

## Impact of Business Group Affiliation on Cost of Debt: Evidence from India<sup>9</sup>

Narahari Hansoge<sup>10</sup>

### 1. Executive Summary

This paper studies the effect of group affiliation on cost of debt by empirically examining two opposing arguments: coinsurance (coinsurance effect is said to occur if the possibility of default decreases when two firms' assets and liabilities are combined into a group compared to the likelihood of default of the standalone firms) and tunneling (where controlling shareholders of the group expropriate outside investors<sup>11</sup>). Tunneling is an illegal business practice but is hard to detect due to its inherent clandestine nature. The evidence presented in this study suggests that, on average, group affiliated firms have a lower cost of debt vis-à-vis similar standalone (unaffiliated) firms. In addition, the credit rating (worthiness) of other member firms in a group has a favourable effect on an affiliated firm's cost of debt (i.e. decreases its cost of debt). Further, evidence suggests that group affiliated firms enjoy co-insurance benefits (i.e. a group affiliated firm in financial trouble may be bailed out by another member of the same group). However, such co-insurance benefits may be restricted to only those firms that have a high insider holding (insider holding refers to the equity stakes held by owners). The analyses in this paper throw up a few interesting but unresolved questions which could perhaps be answered by employing a larger sample set.

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9 This is a non-technical summary of the working paper (WP) with the same title under the NSE-IGIDR Corporate Governance Research Initiative (2013-14). Please refer to the original WP for references & further details.

10 The author is at Indian Institute of Management, Tiruchirappalli, India.

11 Controlling shareholders of a group affiliated firm can expropriate the firm's outside investors by entering into contracts (with other firms of the same group or with the controlling shareholders) that are detrimental to the interest of outside investors but are beneficial to the controlling shareholders. For example, purchasing/selling goods and services at a rate higher/lower than the prevailing market prices, providing loans at lower than market interest rates, paying unwarranted fees/royalties etc.

## 2. Main Research Questions

Recent research has stressed that instead of painting business groups (e.g. TATA Group etc.) as either “paragons” or “parasites”, a more nuanced approach would help us to better understand this wide-spread but complex organizational form. A step in this direction would be to analyse the effect of group affiliation on various stakeholders. While a few studies focus on the social impact of business groups (BG), most of the existing studies focus on equity shareholders of group affiliated firms and only a handful of studies analyse the impact of group affiliation on debt holders. This paper tries to address this gap in the literature by analysing the impact of group affiliation on a firm’s cost of debt.

The following hypotheses are tested in this paper:

- a. ***Hypothesis 1: Group affiliated firms have a lower cost of debt as compared to similar standalone (unaffiliated) firms***

The co-insurance hypothesis states that business group affiliated firms enjoy a lower cost of debt due to internal capital market benefits and bankruptcy protection due to diversified cash flows arising from the different businesses of the group; whereas the tunneling hypothesis states that group firms have a higher cost of debt due to risk of expropriation of debt holders by the controlling shareholders. In essence, Hypothesis-1 postulates that the co-insurance effect dominates the tunneling effect which leads to a lower cost of debt for group affiliated firms vis-à-vis standalone firms.

- b. ***Hypothesis 2: Among firms affiliated to business groups, those affiliated to more diversified (scope effect) and larger (scale effect) groups have lower cost of debt as compared to other business group affiliated firms***

If the cost of debt of group affiliated firms is significantly different from their unaffiliated counterparts, a natural extension of this research question is to examine the characteristics of business groups that give rise to this difference. The hypothesis is that two basic group characteristics--diversification (scope) and size (scale)--lowers the cost of debt of a member firm. In other words, diversification in business groups (which is associated with uncorrelated cash flows) and the resultant coinsurance effect may give rise to a lower cost of debt.

Again, large groups with access to numerous resources can provide stronger coinsurance benefits to their member firms. Also, firms can use their group reputation to negotiate for lower cost of funds from bond investors.

- c. ***Hypothesis 3: Group affiliated firms with low insider holding have relatively higher cost of debt***

Existing research indicates that tunneling (i.e. expropriation of resources by the group owner) is more likely to occur from firms where the group owner (insider) has a lower stake as compared to firms where the group owner/promoter has a higher stake. The expropriation argument can be extended to debt holders as it increases the credit risk of lending to firms with low ownership stakes (as resources of such firms are prone to be tunneled out), thus increasing their cost of debt.

- d. ***Hypothesis 4: The cost of debt of a group affiliated firm is impacted by the credit ratings of other member firms***

In spite of being separate legal entities, group affiliated firms are inter-twined in numerous apparent and hidden ways. The extent of support available to a BG firm from fellow member firms depends on the financial condition of the fellow member firms. This is where the credit rating of other member firms comes into play. The credit rating is a representative measure of the qualitative and quantitative information for the prospective borrower, including information provided by the prospective borrower and other non-public information obtained by the credit rating agency's analysts. A firm that is part of a group that has companies with relatively higher credit ratings might enjoy a lower cost of debt compared to a similar firm that is part of a group with companies having lower credit ratings.

### **3. Results and Interpretation**

Hypothesis wise summary of results is presented below:

- a. The regression results indicate that BG affiliated firms have lower credit spreads (difference in yields between bonds of a company and the safe bonds of similar maturity issued by Government) as compared to similar unaffiliated firms. At

the mean level, the average credit spread of a bond issued by a BG affiliated firm is lower by about 28 basis points<sup>12</sup> as compared to a similar bond issued by a standalone firm. This evidence supports Hypothesis-1 and indicates that BG firms have lower credit risk. This suggests that the coinsurance effect dominates the tunneling effect in Indian business groups.

- b. Surprisingly, the results do not provide evidence either in favour of or against Hypothesis-2. Hence, no conclusion can be drawn on the role of group characteristics: diversification and size.
- c. In line with Hypothesis-3, the results indicate that BG firms with low promoter holding have relatively higher cost of debt as compared to BG firms with high promoter holding. This suggests that significant co-insurance benefits of group affiliation may be available only to firms that are higher in the group pyramid.
- d. In line with the literature that views a business group as a harmonious collection of individual member firms, the results suggest that the credit ratings of fellow group member firms favourably impact a firm's cost of debt. Higher the credit rating of other group affiliated firms, lower is the firm's own cost of debt.

#### **4. Conclusion**

This paper studies the effect of group affiliation on cost of debt by empirically examining two competing hypotheses: coinsurance and tunneling. The evidence presented in this study suggests that, on average, group affiliated firms have a lower cost of debt as compared to similar standalone firms. In addition, the credit worthiness of other member firms in a group favourably impacts an affiliated firm's cost of debt. This evidence suggests that group affiliated firms enjoy co-insurance benefits. However, such co-insurance benefits may be restricted to only those firms that have a high insider holding.

The analyses in this paper throw up a few interesting but unresolved questions. If firms with high insider holding are the recipients of co-insurance benefits, then how are these firms propped? Do group owners use their personal resources to prop up

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<sup>12</sup> This is after controlling for factors like bond rating, issue size, tangibility of firm's assets, firm's profitability etc.

such firms or do they tunnel out resources from other member firms? What role does group diversification play in the co-insurance mechanism? Is the positive “spill over” from other firms in the group (as measured by average group credit ratings) restricted to only firms with high insider holding? Some of these questions may be answered by employing a larger sample set. A larger sample set would also increase our confidence in these results.

Further, our understanding of cross holdings of debt securities in a business group is limited - mainly due to data unavailability. Examining the nature of debt holders of business group firms will help us unravel some aspects of *internal capital (debt) markets* of business groups and this can be a substantial contribution to the business group literature.