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Future Business Journal 4 (2018) 1–15
www.elsevier.com/locate/fbj

Full Length Article

Banker directors and firm performance: Are family firms different?

Saibal Ghosh[1]

Centre for Advanced Financial Research and Learning, Fort, Mumbai 400001, India

Received 8 July 2017; accepted 6 November 2017

Abstract

Employing data on publicly listed Indian manufacturing firms covering the period 1996–2012, we investigate the impact of the presence of banker-director on the board of family firms. We posit several hypotheses that highlight the pros and cons of the presence of banker-directors. The findings provide support to the industry expertise hypothesis which suggests that bankers are less likely on boards on family firms that operate in industries where the possibilities of knowledge spillovers can significantly influence profits. A disaggregated analysis suggests that the performance of these firms varies depending on the nature of equity and ownership interlocking.

JEL classification: G34; L26; P52

Keywords: Family firms; Banker-director; Corporate governance

1. Introduction

The growth and emergence of family firms has been a widely debated topic in recent years. According to La Porta, Lopez-de-Silanes, and Shleifer (1999), 65% of the 20 largest firms in Argentina had a family stake of at least 20%; in Japan, this was 5%. Anderson and Reeb (2003a, 2003b) document that in the US, 35% of the S&P500 firms are those with family ownership. A research report by Credit Suisse (2011) finds that family-owned companies controlled 50% of the over 3500 publicly listed companies in ten major Asian economies: the share was the highest for India at over 65% and the lowest for China at 13% (See also, Claessens, Djankov & Lang, 2000; Claessens, Djankov, Fan & Lang, 2002).

The presence of family firms has raised important questions as to whether it is an efficient organizational form. On one side of the debate, it has been argued that having a large minority shareholder can ensure effective monitoring and thereby ameliorate agency problems (Shleifer & Vishny, 1986). Following from this argument, several studies adduce evidence in support of this contention (Anderson & Reeb, 2003a, 2003b; Barontini & Caprio, 2005; Villalonga & Amit, 2006; Ghosh, 2010). Focusing on a sample of Western European family firms, Maury (2006) for example find that family firms exhibit better performance than firms controlled by non-family block holders. Critics of this argument contend that by putting their own interests before minority shareholders, family ownership might end up

E-mail address: emailsaibal@gmail.com

[1]The views expressed and the approach pursued in the paper are strictly personal.

Peer review under responsibility of Faculty of Commerce and Business Administration, Future University

https://doi.org/10.1016/j.fbj.2017.11.002

aggravating agency problems and impede performance (Faccio, Lang & Young, 2001; Dyer, 2003; Perez-Gonzalez, 2006; Morck & Yeung, 2003).

Another strand of the literature highlights the importance of bankers in enhancing corporate governance in firms. Research based on advanced economies indicate that bankers not only play the role of expertise provider (Booth & Deli, 1999), but in several instances, improve the bank's business opportunities (Dittmann, Maug & Schneider, 2010). Earlier, Kroszner and Strahan (2001) had demonstrated that bankers are less likely to be represented on boards of firms when the monitoring costs overwhelm the benefits.[2] More broadly, using data on non-listed Spanish family firms, Arosa, Iturralde, and Maseda (2010) document a negative impact of outside directors on performance.

In this context, using an extended sample of Indian firms for the period 1996–2012, the article investigates three major hypotheses. First, are family firms more likely to have banker nominee on their boards? In India, 70% of the firms are family-controlled (Piramal, 1996). This lowers the likelihood of principal-agent conflict (Carney, 2005), in turn, reducing the importance of the monitoring role of the board. That being the case, the importance of banker-directors in family firms could actually be much less significant. Second, how does non-bank debt influence firm capital structure? Besides provision of debt, banks have other channels of influence over firms, such as through interlocking directorates. We examine whether this channel matters for firm behaviour. Finally, how important are banker-director in family firms in influencing performance, especially given their varying intensity of involvement?

There are several reasons as to why these are important questions and India presents a compelling laboratory for examining these issues. First, in emerging economies such as India, the presence of family firms spans several industries and product lines. van der Molen (2005) found that Indian families operate in an average of 5.4 industries. A second reason is that although the foundations of the corporate governance model in India are based on the Anglo-Saxon model, the investor base is distinctly at variance with those observed under such a framework. For instance, in the Indian case, investors comprise largely of the company founders, their respective family members and the government. This contrasts with the UK evidence wherein companies are less concentrated towards certain groups, are geographically dispersed and largely held by professional investors. Third, India has a rich longitudinal database on corporates, which permits rigorous statistical analysis. The findings obtained from the analysis may offer useful implications for the role of these firms during periods of financial distress in other emerging markets.

Our study contributes to the literature in three distinct ways. First, this is one of the earliest studies for an emerging economy to systemically investigate the role of banker-director in family firms. Given the limited likelihood of principal-agent conflict in these firms, this raises the question as to what purpose the banker-director serves in such firms.

Second, it is well recognised that banks play an important role in enhancing corporate governance in firms (Booth & Deli, 1999; Kroszner & Strahan, 2001). In the Indian case, based on cross-section data for 2003, Nachane, Ghosh, and Ray (2005) find that banker nominees primarily act as expertise providers. More recently, Dittmann et al. (2010) show that in Germany, banker-directors on the board of non-financial firms help firms tide over funding difficulties. The present analysis augments these findings by exploring the involvement of bankers on boards for family firms across varying degree of equity and ownership interlocks.

Finally and more broadly, our paper is related to the literature that focused on the corporate governance of firms (Shleifer and Vishny, 1997). In the case of Japan, Morck and Nakamura (2007) find that bankers are represented on boards of poorly performing firms to ensure prompt repayment of their debt. In contrast, Dittman et al. (2010) find that bankers represented on boards of German firms also promote their own business interests. Unlike these papers, we focus on an emerging market, where the weak institutions and greater likelihood of cronyism make the role of banks in corporate governance potentially far more critical.

The remainder of this paper continues as follows. In Section 2 we provide an overview of the relevant literature and derives several testable hypotheses. Section 3 discusses the institutional environment, followed by the database (Section 4) and empirical strategy (Section 5), results (Section 6), robustness checks (Section 7 and 8) and the concluding remarks in the final section.

2. Literature and testable hypotheses

The prevalence of family firms is quite pervasive in both developed and emerging economies (Leff, 1976; Caves & Uekusa, 1976; Chang & Choi, 1988; Ghemawat and Khanna, 1998; Khanna & Rivkin, 1999; Morck, 2005; Morck,

[2]We employ the terms bank nominee, banker-director and banker on board interchangeably.

Percy, Tian & Yeung, 2005), although their exact structures differ markedly across countries (Cuervo-Cazurra, 2006). In India for example, family firms operate somewhat like large, diversified conglomerates, with significant resource sharing across the affiliated-firms. The managing director of one family firm might serve as the board chairman of another affiliated firm, leading to commonality of board members. These characteristics of family firms make it easy for the majority owners to expropriate firm value at the expense of minority owners. Research points to the fact that business groups resort to tunnelling resources through intra-group transactions (Johnson, La Porta, Lopez-de-Silanes & Shleifer, 2000; Bertrand, Mehta & Mullainathan, 2002; Bae, Kang & Kim, 2002; Friedman, Johnson & Mitton, 2003; La Porta, Lopez-de-Silanes & Shleifer, 2000, 2002) and even the provision of equity capital (Gopalan, Nanda & Seru, 2007).

Banks can influence corporate governance in several ways. In their capacity as shareholders, banks improve the likelihood for selection of profitable investment projects (Morck, Stangeland & Yeung, 2000; Kang, Kumar & Lee, 2006). As well, firms with bank-shareholders might be better placed to raise external resources (Hoshi, Kashyap & Scharfstein, 1991) at a lower cost (Petersen & Rajan, 1994).

The more pervasive role of banks is in their capacity as nominees on the boards of firms. We posit several channels that are germane for the role of banker nominee in affecting the performance of non-financial firms.

According to the *information channel*, bank nominees gather proprietary information about the firm and transmit it to the lender. This lowers the degree of information asymmetry between the borrower and lender and thereby eases the access to external (bank) finance. That being the case, it appears less likely that bank nominee would be on family firms, in order to reduce the spillover resulting from leakage of confidential information (Bhattacharya & Chiesa, 1995). Combining this with the fact that age and size are proxies for creditworthiness (Petersen & Rajan, 1997), this would suggest that bankers are less likely to be present on boards of large and older family firms where the knowledge repository is likely to be higher. This leads us to our first hypothesis:

H1. *Under the information hypothesis, bankers are less likely to be on board of large and older family firms.*

The *debt monitoring channel* contends that bank nominees are involved in monitoring management on behalf of external financial markets so as to safeguard their lending. As a result, bankers would be more likely on the boards of firms that have a higher debt burden. In case of family firms, given the convergence of ownership and management, agency costs are lower. In addition, given that their long-term reputation and credibility are tied to the image of the firm, they are often willing to provide 'patient capital' (James, 1999) and less concerned about loss of control. All these considerations might entail family firms to have lower leverage ratios. Empirical evidence on this aspect is however mixed, with some studies reporting a positive relationship (Ellul, 2008), whereas others report a negative (Anderson et al., 2011) or no such relationship (Anderson & Reeb, 2003a, 2003b). That being the case, bankers are less likely on boards of family firms with lower debt burden.

H2. *Under debt monitoring hypothesis, bankers are less likely to be on board of family firms with lower burden of debt.*

The *equity monitoring channel* observes that banker-directors pursue their interests as shareholders. In that case, banker-directors are more likely to be present in firms with lower valuation, which necessitate stronger intervention. Earlier studies (Holderness & Sheehan, 1988) found higher valuation for non-family firms as compared to family firms, although subsequent research based on US Fortune 500 companies show that family firms exhibit higher market valuation, as measured by Tobin's Q and higher operational performance, as measured by return on asset (Anderson & Reeb, 2003a, 2003b). This leads us to conclude the following:

H3. *Under equity monitoring hypothesis, bankers are less likely to be on board of family firms with lower profitability and lower market valuation.*

The *capital market hypothesis* postulates that banker nominees are more likely to be represented on boards of firms with higher funding requirements. To the extent that family firms display higher growth, their funding requirements are likely to be high. With banks being the major source of external finance for firms in India (RBI, 2014), this would suggest that such firms are more likely to have banker-directors.

On the other hand, family firms are more likely to have an internal capital market. Such a practice improves these firms' access to external finance (Khanna & Palepu, 1999; Shin and Park, 1999), increasing the likelihood of banker-directors on their boards. Internal capital markets also provide liquidity and funding support to member firms. To

exemplify, Khanna and Yafeh (2005a, 2005b) show that family firms in India use intra-group loans to smooth liquidity across firms. Likewise, Gopalan et al. (2007) find that the internal capital market for Indian family firms is used to support member firms in trouble. That being the case, notwithstanding their slow growth, dependence on external bank finance, are likely to be lower. This leads us to the following hypothesis:

H4. *Under capital markets hypothesis, it is not clear whether family firms with slow growth are more or less likely to have banker-director on their board.*

Finally, the *industry expertise hypothesis* posits that bankers might be present on firm boards in order to gather industry expertise. In the case of family firms, while the pressures to conform to good governance standards are higher, the family might also want to exercise tight control over some of the affiliated firms (Almeida & Wolfenzon, 2006). To the extent that such firms belong to industries which account for a significant proportion of revenue, the possibility of banker-directors on such firms are less likely. As compared to this, provided such firms belong to more diversified industries but where knowledge spillovers are likely to be significant, the possibility of banker-directors on such firms are even less likely. We measure diversification as the ratio of segment sales to total sales, where the segment considered is the one generating the maximum revenues. Knowledge spillovers are measured as the ratio of R&D to sales. Our final hypothesis therefore reads as follows:

H5. *Under industry expertise hypothesis, less diversified family firms with high knowledge spillovers are less likely to have banker-directors.*

3. Institutional background

Prior to the inception of financial sector reforms in the 1990s, the financial sector in India broadly comprised of banks and government-owned development finance institutions (DFIs). Banks provided short- to medium-term credit to industry and agriculture, whereas long-term finance was provided primarily by DFIs. In addition, both banks and DFIs could also invest in the equity of companies. In order to protect their investments, the founding Act of Parliament of the DFIs entailed two specific clauses: (a) a *convertibility clause* to ensure that a loan can be converted into equity in case of default and (b) a *nominee director clause* which imparted flexibility to the DFI to appoint one or more nominee directors on the firm board.

The economic reforms of the 1990s altered the financial landscape for these entities. Competition in the financial marketplace increased manifold with the liberal entry of foreign banks as well as *de novo* private banks. However, it was the DFIs that experienced the biggest change. With gradual lowering of concessional finance from the government alongside increased competition, particularly for access to low-cost resources, several of these entities metamorphosed into banks. More importantly, they began competing with commercial banks for credit extension, besides making large equity investments in firms.

In March 1984, the Ministry of Finance issued guidelines focusing on the issue of nominee directors. More specifically, it stipulated that term-lending institutions should constitute a separate Cell, with the avowed objective of representing the DFIs on the board of financially-assisted companies.

In 2000, a Committee appointed by the Securities and Exchange Board of India recommended that institutions should appoint nominee directors on firm boards on a selective basis, where such appointment is pursuant to a right under loan agreements or where such appointments is considered necessary to protect the interest of the institution. In addition, it was recommended that the nominee director should be subject to the same discipline and responsibility and should be equally accountable to the shareholders as the other directors of the company. Taking these considerations on board, the new *Companies Act* 2013 has excluded nominee directors from the list of independent directors and incorporated it as a separate category. Accordingly, it has been stated in Section 161 of the Act that the Board may appoint any person as a director nominated by any institution or by any Government (Central or State) by virtue of their shareholding.

For the purposes of our analysis, we treat nominees of all financial institutions, whether DFI or bank as 'bank' nominees. The appointment of nominee directors in the Indian case is driven more by statutory obligation and is therefore less susceptible to endogeneity concerns that plague research on director appointments in other countries.

Table 1
Distribution of sample firms by industry and ownership.
Source: Computed from the *Prowess* database.

Industry GROUP	Number of Firms	Percent	Ownership		
			Family	Indian private	Foreign
Food, Sugar and Beverages	95	6.7	55	36	4
Textile and textile products	131	9.2	62	68	1
Chemicals and Pharmaceuticals	187	13.2	95	77	15
Electrical and Machinery	259	18.3	126	107	26
Metal and metal products	139	9.8	78	60	1
Cement	29	2.0	23	4	2
Rubber and plastic products	61	4.3	34	26	1
Miscellaneous manufacturing	87	6.1	47	33	7
Others	430	40.4	195	220	15
Total	**1418**	**100**	**715**	**631**	**72**

4. The dataset and variables

The data employed is extracted from the *Prowess* database, generated and maintained by the Centre for Monitoring the Indian Economy (CMIE), a leading private think-tank in India. The *Prowess* is a firm-level database, akin to the *Compustat* database for US firms and the Financial Analysis Made Easy (FAME) database for UK and Irish public and private limited companies. This database is being increasingly employed in the literature for firm-level analysis on Indian industry (Khanna & Palepu, 1997; Gupta, 2005; Ghosh, 2006; Gopalan et al., 2007; Goldberg, Khandelwal, Pavcnik & Topalova, 2010).

Our sample spans the period 1996–2012 and focus on publicly listed firms, since it is primarily these firms that report information on banker-directors as part of their corporate governance statements. We cull out information on all listed manufacturing firms, yielding a total of 1532 firms. We subsequently delete several firms from the sample. First, we delete firms with extremely misrecorded data. In step two, we delete firms with negative observations on some of the relevant variables, such as profits and leverage, further reducing the sample. These exclusions reduce the final sample to 1418 firms.

Table 1 provides the description of the sample. Over one-third are family firms; the remaining are stand-alone firms across other ownership groups. Taken together, these firms account for, on average, nearly 75% of asset and over 80% of the market capitalization of all manufacturing companies on which information is reported in the *Prowess* database.

5. Empirical strategy

We first characterize the firms that have bank nominees on their boards. Our focus is specifically on family firms. Accordingly, we estimate the following panel regression model:

$$Bank\ \ no\ \min\ ee\ (dummy/fraction/number)_{i,t} = \alpha + \beta_1\ Family_{i,t} + \beta_2\ \mathbf{X}_{i,t} + \eta_t + \mu_{indus} + \varepsilon_{i,t} \quad (1)$$

where *Bank nominee*$_{i,t}$ is a dummy variable that takes value one if firm *i* has a bank nominee in year *t,* else zero. **X** is a vector of firm characteristics such as size, age, profitability, leverage and investment opportunities; η_t and η_{indus} are year- and industry fixed effects and ϵ is the error term.

Our coefficient of interest is *Family*, the dummy variable signifying family affiliation. Provided family firms have higher likelihood of bankers on their boards, the coefficient on this variable would be positive. We estimate Eq. (1) by logit model.

The logit model does not take into account the size of the board. *Ceteris paribus*, a banker is more likely to be on boards of larger firms as compared to smaller ones. Therefore, to adjust for the size of the board and to account for the incidence of multiple bankers on bigger boards, we also employ a Tobit model. The dependent variable is reformulated as the number of bankers on the board of a firm divided by board size.

Table 2
Variable definition and summary statistics.

Variable	Unit	Description	Mean (SD)	p.75 (p.25)
Board level				
Board	Number	Total number of board members	8.81 (3.04)	11 (7)
D.Banker		Dummy = 1 if a firm has a banker-director on the board, else zero	0.123 (0.329)	0 (0)
S.Banker	Share	Number of banker-directors on the board/Total number of board of directors	0.042 (0.088)	0 (0)
N.Bankers	Number	Number of bankers on the board	0.201 (0.639)	0 (0)
Firm level				
Family		Dummy = 1 if a firm is family-owned, else zero	0.504 (0.499)	1 (0)
Sales	..	Log Sales	2.192 (0.769)	2.683 (1.786)
Sales growth	%	Growth rate of sales, defined as Sales (t) − Sales (t-1)/Sales (t-1)	0.181 (0.684)	0.256 (0.002)
SIZE		Log Asset	2.309 (0.704)	2.748 (1.867)
Capex	Ratio	Capital expenditure/Total asset	0.009 (0.011)	0.014 (0.002)
Profits	..	Profits before depreciation, interest and taxes/Asset	0.043 (0.083)	0.083 (0.010)
Age	Year	Ln (1 + number of years since incorporation)	2.953 (0.849)	3.526 (2.485)
RoA		Profit before depreciation and taxes/Asset	0.048 (0.082)	0.083 (0.010)
R&D	%	Research and development expenses/ Total sales	0.085 (0.285)	0 (0)
Tobin's Q		(Market capitalization + total assets-common equity)/Total asset, where Market capitalization = Shares outstanding*Closing share price	0.414 (0.237)	0.527 (0.257)
ICR		Interest coverage ratio, defined as Profits before interest and taxes/Interest expense		
BKDEBT	Ratio	Bank borrowings/Total asset	0.245 (0.227)	0.388 (0.045)
Segment_sales	Ratio	Segment sales/Total sales, where segment sales refers to the segment that accounts for the maximum sales during the year	0.116 (0.472)	0 (0)

Table 3
Family vs. non-family firms – average values.

Year	Family firms			Non-family firms			Normalised difference		
	Board size	Banker Dummy	Banker Share	Board size	Banker Dummy	Banker Share	Board size	Banker Dummy	Banker Share
1996	9.07	0.21	0.084	8.14	0.01	0.030	0.19	0.24	0.17
1997	8.93	0.23	0.087	8.10	0.009	0.032	0.15	0.19	0.24
1998	8.48	0.21	0.085	8.51	0.02	0.043	0.06	0.24	0.21
1999	8.47	0.19	0.079	7.07	0.01	0.022	0.25	0.21	0.21
2000	8.10	0.18	0.081	6.92	0.02	0.029	0.22	0.24	0.22
2001	8.16	0.18	0.084	7.24	0.02	0.032	0.17	0.18	0.22
2002	8.76	0.19	0.079	7.79	0.05	0.029	0.18	0.21	0.23
2003	8.83	0.22	0.075	7.35	0.08	0.024	0.23	0.18	0.23
2004	9.63	0.27	0.072	7.74	0.11	0.030	0.20	0.20	0.19
2005	9.71	0.25	0.065	7.72	0.11	0.027	0.24	0.24	0.17
2006	9.68	0.22	0.052	7.99	0.09	0.021	0.23	0.25	0.15
2007	9.56	0.19	0.045	8.19	0.08	0.017	0.24	0.23	0.14
2008	9.70	0.18	0.041	8.44	0.08	0.015	0.21	0.22	0.24
2009	9.87	0.15	0.034	8.48	0.07	0.014	0.18	0.18	0.15
2010	9.76	0.12	0.025	8.26	0.06	0.012	0.24	0.14	0.16
2011	9.58	0.13	0.025	8.29	0.05	0.012	0.24	0.18	0.15
2012	9.58	0.12	0.023	8.17	0.05	0.011	0.22	0.17	0.14
Average	9.31	0.19	0.056	8.07	0.05	0.019	0.21	0.19	0.13

Finally, we also explore whether the robustness of the results when the dependent variable is the number of bankers on the firm's board. Employing the number as a dependent variable in similar setup has been employed in prior research, such as analysing the role of board connections in bank lending (Kroszner & Strahan, 2001), the impact of the number of bankers on banking relationships (Berger, Klapper, Martinez Peria & Zaidi, 2008) and examining the incentives of firm directors to attend board meetings (Adams & Ferriera, 2012). Furthermore, it is inappropriate to assume that firm observations over time are independent. Consequently, the standard errors are adjusted for clustering at the firm level.

In the second set of tests, we estimate the effect of a banker-director on firm performance. As above, our focus is primarily on family firms. To do this, we estimate variants of the following model:

$$y_{i,t} = \alpha + \beta_1\, Bank\ \ no\ \min ee_{i,t-1} + \beta_2\, Bankno\ \min ee_{i,t-1} * Family_{i,t} + \beta_3\, \mathbf{X}_{i,t} + \eta_t + \mu_{indus} + \varepsilon_{i,t} \quad (2)$$

where y is the performance measure. We consider four measures of performance: Sales growth, capital expenditures (Capex), Leverage and R&D. The specific control variables include, among others, one or more of the following variables: industry sales, industry capital expenditure, industry leverage, Tobin's Q, profits (lagged) and leverage (lagged).

5.1. Summary statistics

In Table 2, we provide a description of the variables employed. The descriptive statistics suggest that, among board-level characteristics, 12% of the firms have at least one banker on their board and there is on average less than one banker on the board.

Among firm-level variables, over fifty percent are family firms; the remaining are stand-alone firms across other ownership groups. To moderate the effect of outliers, all variables of empirical interest are winsorized at the 1% level. The average total assets translates into a book value of INR 200 billion. We measure firm age as the number of age since incorporation and the average age of the sample firms is roughly 17 years. The profitability of the sample firms is close to 5% with average Tobin's Q of 0.41. Taken together, the firms account for, on average, nearly 75% of asset and over 80% of the market capitalisation of all listed non-manufacturing entities reported in Prowess.

In Table 3, we report the year-wise difference in the major variables for family and non-family firms. Family firms have larger board size and a larger share of banker-directors as compared to non-family firms. For the period as a

Table 4
Determinants of bankers on family firms.

Dependent variable	D.BANKER			S.BANKER			N.BANKER	
Estimation method	Logit			Tobit			Poisson	Negative binomial
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
FAMILY	**1.135*** **(0.674)**	**1.071*** **(0.615)**	**1.857*** **(0.987)**	**0.123*** **(0.068)**	**0.138*** **(0.082)**	**0.182*** **(0.108)**	**1.426*** **(0.427)**	**1.229*** **(0.471)**
Board size	0.139*** (0.021)	0.113*** (0.026)	0.141*** (0.021)				0.099*** (0.005)	0.119*** (0.007)
SIZE	0.605*** (0.167)	0.579*** (0.186)	0.609* (0.349)	0.099*** (0.018)	0.098*** (0.022)	0.092*** (0.036)	0.552*** (0.089)	0.482*** (0.098)
AGE	0.079 (0.116)	0.241** (0.127)	0.116 (0.223)	0.017 (0.013)	0.038*** (0.015)	0.023 (0.025)	0.072 (0.081)	0.056 (0.092)
BKDEBT	0.959*** (0.283)	1.529*** (0.341)	1.091** (0.4999)	0.112*** (0.032)	0.198*** (0.043)	0.119** (0.057)	0.712*** (0.209)	0.836*** (0.231)
TOBIN'S Q	−0.182* (0.104)	−0.083 (0.108)	−0.023 (0.160)	−0.017 (0.011)	−0.006 (0.012)	−0.009 (0.016)	−0.085 (0.057)	−0.039 (0.057)
RoA	−0.061*** (0.008)	−0.045*** (0.011)	−0.054*** (0.014)	−0.007*** (0.0009)	−0.006*** (0.001)	−0.006*** (0.002)	−0.048*** (0.005)	−0.048*** (0.006)
Gr_SALES	−0.112 (0.072)	−0.113 (0.095)	−0.092 (0.152)	0.012 (0.008)	0.019 (0.012)	−0.002 (0.017)	0.033 (0.117)	0.027 (0.137)
R&D	0.019 (0.242)	0.015 (0.275)	0.749** (0.332)	−0.0002 (0.026)	0.006 (0.032)	0.085** (0.036)	0.569*** (0.103)	0.581*** (0.118)
Sales_segment		0.022 (0.163)			0.004 (0.021)			
SIZE*Family			−0.004 (0.377)			−0.011 (0.041)	−0.005 (0.095)	0.047 (0.106)
AGE*Family			−0.062 (0.259)			−0.008 (0.029)	−0.077 (0.086)	−0.023 (0.099)
BKDEBT *Family			−0.164 (0.606)			−0.009 (0.068)	−0.050 (0.228)	−0.149 (0.258)
TOBIN'S Q*Family			−0.198 (0.201)			−0.023 (0.020)	−0.122* (0.065)	−0.159*** (0.067)
RoA*Family			0.009 (0.017)			−0.099 (0.191)	0.008** (0.004)	0.004 (0.007)
Gr_SALES*Family			0.262 (0.173)			0.018 (0.019)	0.071 (0.125)	0.080 (0.149)
R&D*Family			−1.161*** (0.449)			−0.129*** (0.049)	−0.849*** (0.130)	−0.896*** (0.146)
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Observations	7995	5075	7995	7993	5073	7993	7986	7986
Censored, Left				5912	4205	5912		
Log pseudo likelihood	−3618	−1972	−3593	−1954	−1217	−1929	−6116	−5977
Pseudo R-squared	0.211	0.152	0.216	0.314	0.216	0.323	0.207	0.145
Prob > χ^2 (p-Value)					0.00	0.00	0.00	0.00
Over-dispersion parameter								0.59
χ^2 (1) p-Value								0.00

Standard errors (clustered by firm) are in parentheses.
***denote statistical significance at 1%.
**denote statistical significance at 5.
*denote statistical significance at 10%.

Table 5
Banker-director and the performance of family firms.

Dependent variable	Sales growth		Capex		Bank debt		R&D	
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
Family	−0.020 (0.022)	−0.026 (0.023)	0.018** (0.009)	0.021** (0.009)	−0.021 (0.019)	0.018 (0.019)	0.023 (0.019)	0.030 (0.022)
S.BANKER (t-1)	−0.059* (0.032)	−0.203* (0.117)	−0.013 (0.022)	−0.047 (0.051)	0.066* (0.040)	0.114* (0.068)	−0.003 (0.066)	−0.172 (0.151)
S.BANKER (t-1) *Family		−0.188 (0.195)		0.078** (0.035)		0.074*** (0.026)		−0.231 (0.166)
Industry sales growth	0.539*** (0.073)	0.541*** (0.074)						
Industry Capex			0.373*** (0.071)	0.374*** (0.071)				
Industry bank debt					0.753*** (0.118)	0.752*** (0.119)		
Industry R&D							0.199*** (0.025)	0.201*** (0.025)
SIZE	0.081*** (0.011)	0.081*** (0.011)	0.006 (0.007)	0.006 (0.007)	−0.038 (0.024)	−0.038 (0.023)	0.033*** (0.013)	0.034*** (0.013)
AGE	−0.057*** (0.019)	−0.058*** (0.019)	−0.012 (0.007)	−0.012 (0.007)	−0.025*** (0.010)	−0.025*** (0.010)	−0.008 (0.012)	−0.008 (0.012)
TOBIN'S Q	0.019*** (0.007)	0.019*** (0.006)	0.012*** (0.004)	0.012*** (0.004)	0.018 (0.016)	0.019 (0.017)	0.020*** (0.007)	0.019*** (0.007)
BKDEBT (t-1)	−0.035 (0.048)	−0.034 (0.049)	−0.009 (0.007)	−0.009 (0.007)			−0.009 (0.026)	−0.009 (0.024)
RoA (t-1)	−0.005 (0.007)	−0.006 (0.008)	−0.008 (0.007)	−0.007 (0.005)	−0.007 (0.052)	0.008 (0.051)	0.027 (0.065)	0.025 (0.064)
R&D	−0.021 (0.020)	−0.021 (0.021)	0.008 (0.006)	0.008 (0.006)	−0.001 (0.007)	−0.001 (0.007)		
Constant								
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
N.Obs	4043	4043	4086	4086	6531	6531	4081	4081
R-squared	0.149	0.150	0.222	0.223	0.182	0.187	0.191	0.192

Standard errors (clustered by firm) in parentheses.
***denote statistical significance at 1%.
**denote statistical significance at 5%.
*denote statistical significance at 10%.

whole, the average board size for family firms is 9.3 as compared to 8.1 for non-family firms. Following Imbens and Wooldridge (2009), we report the normalized difference, as a scale-free measure of the differences in distribution. The authors suggest that, as a rule of thumb, the normalized difference should not exceed one quarter. As can be observed from Table 3, except for board size in 1999, all other values are well below the threshold.

6. Results and discussion

6.1. Family firms and banker-directors

In Table 4, we present the results of panel regression of Eq. (1). Column (1) presents the baseline estimates. The coefficient on both size and age are positive and statistically significant. Taken together, these observations capture the fact that bankers are more likely on boards of larger and well-established firms. Furthermore, the evidence suggests that bankers are more likely on boards of levered firms. The significance of the leverage ratio runs contrary to the US evidence wherein leverage was found to have insignificant effects. As compared to this, low profitable firms are more likely to have banker representation: being relatively more prone to financial distress, are more likely to exhibit banker representation.

The coefficient of interest is *Family,* the dummy variable signifying family firms. The coefficient on this variable is positive with a point estimate of 1.14, which translates into a odds ratio of 3.1 (=exp(1.14)), indicating that the odds of a family firm having a banker-director is 3.1 times higher than the odds of not having a banker-director.

In Column (2), we include the segment sales variable. Since data on this variable is available for a much smaller time span, Inclusion of this variable significantly reduces sample size. Additionally, this variable is not significant as well. Therefore, in subsequent regressions, we do not include this variable.

Column (3) interacts each of the firm-level variables with *Family*. We first test, as predicted by the information hypothesis, whether large and old family firms have greater banker nominee. The coefficients on the interaction terms for both these variables are insignificant. Therefore, our results do not offer much support for the information channel.

Next, we ascertain the validity of the debt monitoring hypothesis. If banker-directors are less likely to be on the boards of family firms with lower debt burden, the coefficient on this variable would be negative. We find that although BKDEBT**Family* is negative, it is not significant. Therefore, our results do not appear to support the debt monitoring hypothesis either.

Table 6
Banker-director and the performance of family firms.

Dependent variable	Sales growth		Capital expenditure (Capex)		Bank Debt		R&D	
	Family	Non-Family	Family	Non-Family	Family	Non-Family	Family	Non-Family
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
nB_nEQ	0.026	0.011	−0.021**	−0.001	0.015	0.036***	0.003	−0.032**
	(0.024)	(0.021)	(0.010)	(0.010)	(0.014)	(0.014)	(0.026)	(0.016)
B_nEQ	−0.003	0.024	0.027	0.027	0.047**	0.078**	−0.004	−0.062**
	(0.026)	(0.041)	(0.017)	(0.025)	(0.021)	(0.037)	(0.029)	(0.030)
B_EQ	0.033**	0.029	0.060***	0.077***	0.063***	0.127***	0.039***	0.103*
	(0.015)	(0.021)	(0.011)	(0.021)	(0.013)	(0.032)	(0.016)	(0.062)
Controls	YES	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
N.Obs	8374	5203	5398	1208	7297	4609	5477	2149
R-squared	0.178	0.098	0.216	0.234	0.215	0.258	0.201	0.145

Standard errors (allowed for clustering by firm) are within parentheses.
***denote statistical significance at 1%.
**denote statistical significance at 5%.
*denote statistical significance at 10%.

Subsequently, we explore the relevance of the equity monitoring hypothesis. If bankers are likely to be present on boards of family firms with higher profitability, then the coefficient on this variable would be positive. We find that the coefficient on RoA is negative with a point estimate of −0.04, whereas *RoA*Family* is positive with a point estimate of 0.8, entailing a net effect of 0.76. On the other hand, the coefficient on neither Tobin's Q nor the interactive term are significant. Therefore, our results provide weak support to the equity monitoring hypothesis that bankers on boards of family firms pursue their interests as shareholders.

The capital markets expertise hypothesis contends that firms with higher funding requirements have greater banker-directors on their boards. Higher funding requirements are more germane for firms with higher sales growth. In the regressions, the coefficient on both Sales_growth and its interaction with family firms are not significant, suggesting that family firms do not recruit banker-directors in order to reduce the costs of external finance. This is consistent with prior evidence, both in India (Gopalan et al., 2007) and elsewhere (Buchuk, Larrain, Munoz & Urzua, 2014) that the internal capital markets of family firms enables them to manage their funding requirements.

Finally, we explore the validity of the industry expertise hypothesis. If banker-directors are less likely to be present on boards of family firms where knowledge spillovers are significant, then the coefficient on the interaction term should be negative. The results in Column (3) suggest that this is indeed the case. The coefficient on R&D in column (3) is positive, whereas that on R&D*Family is negative, yielding a net effect of −0.30. Both these coefficients are statistically significant. In other words, bankers are less likely to be present on boards of family firms where the knowledge spillovers are high, presumably in order to prevent leakage of confidential information (Bhattacharya & Chiesa, 1995).

We repeat our regressions with the share of bankers as the dependent variable. The advantage of employing this variable it that it controls for the size of the board and accordingly, we do not need to explicitly include it as a control variable in the regression. The results (Col.4-6) confirm previous findings.

Finally, we re-run the regression with the number of bankers as the dependent variable. The findings provide additional support for the equity monitoring hypothesis: the coefficient on Tobin'sQ and its interaction with *Family* are both negative, suggesting that bankers are represented on those firm boards that are valued relatively poorly. This runs contrary to evidence proffered for Germany wherein bankers were observed to have limited interest in safeguarding their equity stakes in firms (Dittmann et al., 2010).

Since the mean number of bankers is significantly different from its variance, we re-estimate the model using the Negative Binomial model, which allows for over-dispersion of the mean. The results corroborate previous findings and suggest that bankers on family firms are more likely to be involved in monitoring their equity stakes and contribute to providing industry expertise, especially when the knowledge spillovers from such industries are not overwhelming.

We next analyse the impact of bank nominee directors on firm performance.

6.2. Bank nominee and firm performance

We examine the effect of banker director on firm performance by estimating Eq. (2). The results are reported in Table 5. In column (1), the dependent variable is *Sales growth*. Besides several firm-specific controls, the regressions also include *industry sales growth,* in addition to year and industry fixed effects. The negative and significant coefficient on S.BANKER indicates that firms with higher share of banker-directors on their boards display lower sales growth in the subsequent year. In terms of magnitudes, the point estimates suggest that firms with higher share of banker-directors have nearly 6% lower sales growth. With average sales growth of the sample firms being 18%, this is a fairly sizeable difference.

The control variables, when significant, have expected signs. Thus, bigger and high growth firms have higher sales growth. As well, sales growth is higher for younger firms, indicating their intention to garner market shares.

Our coefficient of interest is *Family* and its interaction with the banker variable. In both columns (1) and (2), the variable is statistically insignificant.

In columns (3) and (4), we repeat our test with *Capex* as the dependent variable. The set of control variables is similar to those earlier, except that we include *industry capex* instead of *industry sales growth.* We find that the coefficient on Family is significant, suggesting that family firms have between 1.8–2.1% higher capital expenditures. From the control variables, we find that firms with higher growth opportunities have higher capital expenditures.

In Columns (5)–(6), we repeat our tests with bank debt as the dependent variable. The evidence suggests that firms with higher share of banker-directors have higher bank debt in the subsequent year. However, for family firms the evidence is the reverse: higher banker-director share are less inclined to assume additional bank debt in the following year. In column (6) for instance, the net effect for family firms equals 0.04, so that for family firms, the presence of a banker nominee lowers bank debt by 4% points in the following year.

The final two columns explore the impact on R&D. However, the evidence suggests that there is no perceptible impact of family firms on R&D activity, either directly or *via* the presence of banker-directors.

Summing up, the results indicate that family firms with bank nominees have lower capital expenditures.

6.3. Additional tests

In this section, we analyse the role of banks on firm performance by splitting the sample into four sub-samples. These sub-samples differ in terms of the potential influence that a bank exerts over the firm's decision-making. Depending on the nature of involvement, we classify firms into four categories based on the nature of their non-promoter shareholding and representation on the board.[3]

The first group consists of firms are those with no banker on the board and no banks among its shareholders. We refer to this group as nB_nEQ. In the second group, there are also no bankers on the board, but the bank shareholding is non-zero (nB_EQ). In the third group are firms with a bank representative on the board, but with no bank shareholders (B_nEQ). The final sample consists of firms with both bank shareholding and banker on the board (B_EQ).

The results of the equality of mean tests among these groups (not reported) indicate significant differences in their capital structures. For instance, firms with banker representation and director interlocks have the highest proportion of banker-directors. Not surprisingly, these firms also have highest levels of bank debt, at 33%, on average. However, for firms with no banker and no director interlocks, the level of bank debt is much lower at 24%. All of these differences are statistically significant.

In the rest of the section, we explore to what extent firm performance is affected by the varying degrees of ownership and equity interlocks. Towards this end, we re-estimate Eq. (2), although we allow the coefficients on independent variable to vary with the individual sub-samples. All results contain the full set of control variables, but they are not reported for brevity.

Table 6 shows the estimation results, taking into account the different degree of ties with banks. Controlling for the different types of bank involvement provides additional insights. The first general observation is that the coefficient on the dependent variable across all columns are uniformly higher as the strength of bank ties increases: the coefficient on B_EQ is positive and statistically significant in most cases. Second and without loss of generality, the coefficient on B_EQ for family firms is lower than that for non-family firms, suggesting that having a board seat along with non-promoter equity stake makes it easier for banks to exert a relatively stronger influence on the behaviour of non-family firms.

Looking at specifics, the coefficient on B_EQ is positive and statistically significant in column 1, implying that for family firms with both board seat and equity interlocks of banks, sales are 3.3% higher, on average. Across columns, for family firms, the evidence indicates that having a board seat along with non-promoter equity stake results in a 6% increase in capital expenditures, a 6.3% increase in bank debt and a nearly 4% increase in R&D spending. As compared to this, the coefficient on B_nEQ is insignificant across almost all specifications for family firms. In other words, bank representation on the board needs to be complemented with equity interlocks in order to impact the firm's sales or capital expenditures or even its innovative activity. The only exception is the positive and significant coefficient on bank debt for B_nEQ, indicating that mere presence on the board is enough to affect the firm's financing policy. In other words, banks need to play a dual role as both shareholders and monitors in order to influence the overall behavior of family firms.

[3]Currently, industrial houses in India are not allowed to float banks. However, banks are permitted to hold shares in any company, whether as pledgee, mortgagee or absolute owner, of an amount exceeding 30% of the paid-up share capital of that company or 30% of its own paid-up share capital and reserves, whichever is less. The aggregate exposure of a bank on a solo or consolidated basis to capital markets (which includes both fund- and non-fund based) should not exceed 40% of its consolidated net worth as on March 31 of the previous year.

The other interesting result is the effects on capital expenditure. The coefficient on nB_nEQ is negative and statistically insignificant, indicating that capital expenses are lower for family firms in which bankers have no board seat, making it difficult for them to exercise control. In terms of magnitudes, with no board seat and no non-promoter equity, capital expenditures for family firms are 2% lower, on average.

The results with respect to non-family firms are also of interest. Looking across columns, three observations are in order. First, non-family firms with no banker representation and no bank equity have higher bank debt, consistent with the debt monitoring hypothesis. Based on the point estimates, the evidence suggests that bank debt for these firms are 3.6% higher, on average. With average bank debt in the sample equal to 25%, this translates into a 1% (=0.245*.036*100) difference in bank debt for these firms as compared to family firms. Second, R&D expenditures for non-family firms are negative for those with no bank equity and positive for those with bank equity; the magnitude of the latter is roughly double that of the former. Both of these coefficients are statistically significant. In other words, having a board seat in non-family firms does not necessarily ensure that the firms will undertake R&D; it needs to be completed with bank equity take. In effect, for non-family firms to undertake R&D, the equity monitoring hypothesis appears to dominate the debt monitoring hypothesis. And finally, non-family firms with ownership and equity interlocks do not have higher sales growth, contrary to what the capital markets hypothesis would tend to suggest.

7. Concluding remarks

The prevalence of family firms all over the world has compelled research pay increasing attention to family business research. One under-researched issue has been the interaction between corporate governance and corporate performance and in particular, the role and relevance of banker-directors in family firms. It assumes particular relevance for India, given the fact that the newly promulgated *Companies Act 2015* underscores the importance of corporate governance by reforming the board of directors.

With a long history and an internal capital market, family-affiliated firms are better able to navigate the dynamics of the marketplace, exploit their information advantage and consequently, encounter lower bureaucratic hurdles as compared to their non-family counterparts. Consequently, their dependence on bankers for funding growth are likely to be lower. Consistent with these expectations, we find that family firms employ less bankers, especially those which operate in sectors where the possibilities of knowledge spillovers are high. Robustness tests using variants of the dependent variable lend credence to our findings.

If family firms are less likely to have banker-directors, this raises the question as to what purpose they serve when they sit on firm boards. The evidence suggests that family firms undertake higher capital expenditures, presumably because banker-directors enable them to attract bank finance.

That being the case, it begs the question as to whether different degrees of bank involvement could be driving these results. To investigate this further, we undertake a disaggregated analysis by classify firms depending on the nature of their non-promoter shareholding and board representation. The findings tend to suggest that the performance of family firms is driven significantly by the degree of equity and ownership interlocking.

These issues hold considerable policy relevance in emerging markets. More often than not, these countries confront significant problems of asymmetric information between the lender and the borrower. Average loan amounts are also curtailed to address this information risk. Contract enforcement and repossession norms plague lender confidence and in the process, hinder credit off-take. Judged from that standpoint, the analysis in the paper provides useful leads as to how different degrees of firm-bank interlocks can affect the behaviour of family firms.

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