Do Family CEOs Impact Firm Value? : An Empirical Analysis of Indian Family Firms

Dr. Lakshmi Kalyanaraman
Professor
King Saud University
Saudi Arabia

Abstract:

We study the association between family CEO and firm value on a sample of 288 family firms during the 6-year period, from 2009 to 2014. The sample is drawn from domestic private companies belonging to non-financial services sector included in the NSE CNX 500 index. We find that family CEO has no significant association with firm value, when the family is not the majority shareholder. Family shareholding has positive relationship with firm value, but does not moderate the relationship of family CEO with firm value. We show that family CEO and firm value are negatively related when the family does not hold majority equity stake in the family firm. While family shareholding has no significant relationship with firm value, it has a negative interaction effect on the relationship between family CEO and firm value. The research findings have important implications for family firms as well as the nonfamily investors in the family firms.
Family firms are rampant all over the world. About 90% of the incorporated businesses in US are owned and controlled by families. (Poza, 2007) Strong presence of families is found in about one-third of S&P 500 corporations (Anderson & Reeb, 2003) and in Fortune 500 companies. (Shleifer & Vishny, 1986) Reins of more than two-thirds of East Asian firms are held by founding families. (Claessens et al., 2002) The family run firms constitute around 44% in Western Europe. (Faccio & Lang, 2002) According to the survey carried out by Credit Swisse (2011), around 67% of the Indian listed companies are controlled by founding families. As a result, India represents largest chunk of family businesses in Asia. Previous works on family firms show that family businesses are more enduring (See for example, Bhattacharya & Ravikumar, 2001), perform better (Anderson & Reeb, 2003) and are more strong (Jones & Rose, 1993) in comparison to non-family businesses. Research is carried out to learn the reasons for the success of these family businesses as they are prevalent all over the world and offer successful business models. There is abundance of research studies on the relationship between family involvement and firm performance. (See for example, Anderson & Reeb, 2003) Research is carried out testing various theoretical viewpoints alternating from agency theory (Schulze, et al., 2003), stewardship theory (Miller et al., 2007), socio-emotional wealth theory (Gomez-Mejia et al., 2001) to resource based angle of firm. (Sirman and Hitt, 2003) However, the question ‘Does family CEO enhances the firm value or erodes firm value?’ is yet to be answered decisively. (See for example, Chung & Chan, 2012) We answer this question by evaluating the relationship between family CEO and firm value. Our analysis also considers the possible moderating effect of family ownership on the relationship between family CEO and firm value.

Earlier works highlight the need for relating the research findings of family firms’ performance to the institutional context of the study before drawing inferences on the
principal-agent (PA) and principal-principal (PP) conflicts. (See for example, Bhagat et al., 2010; Liu et al., 2012) According to Bhagat et al., (2010), robust managerial theories should be evaluated in various institutional backgrounds. India’s institutional framework which implements the corporate governance regulations is characterised by lack of institutional activism (See for example, Sarkar & Sarkar, 2012), absence of pressure on corporate disclosure, presence of political networks that eases evasion of regulations (Khanna & Palepu, 2000) and less developed capital market and managerial market. We study the relationship between family CEO and firm performance in India which has the largest number of family firms in Asia. Study of family firms in India that evaluates the impact of family CEO on firm performance is scanty. Hence, we contribute immensely to the study of family firms by filling in the gap in knowledge about the impact of family CEO on firm performance in India, an unexplored context.

We find that family CEO has no association with firm value and family shareholding has a positive relationship with firm value when family is the major shareholder. Family shareholding has no moderating effect on the relationship between family CEO and firm value. When the family is not a major shareholder, family CEO has a negative association with firm value and family shareholding is found to be positively related to firm value. Family shareholding has a negative interactive effect on the relationship between family CEO and firm value.

The rest of the study is organised as follows: Section 2 describes the related theory and reviews the related literature. Section 3 presents the methodology. Section 4 describes the results and the final section interprets the results and discusses the implications.
2. Theoretical background and literature review

We test the relationship between family CEO and firm value from the agency theory perspective. Family firms normally employ a family member in the CEO position. (See for example Peng & Jiang, 2010) According to the PA view of agency theory, conflicts of interests may arise in a family firm between the family shareholders and a non-family professional CEO due the separation of ownership and control issue. (See for example, Jiang & Peng, 2011) A family CEO in a family firm, on the other hand, may help to reduce this problem because of the alignment of interests between the family shareholders and the family CEO. This may result in better firm performance. However, the PP agency theory viewpoint presents a tangentially opposite effect. According to this line of argument, a family CEO in a family firm may give rise to PP conflict. Because of the alignment of interests between the family CEO and family shareholders, there could be a conflict of interest between family shareholders and non-family shareholders. (See for example, Dharwadkar et al., 2000) Family shareholders may pursue their own interests at the cost of the nonfamily shareholders in a family firm. (See for example, Classens et al., 2000) Because a family CEO may place the family shareholders in a family firm in an undue advantageous position, the PP conflict may get more critical. This could pull down firm performance. (See for example, Fama & Jensen, 1983; Lemmon & Lins, 2003) To sum up, PA and PP viewpoints of agency theory suggest two extremely opposite impact of family CEO on a family firm’s performance.

Empirical results are mixed. Some works show that family CEO enhances the firm performance. (See for example, Anderson & Reeb, 2003; Villalonga & Amit, 2006) There are also evidences to believe the contrary. (See for example, Peng & Jiang, 2010; Westhead & Howorth, 2006) Various reasons and arguments are put forth by either result. (See for example, Liu et al., 2012; Peng & Jiang, 2010) According to Peng and Jiang (2010), the
relationship between family CEO and firm performance is complex. Circumstances in which the falls in the PA costs are compared with the increased costs of PP will have to be studied. This will explain why family CEO enhances firm performance or diminishes firm performance. Some researchers (See for example, Peng & Jiang, 2010; Jiang & Peng, 2011) argue that the rigorousness of PA and PP conflict depends on the institutional and legal framework of the context of study. Level of shareholders protection in a country will decide the value of family CEO. That is why, it is important to study the relationship between family CEO and firm performance in specific contexts and interpret the results in a context specific manner. Previous works cite ownership structure as one of the most important sources of PA and PP conflicts. (See for example, Lemmon & Lins, 2003; Shleifer & Vishny, 1997) Ownership concentration is widespread phenomenon all over the world. (See for example, Faccio & Lang, 2002; Laeven & Levine, 2008) Ownership concentration defines the distribution of ownership and control among large shareholders in a firm. Researchers argue that interests of investors can be protected through two major mechanisms, regulatory framework and concentrated ownership. The two mechanisms can alternate each other. (See for example, La Porta et al., 1999; Young et al., 2008) Varied levels of ownership concentration will have different effects on PA and PP conflicts. Earlier studies have documented evidence to show that value of family CEO to the family firm performance is dominated by the PA and PP conflicts. (See for example, Claessens, et. al., 2002). We study the moderating effect of family shareholding on family CEO and firm performance.

2.1 Hypotheses

We test the following hypotheses. As we see from the literature reviewed, level of ownership concentration may result in varying the nature of relationship between family CEO and firm performance. We classify the family firms into two groups; family firms in which
the family is the majority shareholder and family firms in which the family is not the majority shareholder. We study the association between family CEO and firm performance in each of these two categories of family firms.

1. Association between family CEO and firm performance will be influenced by the family ownership concentration level.
   1.a. Relationship between family CEO and firm performance will be positive in family firms where the family is the majority shareholder. Alignment of interests between family CEO and the majority family shareholders may enhance firm performance.
   1.b. Relationship between family CEO and firm performance will be negative in family firms where the family is not the majority shareholder as it may provide an undue advantage to the family shareholders. This could help family shareholders extract private benefits from the firm at the cost of nonfamily shareholders.

2. Family shareholding will interact with family CEO and impact the association with family CEO and firm performance.
   2.a. Family shareholding will have a positive interactive effect on family CEO in firms where family holds the majority of equity shares.
   2.b. Family shareholding will have a negative moderating effect on family CEO in firms where the family does not hold the majority of equity shares.

3. Methodology

3.1 Definition of family firm

Research on family firms show that cash flow rights may differ from control rights due to the effect of pyramiding and crossholding by promoters in family firms. Hence, interpreting
the results of analysis based on just the cash flow rights of family shareholders could be misleading. Previous works study equity chains encompassing both direct and indirect equity stake. (See for example, Claessens et al., 2002)

Indian data does not suffer from this issue. Disclosure of information on shareholding information by categories of shareholders is governed by Clause 40A of the Listing Agreement in India. Shareholding information is classified as promoters’ shareholding and non-promoters shareholding. Promoters’ shareholding includes data on shareholding held by both promoters and the persons acting in concert. Hence, information on insiders’ shareholding includes the share investments held by other bodies corporate in the promoters group as well. Thus, Indian data on insiders’ shareholding relates to control rights and not the cash flow rights.

Existing research on family firms define a firm as belonging to a family firm category along varied factors. Chua et al., (1999) present a review of family business definition adopted by family research studies since 1964. A firm is categorised as a family firm if
a. family holds majority of shares. (See for example, Barontini & Caprio, 2006)
b. many members from the founding family serve as directors on the board of the firm. (See for example, Rutherford et al., 2008)
c. leadership is held by a family member. (See for example, McConaughy et al., 2001)
d. control is passed on from one generation to the subsequent generations in the family. (See for example, Chrisman et al., 2003)

Most works incorporate more than a single criterion in the categorisation exercise. (Anderson & Reeb, 2003; Arosa et al., 2010, Chu, 2009) We follow this trend and use both family
ownership level and family leadership to classify a firm as a family firm. Companies Act, 1956 of India stipulates that just 26% stake in equity is sufficient to stop special resolutions from being passed by the firm. Firms with a family shareholding of 26% or above with family involvement in management should possess the ability to influence the managerial decision making process in the firm and hence may impact firm performance. Corporate governance regulations in India stipulate the requirements on the size of independent directors on the board on the basis of the position of the chairman. If the board has a non-executive non-promoter chairman, the firm can just include independent directors equal to the one-third of the total board size. In case the chairman is a promoter or an executive, the firm should have independent directors equal to 50% of the board size. Hence, the basis minimum requirement is one-third of the board should comprise of independent directors. We believe that if the board has equal of number of family directors, the family can influence the decisions of the firm. We also include firms that have the family shareholding of less than 26% with a family CEO in the family firms’ category. Firms that fulfil any one of the criteria is classified as a family firm and included in our study.

a. Firms with a median family shareholding of less than 26% and with a family CEO.

b. Firms with a median family shareholding of 26% to 50.99% with a family CEO.

c. Firms with a median family shareholding of 26% to 50.99% with one third of the board composed of family directors.

d. Firms with a median family shareholding of a simple majority of 51% or above which is sufficient to pass any ordinary resolution which is the requirement for most of the businesses of the firm.

Table 1 about here
Table 1 groups the firm-year observations studied into different family ownership ranges. Firm-year observations with a family shareholding of less than 51% and more than 51% do not drastically vary in the employment of a family CEO. Around 67% of the firm-year observations in both the categories have a family CEO.

3.2 Sample and study period

We study 288 firms with valid 1661 firm-year observations over the study period of 6 years spanning from 2009 to 2014. The sample is drawn from domestic private companies included in the NSE CNX 500 index belonging to non-financial services industry with data on study variables available for the study period. The index is a broad based benchmark on Indian capital market. The CNX 500 index represents about 96.42% of the free float market capitalisation of the stocks listed on India’s leading stock exchange, National Stock Exchange as of June 30, 2014.

Table 2 shows the industry wise distribution of the firm-year observations studied. It can be seen from the table that around 67% of the firm-year observations studies have a family CEO. Less than 50% of the firm-year observations from automobile, fertilisers & pesticides, paper and telecommunications have a family CEO. But, more than 50% of the firm-year observations from all other industries have a family CEO. This shows that family CEO is a prevalent phenomenon across all the industries.
Table 3 presents the descriptive statistics for the full sample, firm-year observations with family shareholding exceeding 51% and firm-year observations with family shareholding less than 51%. Mean values of total assets, debt employed, firm age, sales and risk level of firm-year observations with a family shareholding of less than 51% is higher than the corresponding mean levels for firm-year observations with a family shareholding of more than 51%. However, the average market value of the latter group is higher than the former.

Table 4 about here

Table 4 gives the t-test results. The analysis presented shows that the firm-year observations with a professional non-family CEO have a mean market capitalisation which is significantly higher than the firm-year observations with a family CEO. Mean value of firm age of observations with a non-family professional CEO is higher than the mean firm age of firm-year observations with a family CEO. All other variables like family shareholding, total assets, debt, sales and risk are not found to be statistically significantly different across the two groups.

Table 5 about here

Table 5 presents the correlation matrix that shows the correlations for the dependent variable, independent variable and the control variables. It can be asserted that the correlation coefficient between any of the study variables is not high enough to cause a concern.

3.3 Data
Data for the research is extracted from Centre for Monitoring Indian Economy database, ‘Prowess’.

3.4 Variables definition

This study employs a market based measure as firm performance variable. A market based measure is the result of the consensus of a large number of independent investors in the market. Hence, we prefer it over an accounting measure which is impacted by the accounting policies of the firm. In line with many of the earlier works, we use market-to-book ratio to capture the firm value. (See for example, Claessens et al., 2002)

MTB is the market-to-book ratio which is the ratio of the summation of market value of common stock, book value of debt and preferred stock to book value of assets.

FCEO is a dummy variable, equal to 1 if the firm has a family member as CEO, otherwise 0.

FS is the family ownership variable, which is measured as the proportion of promoters’ shareholding to total shares.

SIZE is the log of total assets.

DEBT is the ratio of long-term debt to total assets.

AGE measures the firm’s age since its incorporation. It is represented as the log of number of years since the firm’s incorporation.

GR measures the growth of the firm and is defined as the annual growth rate in sales.

RISK is the systematic risk of the firm.

3.5 Model

We employ hierarchical linear regression model to test if family shareholding moderates the relationship between family CEO and firm value. The hierarchical regression enters
control variables, independent variables and moderation variable in blocks. Initial models run are as follows.

\[
MTB = a_0 + a_1\text{SIZE} + a_2\text{DEBT} + a_3\text{AGE} + a_4\text{GR} + a_5\text{RISK} + \varepsilon \ldots (1)
\]

\[
MTB = a_0 + a_1\text{SIZE} + a_2\text{DEBT} + a_3\text{AGE} + a_4\text{GR} + a_5\text{RISK} + a_6\text{FCEO} + a_7\text{FS} + \varepsilon \ldots (2)
\]

\[
MTB = a_0 + a_1\text{SIZE} + a_2\text{DEBT} + a_3\text{AGE} + a_4\text{GR} + a_5\text{RISK} + a_6\text{FCEO} + a_7\text{FS} + a_8\text{FCO}\times\text{FS} + \varepsilon \ldots (3)
\]

The above models are run on three groupings of data namely the full sample which includes all the firm-year observations, firm-year observations with a family shareholding of less than 51% and firm-year observations with a family shareholding of more than 51%. Since, family firms included in the study also have a family as minority shareholders with a stake of less than 51%, we analyse the data to check out if the results for the family firms with family as minority shareholders and family firms with family as majority shareholders differ.

4. Results

Results of the basic models are presented in table 6. It can be seen from the analysis run on the full sample shows family CEO has no statistically significant association with firm value. While family shareholding has a positive relationship with firm value, it is not found to have a moderating effect on the relationship between family CEO and firm value. All control variables except growth rate are found to be statistically significant. Firm size is found to be positively associated with firm value. All other control variables which are significant, level of debt employed, firm age and risk are found to have a negative relationship with firm value.
When we segregate the data into two groups, family firms where family is the major shareholder and family firms where family is not the major shareholder, we find the results differ drastically. In case of firms where family is the major shareholder, we find that family CEO has not found to be statistically significant. Family shareholding is found to have a positive association with firm value. However, we find no evidence to show that family shareholding has moderating effect on the relationship between family CEO and firm value. When the family is not the major shareholder, the family CEO has a negative relationship with firm value. While family shareholding is not found to have any statistically significant relationship with firm value, it found to have a negative interactive effect on the relationship with family CEO and firm value. Growth rate is not found to be significant by the analyses carried out on the two groups for family firms. Level of debt employed and risk are found to be negatively associated with firm value in both the cases. Size has a positive relationship with firm value when the family is not the major shareholder, but is insignificant when the family is the major shareholder. Firm age has a negative association with firm value when the family is the major shareholder, but is not significant when the family is not the major shareholder.

Table 6 about here

Interaction effects are shown in the following figures.

Figures are about here

5. Discussion of results
We find that family CEO has no association with firm value, when the family is the major shareholder. We show that around 288 of the 500 top Indian firms included in the leading NSE CNX 500 index are family firms that belong to the non-financial services industry. If we include the family firms that belong to the financial services as well, the number will be larger. Around 67% of the family firms employ a family CEO whether the family is the major shareholder or not. Hence, market does not attach any significance to the presence of a family CEO in a family firm, when the family has controlling equity stake. However, family CEO and firm value is found to be negatively related when the family does not hold majority equity shareholding. CEO is the centre of the decision-making process in any firm and can significantly influence its decisions. That CEO can direct business decisions and assumes the most important role among the organizational actors is brought out by many earlier research works. (Minichilli et al., 2010) Appointment of a family CEO gives an undue advantage to the family when it does not have the controlling voting rights. Earlier works show that family shareholders may expropriate non-family shareholders with the help of family CEO. (See for example Villalonga & Amit, 2006) Family may indulge in interested party transactions and accumulate private benefits at the expense of non-family shareholders. Family CEO may widen the information gap between family shareholders and non-family shareholders and use the information asymmetry to their advantage. (See for example, Liu et al., 2012) Hence, family CEO in a family firm has a negative relationship with firm value when the family does not have majority equity stake.

Family shareholding has a positive association with firm value, when the firm is the majority shareholder. Family research shows that strong presence of family improves the earnings quality of family firms. (See for example, Wang, 2006) Lee (2006) argues that family shareholders are keen on the long-run survival of the firms because of their interest in
the intergenerational transfer of wealth. They implement strategies focusing on value maximization which benefit the non-family minority shareholders as well. (See for example, McVey & Draho, 2005) Most of the family businesses in India are owned by large business houses of long standing. 230 out of 288 family firms included in this study belong to large Indian business houses which are of good repute. Around 44% of the family firms with an equity stake of above 51% and 50% of the family firms with the family not as the major shareholder have a next generation CEOs leading the firms. This goes to prove that family firms have a strong concern for the reputation and intergenerational transfer of family leadership and wealth. This is positively received by the market.

We find that family shareholding has a negative interactive effect on the relationship between family CEO and firm value, when the family does not have majority shareholding. Family shareholding when considered separately is not found to be significant. Since family shareholding does not have absolute majority voting rights, family may not have significant influence over the firm’s decision making process and as a result will not be in a position to gain private benefits. However, even the less than majority shareholding of the family gains the power to impact the firm’s decision making process by virtue of its family CEO. This could provide an opportunity for the minority family shareholders to exercise undue influence on the firm through the family CEO and gain private profits. Minority shareholding of family combined with family CEO, as a result has a negative association with firm value.

To conclude, while family CEO has no association with firm value when the family is the major shareholder; family shareholding at less than majority equity stake negatively interacts with family CEO and diminishes firm value. This has an important implication for governance of family firms in India.
References

Aguilera, R., and Crespi-Cladera, R. (2012), Firm family firms: current debates of corporate governance in family firms. Journal of Family Business Strategy, 3, 66-69.

Anderson, R., and Reeb, D. (2003) Founding family ownership and firm performance: evidence from the S&P 500. Journal of Finance, 58, 1301-1328.

Arosa, B., Iturralde, T., and Maseda, A. (2010) Ownership structure and firm performance in non-listed firms: evidence from Spain. Journal of Family Business Strategy, 1, 88-96.

Barontini, R., and Caprio, L. (2006) The effect of family control in firm value and performance: evidence from continental Europe. European Financial Management, 12, 689-723.

Bhagat, R., McDevitt, A., and McDevitt, I. (2011) On improving the robustness of Asian management theories: theoretical anchors in the era of globalization. Asia Pacific Journal of Management, 27, 179-192.

Bhattacharya, U., and Ravikumar, B. (2001) Capital markets and the evolution of family businesses. Journal of Business, 74, 187-219.

Chrisman, J.J., Chua, J. H., Litz, R. (2003) A unified systems perspectives of family firm performance: an extension and integration. Journal of Business Venturing, 18, 467-472.

Chu, W. (2009) The influence of family ownership on SME performance: evidence from public firms in Taiwan. Small Business Economics, 33, 353-373.

Chua, J.H., Chrisman, J.J., and Sharma, P. (1999) Defining the family business by behaviour. Entrepreneurship Theory and Practice, 23, 19-39.

Chung, H.M., and Chan, S.T. (2012). Ownership structure, family leadership, and performance of affiliate firms in large family business groups. Asia Pacific Journal of Management, 29, 1-29.

Claessens, S., Djankov, S., and Lang, L. (2000) The separation of ownership and control in East Asian corporations. Journal of Financial Economics, 58, 81-112.

Claessens, S., Djankov, S., Fan, J., and Lang, L. (2002) Disentangling the incentive and entrenchment effects of large shareholdings. Journal of Finance, 57, 2741-2771.

Credit Suisse, (2011) Family businesses: sustaining family businesses. https://publications.credit-suisse.com/tasks/render/file/index.cfm?fileid=88ED9AE8-83E8-EB92-9D5DE4532F973AAA

Dharwadkar, R., George, G., and Brandes, P. (2000) Privatization in emerging economies: an agency theory perspective. Academy of Management Review, 25, 650-669.

Faccio, M., and Lang, L.H.P. (2002) The ultimate ownership of western European corporations. Journal of Financial Economics, 65, 365-395.

Fama, E.F., and Jensen, M.C. (1983) Agancy problems and residual claims. Journal of Law and Economics, 26, 327-349.

Gomez-Mejia, L., Nunez-Nickel, M., and Gutierrez, I. (2001) The role of family ties in agency contracts. Academy of Management Journal. 44, 81-95.

Jiang, Y., and Peng, M.W. (2011) Are family ownership and control in large firms good, bad or irrelevant? Asia Pacific Journal of Management, 28, 15-39.

Jones, G., and Rose, M.B. (1993) Family capitalism. Business History, 35, 1-16.

Khanna, T., and Palepu, K. (2000) Is group affiliation profitable in emerging markets? an analysis of diversified business groups. Journal of Finance, 55, 867-891.

Laeven, L. and Levine, R. (2008) Complex ownership structures and corporate valuations. Review of Financial Studies, 21, 579-604.

La Porta, R., Lopez-de—Silanes, F., & Shleifer, A. (1999) Corporate ownership around the world. Journal of Finance, 54, 471-518.
Lemmon, M.L., and Lins, K.V. (2003) Ownership structure, corporate governance, and firm value: evidence from the east Asian crisis. Journal of Finance, 58, 1445-1468.

Lee, J. (2006) Family firm performance: further evidence. Family Business Review, 19, 103-114.

Liu, W., Yang, H., and Zhang, G. (2012) Does family business excel in firm performance? An institution based view. Asia Pacific Journal of Management, doi:10.1007/s10490-010-9216-6.

McConaughy, D. L., Mathews, C.H., and Fialko, A.S. (2001) Founding family controlled firms: performance, risk and value. Journal of Small Business Management, 39, 31-49.

McVey, H., and Draho, J. (2005) US family-run companies – they may be better than you think. Journal of Applied Corporate Finance, 17, 134-143.

Miller, D., Le, Bretton-Miller, I., and Scholnick, B. (2007) Stewardship vs. stagnation: an empirical comparison of small family and non-family businesses. Journal of Management Studies, 45, 51-78.

Minichilli, A., Corbetta, G., and MacMillan, I. (2010) Top management teams in family-controlled companies: ‘familiness’, ‘faultiness’ and their impact on financial performance. Journal of Management Studies, 47, 205-222.

Oreland, C. (2007) Family control in Swedish public companies. Implications for firm performance, dividends and CEO cash compensation. Doctoral dissertation, Department of Economics, Uppsala University.

Peng, M.W., and Jiang, Y. (2010) Institutions behind family ownership and control in large firms. Journal of Management Studies, 47, 253-273.

Poza, E.J. (2007) Family business. New York: Thomson South-Western.

Rutherford, M.W., Kuratko, D.F., and Holt, D.T. (2008) Examining the link between familiness and performance: Can the F-PEC untangle the family business theory jungle? Entrepreneurship: Theory and Practice, 32, 1089-1109.

Sarkar, S. and Sarkar, J., 2012. Corporate governance in India. Sage publications. New Delhi.

Schulze, W.G., Lubatkin, M.H., and Dino, R.N. (2003) Exploring the agency consequences of ownership dispersion among the directors of private family firms. Academy of Management Journal, 46, 179-194.

Shleifer, A., and Vishny, R.W. (1986) Large shareholders and corporate control, Journal of Political Economy, 94, 461-488.

Shleifer, A., and Vishny, R.W. (1997) A survey of corporate governance. Journal of Finance, 52, 737-783.

Sirmon, D.G., and Hitt, M.A. (2003) Managing resources: linking unique resources, management and wealth creation in family firms. Entrepreneurship: Theory and Practice, 27, 339-358.

Villalonga, B., and Amit, R. 2006. How do family ownership, control and management affect firm value? Journal of Financial Economics, 80, 385-417.

Wang, D. (2006) Founding family ownership and earnings quality. Journal of Accounting Research, 44, 619-656.

Westhead, P., and Howorth, C. (2006). Ownership and management issues associated with family firm performance and company objectives. Family Business Review, 19, 301-306. http://dx.doi.org/10.1111/j.

Young, M.N., Peng, M.W., Ahlstrom, D., Bruton, G.D., and Jiang, Y. (2008) Corporate governance in emerging economies: a review of the principal-principal perspective. Journal of Management Studies, 45, 196-220.
Table 1
Distribution of Firm-year Observations across Different Family Ownership Ranges

| Family ownership range | Total firm-year observations | Firm-year observations with family CEO | Percentage of firm-year observations with family CEO |
|------------------------|-------------------------------|----------------------------------------|--------------------------------------------------|
| Less than 26%          | 59                            | 59                                     | 100.00                                           |
| 26% to 50.99%          | 787                           | 507                                    | 64.42                                            |
| Below 51%              | 846                           | 566                                    | 66.90                                            |
| Above 51%              | 815                           | 550                                    | 67.48                                            |
| Total                  | 1661                          | 1116                                   | 67.19                                            |
| Industry               | Total number of firm-year observations | Number of firm-year observations with family CEO | Percentage of total firm-year observations with family CEO |
|------------------------|----------------------------------------|-------------------------------------------------|----------------------------------------------------------|
| Automobile             | 137                                    | 68                                              | 49.64                                                    |
| Cement                 | 48                                     | 29                                              | 60.42                                                    |
| Chemicals              | 60                                     | 52                                              | 86.67                                                    |
| Construction           | 191                                    | 142                                             | 74.35                                                    |
| Consumer goods         | 261                                    | 185                                             | 70.88                                                    |
| Energy                 | 72                                     | 36                                              | 50.00                                                    |
| Fertilisers & Pesticides | 35                               | 12                                              | 34.29                                                    |
| Healthcare services    | 18                                     | 12                                              | 66.67                                                    |
| Industrial manufacturing | 166                             | 98                                              | 59.04                                                    |
| Information technology | 141                                   | 88                                              | 62.41                                                    |
| Media & entertainment  | 69                                     | 52                                              | 75.36                                                    |
| Metals                 | 127                                    | 94                                              | 74.02                                                    |
| Paper                  | 12                                     | 4                                               | 33.33                                                    |
| Pharmaceuticals        | 132                                    | 110                                             | 83.33                                                    |
| Services               | 77                                     | 53                                              | 68.83                                                    |
| Telecommunications     | 34                                     | 11                                              | 32.35                                                    |
| Textiles               | 81                                     | 70                                              | 86.42                                                    |
| Total                  | 1661                                   | 1116                                            | 67.19                                                    |
| Variable                          | N  | Mean       | Standard Deviation | Range     | N  | Mean       | Standard Deviation | Range     | N  | Mean       | Standard Deviation | Range     |
|----------------------------------|----|------------|--------------------|-----------|----|------------|--------------------|-----------|----|------------|--------------------|-----------|
| Market Capitalisation (rupees crores) | 1646 | 80,310.225 | 249,790.984        | 3,433,770.220 | 810 | 96,347.357 | 277,668.202        | 3,433,558.340 | 836 | 64,771.854 | 218,478.372        | 3,293,350.220 |
| Family Shareholding              | 1661 | 0.5112     | 0.1522             | 0.8786    | 815 | 0.6354     | 0.0932             | 0.3896    | 846 | 0.3916     | 0.0889             | 0.4889    |
| Total Assets (rupees crores)     | 1661 | 6,787.689  | 18,960.009         | 318,503.150 | 815 | 5,979.924 | 12,294.371         | 150,041.010 | 846 | 7,565.855 | 23,650.777         | 318,503.150 |
| Debt (rupees crores)             | 1661 | 1,848.365  | 4,909.804          | 73,904.480 | 815 | 1,581.561 | 3,745.662          | 36,479.680 | 846 | 2,105.394 | 5,805.724          | 73,904.480 |
| Firm Age                         | 1661 | 35.934     | 25.286             | 149.000   | 815 | 31.714     | 24.478             | 147.000   | 846 | 39.999     | 25.400             | 131.000   |
| Sales (rupees crores)            | 1659 | 44,637.348 | 165,228.200        | 3,711,189.300 | 813 | 34,849.174 | 74,693.925         | 1,392,694.300 | 846 | 54,043.713 | 219,145.602        | 3,710,949.900 |
| Risk                             | 1606 | 1.068      | 0.340              | 1.92      | 770 | 1.025      | 0.332              | 1.720     | 836 | 1.107      | 0.344              | 1.890     |
| Variable                      | Firm-year Observations with Family CEO | Firm-year Observations with Non-family CEO | Total                                                                 |
|-------------------------------|----------------------------------------|-------------------------------------------|----------------------------------------------------------------------|
|                               | N   | Mean      | Standard Deviation | N   | Mean      | Standard Deviation | N   | Mean      | Standard Deviation | t   | df  | p    |
| Market Capitalisation (rupees crores) | 1113 | 70,831.00 | 222,681.60       | 533 | 100,104.60 | 297,833.50        | 1646 | 80,310.22 | 249,791.00        | 2.227 | 1644 | 0.026 |
| Family Shareholding           | 1116 | 0.5102    | 0.1540           | 545 | 0.5134    | 0.1484            | 1661 | 0.5112    | 0.1522            | 0.408 | 1659 | 0.683 |
| Total Assets (rupees crores)  | 1116 | 6,288.43  | 20,589.48        | 545 | 7,810.03  | 15,049.79         | 1661 | 6,787.69  | 18,960.01         | 1.536 | 1659 | 0.125 |
| Debt (rupees crores)          | 1116 | 1,751.99  | 5,026.79         | 545 | 2,045.71  | 4,659.39          | 1661 | 1,848.37  | 4,909.80          | 1.145 | 1659 | 0.252 |
| Firm Age                      | 1116 | 32.53     | 22.14            | 545 | 42.90     | 29.56             | 1661 | 35.93     | 25.29             | 25.29 | 7.999 | 1659 | 0.000 |
| Sales (rupees crores)         | 1116 | 45,930.61 | 194,916.80       | 543 | 41,979.36 | 73,104.51         | 1659 | 44,637.35 | 165,228.20        | -0.457 | 1657 | 0.648 |
| Risk                          | 1072 | 1.08      | 0.35             | 534 | 1.05      | 0.31              | 1606 | 1.07      | 0.34              | -1.582 | 1604 | 0.114 |
Table 5
Correlation between Dependent, Independent and Control Variables

| Variable | MTB  | FCEO | FS  | SIZE  | DEBT | AGE  | GR  | RISK  |
|----------|------|------|-----|-------|------|------|-----|-------|
| MTB      | 1    |      |     |       |      |      |     |       |
| FCEO     | -.028|      |     |       |      |      |     |       |
| FS       | .253**| -.010|     |       |      |      |     |       |
| SIZE     | -.078**| -.010| -.038|     |      |      |     |       |
| DEBT     | -.348**| .067**| -.055*| .223**| 1    |      |     |       |
| AGE      | -.117**| -.162**| -.166**| .094**| .003|      | 1   |       |
| GR       | -.088**| .003| -.004| .062*| .235**| -.178**| 1   |       |
| RISK     | -.414**| .039| -.112**| .172**| .230**| -.037| .078**| 1    |

** Correlation significant at 0.01 level (2-tailed)
* Correlation significant at 0.05 level (2-tailed)

MTB: Market-to-Book Ratio
FCEO: Dummy variable assigned 1 when the firm has a family CEO, otherwise 0.
FS: Family shareholding as a ratio of total shares.
SIZE: Total assets in logarithmic form
DEBT: Long-term debt divided by total assets
AGE: Years since firm incorporation in logarithmic form
GR: Year on year growth rate of sales
RISK: Systematic risk
Table 6

Moderation Regression Analysis Results Testing the Interactive Effect of Family Ownership on the Relationship between Family CEO and Firm Value

| Independent variables | Full Sample | Firm-year Observations with Family Shareholding of 51% or more | Firm-year Observations with Family Shareholding less than 51% |
|-----------------------|-------------|-------------------------------------------------------------|-------------------------------------------------------------|
|                       | Model 1     | Model 2           | Model 3          | Model 1     | Model 2           | Model 3          | Model 1     | Model 2           | Model 3          |
| Constant              | 4.258**     | 3.998**           | 3.997**          | 5.424**     | 5.558**           | 5.515**          | 2.647**     | 2.762**           | 2.641**          |
|                       | (16.690)    | (15.529)          | (15.520)         | (10.896)    | (10.877)          | (10.730)         | (11.265)    | (11.516)          | (11.090)         |
| SIZE                  | 0.176**     | 0.184**           | 0.185**          | 0.193       | 0.124             | 0.137            | 0.154**     | 0.174**           | 0.182**          |
|                       | (2.999)     | (3.212)           | (3.216)          | (1.707)     | (1.103)           | (1.203)          | (2.759)     | (3.079)           | (3.257)          |
| DEBT                  | -2.011**    | -1.986**          | -1.987**         | -2.043**    | -1.965**          | -1.768**         | -1.814**    | -1.796**          | -1.706**         |
|                       | (-11.300)   | (-11.415)         | (-11.413)        | (-6.437)    | (-5.817)          | (-5.787)         | (-10.516)   | (-10.286)         | (-9.837)         |
| AGE                   | -0.591**    | -0.475**          | -0.476**         | -0.431**    | -0.857**          | -0.812**         | -0.135      | -0.195            | -0.174           |
|                       | (-5.370)    | (-4.304)          | (-4.306)         | (-4.317)    | (-4.049)          | (-4.046)         | (-1.268)    | (-1.816)          | (-1.638)         |
| GR                    | -0.094      | 0.135             | 0.136            | 1.620       | 1.459             | 1.455            | -1.296      | -1.269            | -1.257           |
|                       | (-0.131)    | (0.194)           | (0.194)          | (1.350)     | (1.230)           | (1.226)          | (-1.916)    | (-1.884)          | (-1.891)         |
| RISK                  | -1.463**    | -1.371**          | -1.370**         | -2.032**    | -2.044**          | -2.050**         | -0.778**    | -0.752**          | -0.720**         |
|                       | (-16.326)   | (-15.555)         | (-15.532)        | (-12.325)   | (-12.459)         | (-12.479)        | (-9.337)    | (-9.035)          | (-8.732)         |
| FCEO                  | -0.052      | -0.052            | -0.015           | -0.015      | -0.015            | -0.010           | -0.015      | -0.015            | -0.015           |
|                       | (-0.830)    | (-0.824)          | (-0.132)         | (-0.083)    | (-0.083)          | (-0.083)         | (-3.011)    | (-3.011)          | (-3.011)         |
| FS                    | 1.724**     | 1.668**           | 2.737**          | 2.120*      | 2.201             | 2.076            | 0.876       | 1.710             |                 |
|                       | (8.844)     | (4.743)           | (4.760)          | (2.201)     | (2.201)           | (2.201)          | (0.876)     | (1.710)           |                 |
| FCEO×FS               | 0.080       | 0.080             | 0.080            | 0.080       | 0.080             | 0.080            | 0.080       | 0.080             | (-3.443**)       |
|                       | (0.192)     | (0.799)           | (4.718)          | (0.192)     | (0.799)           | (4.718)          | (0.192)     | (0.799)           | (4.718)          |
| Industry dummies      | Yes         | Yes               | Yes              | Yes         | Yes               | Yes              | Yes         | Yes               | Yes              |
| R                     | 0.518       | 0.550             | 0.550            | 0.564       | 0.581             | 0.582            | 0.511       | 0.520             | 0.538             |
| R²                    | 0.268       | 0.303             | 0.303            | 0.318       | 0.338             | 0.338            | 0.261       | 0.270             | 0.289             |
| ΔR²                   | 0.035       | 0.000             | 0.000            | 0.020       | 0.020             | 0.001            | 0.009       | 0.009             | 0.019             |
| Adjusted R²           | 0.261       | 0.295             | 0.295            | 0.301       | 0.320             | 0.320            | 0.249       | 0.257             | 0.275             |
| F                     | 38.789**    |                   | 19.388**         |                   |                   | 22.337***       |                   |                   |                   |
| ΔF     | 39.686** | 0.037 | 11.368** | 0.639 | 5.023*** | 22.260** |
|--------|----------|-------|----------|-------|----------|----------|

Dependent variable: MTB

** Significant at 0.01 level
* Significant at 0.05 level

MTB: Market-to-Book Ratio
FCEO: Dummy variable assigned 1 when the firm has a family CEO, otherwise 0.
FS: Family shareholding as a ratio of total shares.
SIZE: Total assets in logarithmic form
DEBT: Long-term debt divided by total assets
AGE: Years since firm incorporation in logarithmic form
GR: Year on year growth rate of sales
RISK: Systematic risk
Figure 1.a
Full Sample: Interaction Effect of Family Shareholding on the Relationship between Family CEO and Firm Value

Figure 1.b
Firm-year observations with Family shareholding ≥51%: Interaction Effect of Family Shareholding on the Relationship between Family CEO and Firm Value

Figure 1.c
Firm-year observations with Family shareholding ≥51%: Interaction Effect of Family Shareholding on the Relationship between Family CEO and Firm Value
