at $\theta = 0.900$
Intercept	-8.709*** (0.556)	15.66	-6.9666	-10.0100	-9.3522	-7.8651	-3.0421
<i>BANK</i>	-0.062*** (0.005)	11.73	-0.0028	-0.0154	-0.0516	-0.1093	-0.2027
<i>INSTITUTION</i>	-0.029*** (0.005)	5.81	0.0042	0.0012	-0.0166	-0.06515	-0.1479
<i>DEBENTURES</i>	-0.013** (0.007)	2.01	0.0019	0.0048	0.0082	-0.0518	-0.1011
<i>FIXED</i>	0.067*** (0.008)	8.00	0.0482	0.0906	0.0886	0.0479	-0.0559
<i>DIVERSITY</i>	4.061*** (0.217)	18.70	1.3452	2.2570	4.5667	5.2645	5.7410
<i>SIZE</i>	5.605*** (0.084)	66.22	2.6889	4.1183	5.2323	7.4025	9.9639
<i>GROUP</i>	1.114*** (0.184)	6.18	0.6658	0.8080	0.8373	1.5525	3.1265
<i>TIME</i>	1.306*** (.254)	5.14	0.6732	0.9005	1.3487	1.3462	3.4246

***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively; standard errors in parentheses

corporate debentures (*DEBENTURES*) and fixed deposits (*FIXED*), as proportions of total debt raised by the firm; the additional independent variables are an index measure of diversity (*DIVERSITY*), firm size (*SIZE*) which is the log of sales, a dummy to denote membership of business groups (*GROUP*), and a liberalization dummy variable (*TIME*).

For each of the debt categories, the estimates vary considerably across the various quantiles.

For the *BANK* variable, the comparative mean OLS estimate is -0.136, but at the 0.10 quantile, the estimated value is -0.0028, rising to -0.2027 at the 0.90 quantile. Recollect that the outsourcing variable used is actually the level of activities conducted in-house. Thus, a negative estimate indicates either a lower level of integration or a higher level of outsourcing. On average, at the mean of the data set as a whole, a 10 percentage point increase in *BANK* funds ownership is associated with a 1.36 percentage point increase in the level of outsourcing.

For firms at the bottom ten per cent of the outsourcing distribution, or the 0.10 quantile, a 10 percentage point increase in *BANK* funds is associated with only a 0.28 percentage point increase in the level of outsourcing. On the other hand, for firms that are at the top 10 per cent of the outsourcing distribution, the 0.90 quantile firms, a 10 percentage point increase in *BANK* funds is associated with a 2.027 percentage point increase in the level of outsourcing.

Clearly, at the upper reaches of the outsourcing variable, the intensity of the relationship between *BANK* funds usage and undertaking activities in-house is very much stronger than at the lower reaches of the distribution. The coefficient estimate is monotonically decreasing, denoting that the intensity of preferences for conducting activities in-house where *BANK* funds are present in firms, falls steadily. These further support the expectations as to the impact of *BANK* funds on the corporate behaviour in India.

For the *INSTITUTIONAL* borrowing category, the mean OLS estimate is -0.0723, but at the 0.10 quantile, the estimated value is 0.0042. This turns to -0.1479 at the 0.90 quantile. At the mean of the data set as a whole, a 10 per cent increase in *INSTITUTIONAL* borrowing is associated with a 0.723 percentage point increase in the level of

outsourcing. Yet, for firms at the bottom ten per cent of the outsourcing distribution, or the 0.10 quantile, a 10 percentage point increase in *INSTITUTIONAL* borrowing is associated with a 0.042 percentage point decrease in outsourcing.

On the other hand, for firms that are at the top 10 per cent of the outsourcing distribution, the 0.90 quantile firms, a 10 percentage point increase in *INSTITUTIONAL* borrowing is associated with a 1.479 percentage point increase in the level of outsourcing. Clearly, at the upper reaches of the outsourcing distribution, the intensity of the relationship between *INSTITUTIONAL* borrowing and not undertaking activities in-house is substantially larger than at the lower reaches of the distribution. The coefficient estimate increase is sharp and monotonic, denoting that the intensity of firms' preferences for conducting activities in-house in the presence of *INSTITUTIONAL* borrowing has steadily fallen. These trends, too, support the hypothesis as to government financial firms' impact on the strategic behaviour in India.

For the *DEBENTURES* category, the mean OLS estimate is -0.085, while at the 0.10 quantile, the estimated value is 0.0019. This falls to -0.1011 at the 0.90 quantile. At the mean of the data, a 10 per cent increase in the *DEBENTURES* category is associated with a 0.085 percentage point increase in outsourcing. For firms at the bottom ten per cent of the outsourcing distribution, or the 0.10 quantile, a 10 percentage point increase in *DEBENTURES* category is associated with a 0.019 percentage point decrease in the level of outsourcing. For firms at the top 10 per cent of the outsourcing distribution, the 0.90 quantile firms, a 10 percentage increase in *DEBENTURES* category is associated with a 1.479 percentage point increase in the level of outsourcing.

For the *FIXED* borrowing category, the mean OLS estimate is 0.033, but at the 0.10 quantile, the estimated value is 0.0482 and -0.0559 at the 0.90 quantile. It rises to 0.0906 at the 25 quantile, but then falls rapidly. Thus, on average, at the mean of the data set as a whole, a 10 percentage point increase in the *FIXED* borrowing category is associated with a 0.33 percentage point decrease in the level of outsourcing. For firms that are at the bottom ten per cent of the outsourcing distribution, or the 0.10 quantile, a 10 percentage point increase in the *FIXED* borrowing category is associated with a 0.482 percentage point decrease in the level of outsourcing.

On the other hand, for firms that are at the top 10 per cent of the outsourcing distribution, the 0.90 quantile firms, a 10 percentage point increase in the *FIXED* borrowing category is associated with a 1.101 percentage point increase in the level of outsourcing. These trends fully support the expectations as to the relatively marginal impact that arm's-length lenders, such as those in the *DEBENTURES* and *FIXED* borrowing category, might have on Indian firms' behaviour in the presence of other suppliers of debt that are government-owned.

DISCUSSION AND CONCLUSION

Raising of Corporate Debt in India

Before assessing the results in detail, it is useful to review more recent trends in corporate fund-raising. The principal types of funds that firms have raised in India are given for the longer period of 1970-71 to 2001-02. These are the years for which time series data are available from the Reserve Bank of India.

These are macro-economic data from the Reserve Bank of India, for the firms in Indian industry as a whole, originally expressed in Rupees crore, translated for comparative purposes into relative amounts expressed as percentages. Figure 1 tracks the relative percentages of funds that firms in India have raised either as loans from financial institutions, as corporate debentures or as eq-

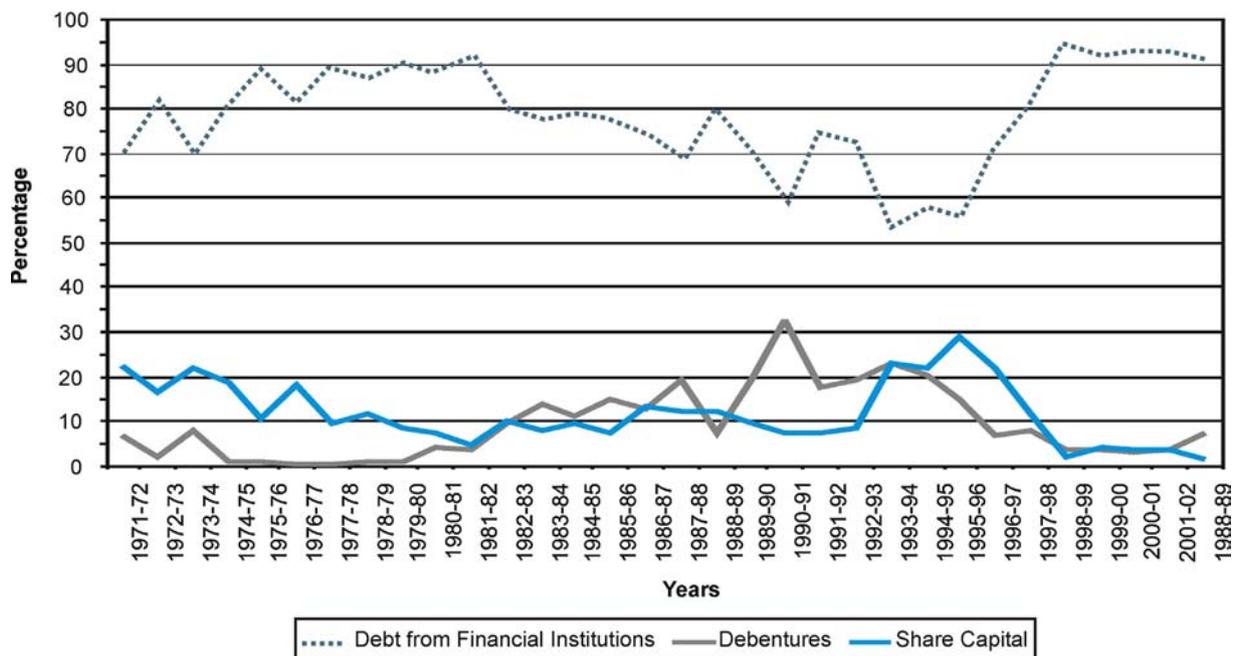
uity and preference share capital from the equity markets.

The first important result noted is the importance of funds provided by financial institutions as debt. On average, for the entire period, the proportion of funds that firms have raised as debt from financial institutions has been about 78 per cent. The proportion of such debt to total funds raised has exceeded 90 per cent in the late 1970s, as well in the late 1990s and the early part of the 21st century. This proportion increased substantially in the 1970s, in keeping with the assumption of a role of absolute primacy by the state in matters of industrial financing and development.

The proportion shrunk till the mid-1990s, with the onset of liberalization, as well as following the onset of an extremely dear money policy that was adopted in the mid-1990s. The proportion that rose again after interest rates were considerably reduced from the late 1990s onwards. The role of debt financing is crucial for operations and long-term investments in the Indian industry. A possible reason for this may be underdeveloped primary equity and venture capital markets in India.

Corporate debentures have a relatively lesser role as a source of funds for firms. On average, for the overall period, 10 per cent of total funds were raised as debentures. Correspondingly, the proportion of total funds raised as

Figure 1: Proportion of Industrial Finance Raised from Different Sources



equity was 12 per cent. Clearly, debt has played an extremely important role in the financing of the Indian industry, with, on average, 88 per cent of industrial funding coming from borrowings, and of this, the bulk coming from the state-owned financial institutions.

The Indian state remains the major industrial financier of firms in India. This is true of the period evaluated, though since then the presence of a number of rapidly growing private commercial banks such as the ICICI Bank and the HDFC Bank, has raised the possibility that government-owned banks' supply of credit would eventually decline.

In addition, there has been progressive relaxation of capital and exchange controls in the last decade and a half in India. Several Indian firms have progressively entered the overseas capital markets to raise funds. These borrowings are classified as external commercial borrowings (ECB). Indian firms also privately place debt with qualified financial institutions. These borrowings are convertible at a later stage to equity and are classified as qualified institutional placements (QIP).

The overseas ECB lenders as well as the Indian QIP lenders will engage in a close relationship with the Indian firms and can exercise their monitoring privileges more efficiently. In such circumstances, as the composition of monitored debt changes for several Indian firms, one can note that engagement in potentially risky activities by the firms may be curtailed.

Assessment of the Study

This study starts with a presumption that the Indian economy may not have as yet reached a state of institutional development comparable with the Western economies, and that has been the case for the period evaluated. There may be crucial contract enforcement issues. Their presence can make property rights protection and enjoyment of economic performance difficult. In such circumstances, firms would choose to vertically integrate and outsource activities as little as feasible as a risk-avoidance strategy.

Equally, in such institutional circumstances, the financiers of firms would like to see that the firms that they have financed deploy such strategies so that not only are the assets of the firm protected and economic performance enhanced, but the sanctity of the financed amounts can remain inviolate. Thus, to the extent that financiers

are able to, they would monitor their portfolio firms and ensure that appropriate strategies, such as vertical integration, or in-sourcing, are adopted as much as possible.

Nevertheless, the same lack of institutional development that would have led to contract enforcement issues would have also led to an inadequately developed financial system. Even if the financial system were to be flush with funds, it would be relatively lax in monitoring the firms funds were lent to. Plus, government-owned banks and financial institutions, which would have lent money based on extraneous considerations, would suffer from incentive problems in monitoring the strategies of firms and fund usage, and engage in considerably less monitoring relative to privately-owned banks. Thus, one would observe firms' adoption of riskier strategies where government financial institutions, relative to private suppliers, had large stakes in their finances.

The prevalence of very substantial amounts of non-performing assets (NPA) with commercial banks and financial institutions in India may be an indicator of such laxity (See Kannan, 2003 for details of the NPA issue in the Indian banking sector). In addition, the ratio of NPA to assets of the government-owned banks and financial institutions are double that of the privately-owned banks in India. This is a further indicator of the incentive and other political economy driven problems that can exist in a still institutionally inadequate economy such as India.

The principal result obtained in the analysis is that as the proportion of funds borrowed by Indian firms from commercial banks and financial institutions rise, these firms engage in greater levels of outsourcing and are less inclined to vertically integrate. The results bear out the expectations as to the behaviour of firms in India. Indian industry has had the bulk of its investment financed by government-owned banks and financial institutions, for the period evaluated, as well as subsequently. In the presence of such financing, industry has been able to engage in strategies that may not be compatible with asset and property rights protection and performance enhancement.

In contrast, the results for the arm's-length debt, such as corporate debentures and fixed deposits, show that where corporate debentures rise as a proportion of borrowings, firms continue to engage in outsourcing, as opposed to engaging in a strategy of vertical integration, possibly because they can ignore the pressures from bondholders,

who in India have not yet had a significant presence. The corporate debt market in India is still relatively underdeveloped and inadequate as a source of funds for firms (Sharma and Sinha, 2006). Within such an undeveloped market, corporate debenture holders would not have yet acquired the intrinsic power to impact borrowing firms' strategies.

By that same token, firms can ignore the pressures from fixed deposit holders brought to bear to adopt performance-enhancing or property rights protecting strategies. Yet, this category shows an ability to influence firms to lower outsourcing as their presence in the debt structure of firms enhances. This may be simply because the relative costs of fixed deposits are very high. Interest rates on fixed deposits cost five to ten percentage points more than that for debt amounts raised from financial institutions, and are thus relatively much more expensive. These are uncollateralized debt, relative to bank and financial institutions' loans (Rajan and Winton, 1995), carrying a risk premium in pricing. Thus, the enhancement of fixed deposits in firm' debt profiles would cause margin pressures, to obviate which cost-saving integration strategies are resorted to.

CONCLUSION

While India is important to the world economy, little is known about the structure of financing of firms in this country and how it affects strategic behaviour. Most studies examining the relationship between capital structure

and strategy focus on the structure of equity rather than the structure of debt, and on advanced market economies. This article contributes to the literature on the strategic implications of capital structure by investigating the relationship between debt composition and outsourcing for India.

The article examines whether debt composition matters in explaining firms' outsourcing. The importance of debt financing in India is considerably more important than in many other industrial economies. A substantial portion of the debt has been provided by government agencies and government-owned financial institutions. Using a unique dataset on a cross-section of Indian firms, that disaggregate debt into its various components, an analysis of the effects of the different types of corporate borrowing on Indian firms' outsourcing is conducted. Firms are more likely to outsource when the monitored debt is held by banks and term-lending institutions which are principally owned by the government. A greater reliance of firms on corporate debentures and fixed deposits leads to a lower likelihood of these firms engaging in outsourcing.

The results suggest that findings obtained from advanced market economies may not yet be generalized for the emerging economies. Theoretical perspectives derived from the modern literature may need modification in application to take into account the specific context of the economy in question. As India undergoes an institutional transformation, extant ideas may find currency in explaining Indian firms' behaviour. ✓

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Outsourcing and globalization of manufacturing allows companies to reduce costs, benefits consumers with lower cost goods and services, causes economic expansion that reduces unemployment, and increases productivity and job creation.

— Larry Elder quotes