

Earnings Management and Entrenchment: Evidence from India

By

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Abstract

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Purpose: The research examines the impact of family ownership on the entrenchment of the minority shareholders in India

Design/Methodology/Approach: The research has been carried out using more than 13,000 firm year data belonging to public listed family firms of India, for a period of 6 years. We have used fixed effects regression with both period and cross-sectional effects.

Findings: Our study shows that family firms practice of both accrual and real activity earnings management with a motive of entrenchment of minority shareholders. The entrenchment is higher when the family shareholding is above 75% and when the family holding is below 51% we did not find any support for the entrenchment, Indicating higher family control leads to higher entrenchment.

Research limitations/implications: Since family firms are heterogeneous, the findings of the study might not be applicable to other regions.

Practical implications: The findings on the entrenchment will be useful to the policy makers, and regulators in designing rules and regulations to protect the interest of the minority shareholders

Keywords: Earnings Management, Entrenchment, Family Firms

Introduction

A company's financial statements provide critical information used by various stakeholders such as investors, lenders, employees, suppliers, customers, government, and regulators for decision-making purposes. The decisions taken by stakeholders based on the accounting information will be informed if the information provided in the financial statements is true and fair. In the past decade, there have been many corporate accounting scandals across the globe ranging from Enron Inc., WorldCom, Satyam Computers Ltd., etc., resulting in an erosion of confidence in the accounting information provided by the companies. This has resulted in questioning the disclosure practices of companies.

Financial statements can be prepared either on an accrual or cash basis. In most countries, the companies' financial statements are prepared based on the accrual principle. The accrual principle is defined by the Financial Accounting Standards Board (FASB) as "the

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financial effects on equity of transactions and other events and circumstances that have cash consequences for the entity in the periods in which those transactions and events and circumstances occur rather than only in the periods in which cash is received or paid by the entity." The actual basis of accounting has been considered superior and value-relevant (Dechow et al., 2010) to its counterpart cash-based accounting, where transactions are recorded only when the entity receives the cash.

The accrual accounting system is the basis for earnings management, as the firm's managers can exercise their discretion while recording business transactions. The practice of earnings management techniques defeats the primary purpose of accounting. It is defined as "purposeful intervention in the external financial reporting process to obtain some private gains" (Schipper, 1989).

Earnings management could be a precursor to more severe illegal and fraudulent reporting activities (Treadway, 1987). According to Jensen (2005), managers of the company want to increase the opacity of information so that a higher company valuation can be achieved. Hence, they engage in earnings management. Apart from the above, managers of the organization indulge in earnings management for other reasons as well, such as higher compensation, higher valuation of company's shares, fulfillment of debt covenants, avail favorable rebates and exemptions from the government, higher pricing of equity during initial public offers, etc.

The research in the area of earnings management (Fan & Wang, 2002; Haw et al., 2004) at the country level and cross-country level show that the ownership structure of the firm has a significant impact on the quality of financial reporting due to the influence of insider or owner (Coffee, 2005; Sarkar et al., 2013). It has been further observed that globally, most businesses are owned by the founders and founder families (through concentrated ownership). In most cases, family members hold key managerial positions (Bennedsen, et al., 2015). Even in a capitalist country like the United States of America, most businesses (Du Pont, Ford Motors, Walmart, etc.) are controlled by families though not wholly owned by them. In developing countries, family business ownership is the norm (La-Porta, et al., 1999). When the firm has a high degree of family ownership, it is observed that the objectives of the firms are different from that of publicly held businesses, as the majority of the family wealth is concentrated in one business and family firms assign significant importance to noneconomic factors like socioemotional wealth, stewardship, family values, traditions, etc.

In India, the majority of businesses are controlled by families. Family firms are the backbone of the Indian economy as they constitute almost all the Industrial output and significant contributors to Gross Domestic Product (Ward, 2000). Indian family firms come in all sizes. For instance, in India, there are more than 60 lakhs of small-scale industries with less than a hundred employees and a net worth of less than \$ 500,000. At the same time, there are large business groups such as Adanis, Ambanis, Bajaj, Birlas, Tatas, etc., with a net worth of more than a few billion dollars, controlled by families. Indian family firms are influenced by the Hindu Undivided Families (HUF) culture, where three generations live together, and wealth is created for the family and not for the individual (Ward, 2000). Even though traditions are changing, the values remain within family firms. The national, and international culture and institutional environment also influence Indian family culture. The influence of these factors results in creating businesses with values specific to a particular country. For instance, before 1991, the success of a business is primarily determined by its relationship with the government. Generally, business market share increased by obtaining licenses in a

bureaucrat's office (Timberg, 2014). The promoters invest roughly twenty to eighty percent of capital, and the government-owned financial institutions invest the rest in the form of debt (Ward, 2000). This resulted in the creation of family business conglomerates and the pyramid structure of family firms. Hence, the Indian family firms differ from those of other countries, providing a unique setup to study and understand.

Family firms practice earnings management with different motives. Compared to non-family firms, family firms plan their business strategies with a longer time horizon and a conservative approach. Owing to the conservative approach, earnings management practices are lower in family firms and prefer accrual-based earnings management than real activity earnings management. Generally, real activity earnings management is riskier in the long run (Roychowdhury, 2006). Gomez-Mejia et al. (2011) confirmed that family firms, apart from maximization of their shareholders' value, try to maximize the family's socioemotional wealth and attempt to entrench wealth from minority shareholders (Chen, et al., 2009). The entrenchment should result in higher earnings management. Hence, family firms practice both higher and lower earnings management. In the case of earnings management by Indian family firms, Sarkar et al. (2013) found evidence for the practice of opportunistic earnings management, and they observed that higher ownership by family results in higher opacity of financial statements, which leads to greater scope for the practice of both accrual and real activity earnings management.

In this research, we investigate the entrenchment of wealth by the family using earnings management techniques. Our study indicates that family firms practice both accrual-based and real activity earnings management with a motive of entrenching wealth from the minority holders when the family ownership is above 75%. When family ownership is lower, we did not find any evidence for the practice of earnings management with an entrenchment motive.

The rest of our paper is organized as follows. Section two will discuss the literature review and the hypothesis development in section three. Section four will present the data and the methodology, and section five will discuss the results and analysis, and finally, section six will conclude the study

Literature Review

Earnings management in family ownership has been researched for the last two decades (Warfield et al., 1996; Ali et al., 2007; Miller & Breton-Miller, 2006), and it is observed that concentrated ownership sometimes leads to the practice of earnings management and vice versa. Researchers (Prencipe et al., 2008; Salvato&Moore, 2010) show that concentrated ownership settings lead to objectives other than shareholders' wealth maximization by practicing earnings management. Hence, it is imperative to study the earnings management practices of family firms separately, as clubbing family firms with diversely held firms could lead to erroneous results.

Separation of ownership from management has always been the center of research in accounting, yet family firms were left out of it (Salvato&Moore, 2010). Even in family firms' literature, accounting does not sound familiar, and researchers have concentrated mainly on succession planning and conflict (Smyrnois et al., 2003). Existing research on family firms and accounting (Villalonga& Amit, 2006; Chen et al., 2015; Prencipe et al., 2008; Siregar& Utama, 2008) indicates that family involvement in management has an

impact on the accounting practices of business. Moores (2009) notes, "the purpose of accounting is to provide owners with a measure of changes in wealth takes a special meaning when the ownership is concentrated in the hands of a founding and controlling family."

Consistent with the above explanations, Warfield, et al. (1996) reported lower discretionary accrual, greater earning informativeness, and lower persistence of transitory components for Standard & Poor (S&P) 500 family firms. Anderson & Reeb (2003) analyzed the financial performance of S&P 500 family firms and concluded that family owners have a longer investment horizon than other stakeholders. The benefits of accelerating timely information, such as trading profits, are less important to family owners. Ali et al. (2007) studied S&P 500 firms. They found that family firms report better quality earnings and are more likely to warn investors of the magnitude of bad news compared to non-family firms. They also found that family firms with the founder as the CEO exhibit better disclosure practices. They further note that family firms have more analyst following than non-family firms indicating higher confidence displayed by analysts in family firms. Tong (2008) studied reporting practices of family firms that are part of the S&P 500 and concluded that financial reporting by family firms is of better quality than non-family firms and is consistent with long-term investment horizon. They also note that family firms experience a concern for reputation, which leads to better monitoring of managers and lower opportunistic extraction.

Researchers found evidence supporting the 'entrenchment hypothesis and family ownership' leading to lower quality of accounting and disclosures. Ball & Shivakumar (2005) studied the private limited companies of the United Kingdom (UK) and concluded that earnings quality is lower for private firms due to different market demands, lower regulations on accounting standards, auditing, and taxes. They found timely loss recognition is substantially less prevalent in private companies than in public companies. Yoe et al. (2002) studied family firms listed on the Singapore stock exchange. They observed that earnings would only sometimes increase with the increase in managerial ownership, as suggested by previous research (Warfield et al., 1996). The above scenario occurs only in firms where managerial ownership is lower and vice versa. Ho & Wang (2001) studied family firms listed in Hong Kong and found that the active involvement of families in the management of firms results in lower asymmetry between managers and owners. This subsequently results in lower demand for information leading to lower disclosures by family firms and lessened control on managers of the firms. Anderson & Reeb (2003) also pointed out that family firms are more likely to appoint family members to managerial positions, which lowers the reliability of their information to financial markets.

With respect to earnings management practices in family firms, the literature provides mixed evidence. Kim & Yi (2006) studied publicly and privately held Korean family firms and documented a direct relationship between ownership structure and earnings management. They provide evidence for an increase in earnings management with an increase in ownership. They also documented a higher degree of earnings management among group-affiliated firms and also for publicly listed firms. Their results indicate that group affiliation provides more scope for earnings management activity, and the stock market listing also incentivizes engaging in opportunistic earnings management. Liu & Lu (2007) studied the earnings management practices of Chinese firms and found strong support for conflict between controlling and minority shareholders, resulting in earnings management with a motive of tunneling the resources. Chen et al. (2009) researched the use of dividends as a measure of tunneling funds. They found a positive relationship between ownership, dividends, and earnings management, indicating that dividends in emerging markets are not

just used for signaling; they are also used to tunnel funds to control firm owners. Yang (2010) examined Family firms in Taiwan and observed a positive relationship between earnings management and family ownership with a possible objective of expropriating minority shareholders. They also noted that non-family CEOs in family firms engage in higher earnings management. Chi et al. (2015) examined the relationship between family firms, earnings management, and corporate governance with respect to Taiwan. They recorded that earnings management increases with the involvement of the family. They also recorded that firms wherein the CEO is chairman of the board result in higher opportunistic earnings management.

Contrary to the above, family involvement also led to a reduction in earnings management practices. Prencipe et al. (2008) studied the involvement of family and earnings smoothing in family firms using R&D cost capitalization for Italian firms. They record that family firms are less sensitive to income-smoothing motives than non-family firms. Prencipe & Bar-Yosef (2011) analyzed the relationship between board independence and earnings management using the Italian family firms' data. Their results indicated that the relationship between family firms and earnings management is weaker compared to non-family firms. They further documented that when the firm's CEO is a family member, earnings management practices were coming down, indicating the positive effect of family in reducing earnings management. Allouche, et al. (2008) and Alcleitner et al. (2014) studied the intensity of real activity earnings management and accrual-based earnings management in a family firm setting with respect to Japan and Germany. They found that family firms indulge in lower accrual-based and real activity earnings management levels. With respect to the comparison between accrual-based earnings management and real activity earnings management, family firms indulge in a lower degree of real activity earnings management. This is consistent with the long-term sustainability view of family firms. Martin et al. (2016) examined the relationship between family firms and earnings management with respect to US family firms using S&P 500 data. They documented evidence for a lower degree of earnings management in comparison to non-family firms. They also recorded that the effect of family firms on earnings management varies with size, CEO entrenchment, and firm's capital structure.

One interesting observation from the above discussion of family firms and earnings management literature is that most research reporting a favorable influence of family in reducing earnings management practices are from Western and European countries. In contrast, research concerning Asian families has supported the entrenchment of wealth from minority shareholders.

With respect to Indian family firms, Sarkar et al. (2013) examined listed family firms and found a nonlinear relationship between insider control and earnings management. Insider control was found to reduce income smoothing up to a point beyond which the entrenchment effect begins. They also showed that group affiliation had an adverse effect on earnings management when insider shareholding exceeded the limit of 26%. Further, they also noted that ownership opacity influences earnings management in a significant way. Higher opacity leads to higher earnings management.

Hypothesis Development

Agency theory (Jensen & Meckling, 1976) posits that under an asymmetric information environment, managers have the incentive to expropriate company owners. However, the theory was proposed for widely held corporations where business owners are separated from business managers. Family firms are different from widely-held corporations.

Anderson et al. (2003) note that family firms have undiversified holdings, take an interest in the management of business and desire to pass the business to the next generation. This results in aligning the goals of managers and owners of the business, resulting in lower levels of agency problems. The degree of alignment of interest increases with the increase in family holding (Sánchez-Ballesta & García-Meca, 2007).

However, the increased ownership and interest of concentrated shareholding results in a different agency problem (Johnson et al., 2000) between majority shareholders (family) and minority shareholders. Salvato & Moores (2010) noted the risk of wealth expropriation by family firms at the expense of minority shareholders. This is supported in countries like France, Korea, and China. Prencipe et al. (2008) note that the problem of family entrenchment is more significant than that of non-family managers' expropriation.

Families tend to exercise their control through complicated pyramid structures, which results in differential ownership and cash flow rights (Bertrand et al., 2002). Separation of ownership rights from cash flow rights induces the owner-manager to indulge in the ferreting of resources, which results in earnings management (Yang, 2010). Apart from confirming the entrenchment hypothesis, researchers (Yoe et al., 2002; Ball & Shivakumar, 2005) have observed that family firms generally have lesser independent boards and lower corporate governance disclosures (Ali et al., 2007).

The positive effect of family firms in reducing earnings management and improvement of disclosures have also been reported (Warfield et al., 1996; Anderson & Reeb, 2003; Tong, 2008), but they are majorly with respect to western family firms. With respect to Asian family firms majority of the studies have reported opportunistic behavior (Kim & Yi, 2006; Liu & Lu, 2007; Chen et al., 2009). Hence, we formulate our hypothesis as follows

H₁: Family firms practice earnings management to entrench wealth from minority shareholders of the firm.

Data And Methodology

The requisite data were collected from the Centre for Monitoring Indian Economy (CMIE) Prowess database. Various researchers have used this database (Bertrand et al., 2002; Pennathur et al., 2012; Sarkar et al., 2013; Saravanan et al., 2016). We have collected data for six years from 2016-2021 for all companies listed in the Bombay Stock Exchange (BSE), India. We have applied the following filters to clean the data

1. We have excluded firms engaged in banking, insurance, and other financial activities as they are governed by various statutory Acts other than Indian Companies Act 2013. Besides, the financial reporting style and format are different.
2. We also excluded firms which are merged/ de-merged/ acquired/ vanished/ de-listed during the study period.
3. As the proxies for accrual-based earnings management are calculated individually for each industry in every year, we stipulated a threshold level of 10 observations for each industry year.
4. Following the standard practice, we have winsorized our sample for extreme value by removing observations from the first and the ninety-nine percentile.

After the above iteration procedure, our total data points consist of 13,843 firm years belonging to 42 industries as per two-digit NIC codes. Further, we have 10,797 firm

years of family firms, and the rest were of non-family firms. Table number 1 below presents the characteristics of our data,

Table 1 *Data Characteristics*

Sl.no	Year	Numberoffirm years	Number of familyfirms	NumberofNon- familyfirms
1	2016	2089	1625	464
2	2017	2054	1577	477
3	2018	2409	1872	537
4	2019	2448	1914	534
5	2020	2438	1914	524
6	2021	2405	1895	510
	Total	13843	10797	3046

Accrual-Based Earnings Management Proxy

Francis et al. (2005) state that the quality of accruals is most accurately captured by the model developed by Dechow&Dichev (2002) (hereafter referred to as the DD model), where accruals of working capital are modeled as a function of current, past and future operating cash flows. DD model is based on the notion that regardless of the intent of managers (opportunistic or informativeness) quality of accruals is affected by measurement errors (Francis et al., 2005). However, the DD model comprehensively captures current accruals but has a lacuna in measuring non-current accruals and realizing cash flows. The model proposed by Jones (1991) (hereafter referred to as the Jones model) captures both current and non-current accruals. Wherever accruals are not explained by a limited set of fundamental factors considered in the model, the Jones model considers accruals as abnormal, resulting in a higher degree of Type-I error (Dechow et al., 2010). Francis's model was the improvised version of the DD model. She incorporated the intuitive drivers of firm value like revenue growth and property, plant, and equipment as proposed by Jones.

Francis model can be represented as follows:

$$TCA_{j,t} = \alpha_0 + \alpha_1 CFO_{j,t-1} + \alpha_2 CFO_{j,t} + \alpha_3 CFO_{j,t+1} + \alpha_4 \Delta REV_{j,t} + \alpha_5 PPE_{j,t} + \varepsilon_t$$

Where,

$TCA_{j,t} = \Delta CA_{j,t} - \Delta CL_{j,t} - \Delta CASH_{j,t} + \Delta STDEBT_{j,t}$ =Total current accruals for *j*th firm in year *t*

$CFO_{j,t}$ = Cash flow from operating activity for *j*th firm in year *t*

$\Delta CA_{j,t}$ = Change in current assets between year *t* and *t-1* for *j*th firm

$\Delta CL_{j,t}$ = Change in current liabilities between year *t* and *t-1* for *j*th firm

$\Delta CASH_{j,t}$ = Change in cash position between year *t* and *t-1* for *j*th firm

$\Delta STDEBT_{j,t}$ = Change in short term debt between year *t* and *t-1* for *j*th firm

$\Delta REV_{j,t}$ = Change in revenue between year *t* and *t-1* for the *j*th firm

$PPE_{j,t}$ = Property Plant and Equipment scaled by total assets for the *j*th firm in year *t*

Family Firms

Following our definition of family firms, we have classified our sample firms into family and non-family. A firm is considered a family firm if it has more than 26% shareholding and family members hold an influential position in managing business affairs. In order to measure the influence of family in their business, we have used their equity

holding. It acts as a proxy for the interest and control exercised by them. It is expected that when family equity holding is high they have a higher level of interest.

Real Activity Earnings Management Proxy

Roychowdhury (2006) developed proxies for capturing real activity earnings management by companies. In our current work, we used proxies developed by Roychowdhury (2006) for measuring the practice of real activity earnings management. Country-specific settings have no impact on proxies. Accordingly, the following three measures of real activity earnings management were used.

Abnormal cash flows from operation: This captures the use of lenient credit terms, discounts, etc., to boost sales of the company. Using such means should result in a temporary increase in sales, but abnormal sales should disappear when the firm restores to its normal terms. Current abnormal sales should boost current period earnings (assuming the firm will have a positive profit margin on sales). However, it should also result in lower cash flows in the current period.

Abnormal production cost: The firm's earnings could be improved by producing more units—higher production results in lower fixed production cost per unit and higher margin for the firm. However, the above argument holds true until the marginal cost increase does not offset the reduction in fixed production cost.

Abnormal discretionary expenses: Reducing discretionary expenses, such as R&D, advertising, etc., is relatively easier to improve earnings. Through this technique, firms improve their current earnings at the cost of future cash flows.

Other two measures of real activity earnings management namely, discretionary cost of goods sold and discretionary inventory were not considered in our study as discretionary production cost includes the same.

After developing the proxies for real activity earnings management, we have developed two comprehensive measures of real activity earnings management based on Zang (2012).

1. $REM_1 = (-1 \times Abnormaldiscretionaryexpenses) + Abnormalproductioncost$
2. $REM_2 = (-1 \times Abnormaldiscretionaryexpenses) + (-1 \times AbnormalCFO)$

These two comprehensive measures were developed for easy interpretation.

Dependent Variable

Absolute Value of Discretionary Accruals:

Our dependent variable is the absolute value of discretionary accruals. Discretions accruals are calculated using the Francis model (2005), as described earlier. The absolute value of discretionary accruals was used by Sarkar, et al., (2008) and Yang (2010).

Absolute Real Activity Earnings Management:

The absolute values of REM_1 and REM_2, calculated earlier, have been used as a proxy for the practice of real activity earnings management.

Independent Variables Ownership

Ownership has been measured as the percentage of family shareholding. If the family firm practices earnings management with a motive to entrench minority shareholders, a positive relationship between ownership and earnings management is expected.

H Ownership:

Previous research (Sarkar, et al., 2013) indicates that higher entrenchment occurs when the family holds a significant stake. This is measured as a binary variable coded as 1 if family ownership is above the third quartile or 0. We expect a positive relationship between higher shareholding and earnings management (Sarkar et al., 2013).

L Ownership:

A reduced entrenchment level occurs when ownership is less than the threshold of 51% (Sarkar, et al., 2013). We have created a binary variable coded as 1 if family ownership is less than the first quartile or 0. We expect a negative relationship between lower shareholding and earnings management.

Auditors:

Firms are subject to higher monitoring when they practice higher levels of accrual-based earnings management (Cohen & Zarowin, 2010; Zang, 2012). We have used the engagement of the big three audit firms as a proxy. It is a binary variable coded as 1 if the external auditors are from Big three audit firms, otherwise 0.

Litigation:

Literature (Cohen & Zarowin, 2010; Zang, 2012) suggests that a firm that is a member of a litigation-prone industry indulges in higher levels of real activity earnings management. It is a binary variable coded as 1 if the firm belongs to the litigation-prone industry or 0.

Control Variables

We have controlled for the size using a natural log of sales (LNS), for growth using the price-to-book ratio (PB), and for performance using ROA.

Our model for analyzing earnings management practices is as follows

$$EarningsManagement_{i,t} = \alpha_0 + \beta_1 Ownership_{i,t} + \beta_2 HOwnership_{i,t} + \beta_3 LOwnership_{i,t} + \beta_4 Auditors_{i,t} + \beta_5 Litigation_{i,t} + \beta_6 SALES_{i,t} + \beta_7 PB_{i,t} + \beta_8 ROA_{i,t} + \varepsilon_t$$

We have used cross-sectional fixed effects and period fixed effects due to the presence of cross-sectional and temporal variations.

Analysis

Table 2 Descriptive statistics

Sl.no	Variable	Mean	Median	Standard Deviation	Range
1	Discretionary Accruals	-0.0071	-0.0039	0.1907	2.8871
2	REM_1	-0.0617	-0.09272	0.7583	12.6854
3	REM_2	-0.0100	-0.0060	0.2949	11.4181
4	Debt Equity (Times)	1.7497	0.6200	9.2534	398.75
5	Long-term Debt Proportion (%)	34.32	25.54	34.86	100
6	Interest (₹ Mn)	423.6096	43.9500	1731.272	34957.40
7	Interest/EBIT (Times)	0.1567	0.1503	6.2942	0.99
8	Family shareholding (%)	52.990	52.93	14.30	73.16
9	Sales (₹ Mn)	11469.93	1691.5	84717	4013020
10	PB (Ratio)	1.99	0.87	6.97	358.33

It can be observed from the above table that the mean and median of discretionary accruals are close to zero. However, we could observe a significant standard deviation and range, which indicates the practice of accrual-based earnings management. With regard to real activity earnings management, consistent with our findings in the previous hypothesis, we could observe a higher mean of REM₁

compared to REM₂. The standard deviation and range of REM₁ are also higher than REM₂, which indicates the practice of cost-based real activity earnings management. Family firms' average debt-equity ratio is 1.74, and the median is 0.62. This could be due to industry-wise differences. The proportion of long-term debt in the total debt is 34%, and the median is 26%, indicating higher borrowings through short-term debt. The mean and median family shareholding is 53 percent. This indicates that Indian family firms prefer to hold a clear majority. Average and median sales and price-to-book ratio display a significant deviation. This indicates the presence of industry and firm wise differences.

We present below the correlation matrix of variables considered.

Table 3 *Correlation Matrix*

	DTA	REM_1	REM_2	DE	ICR	LT/TB	ROA(+1)	LNS	PB	HLD
DTA	1	0.041	0.094	0.001	-0.079	0.046	0.08	0.033	0.015	0.001
REM_1		1	-0.088	-0.006	0.042	-0.09	0.042	0.144	-0.027	-0.003
REM_2			1	0.015	0.017	0.008	-0.103	-0.027	-0.039	-0.033
DE				1	0.152	0.057	-0.038	0.043	0.129	0.017
ICR					1	0.069	-0.183	0.166	-0.049	-0.009
LT/TB						1	-0.036	0.094	0.025	-0.015
ROA(+1)							1	0.080	0.017	0.041
LNS								1	0.009	0.002
PB									1	0.062
HLD										1

It could be observed from the above table that none of the variables are correlated with a value greater than 0.15. This clearly indicates the absence of multicollinearity among variables. Accordingly, we have proceeded with regression analysis.

Regression Results

The table below presents the result of ownership and entrenchment.

Table 4 *Ownership and the Entrenchment of Wealth from Minority Shareholders*
Dependent Variable: Absolute Value of Discretionary Accruals

Variable	Coefficient	Standard Error	T-Stat
Constant	0.2178***	0.0144	15.0691
Ownership	-0.0003*	0.0002	-1.7647
H*Ownership	0.0009*	0.0005	1.8714
L*Ownership	-0.0001	0.0001	-0.8271
Auditors	0.0074	0.0066	1.1210
Litigation	-0.0093***	0.0035	-2.6113
LNS	0.0125***	0.0008	15.545
PB	0.0012***	0.0003	3.5974
ROA	-0.0036	0.0154	-0.2331
Adj. R Square	0.0755		

Notes: Ownership is the percentage of shareholding, H*Ownership is an interactive variable, it is calculated as Ownership*H Ownership, L*Ownership, is an interactive variable, it is calculated as Ownership*L Ownership, Auditors is a binary variable, which is coded as 1 if the auditors of the firm belong to big three audit firms, else 0, Litigation is a binary variable, which is coded as 1, if the family firm is a member of a litigation prone industry, else 0, LNS is the natural log of sales, PB is the price to book ratio and ROA is the return on assets for the company. The above regression has been estimated using the fixed effects model with both period and cross-sectional fixed effects. We have used White's robust standard errors.

*** Significant at 1% level of significance, ** significant at 5% level of significance, and * significant at 10% level of significance.

It could be observed from the above table that family shareholding is negatively related to earnings management indicating family firms practice lower levels of earnings management. However, when family shareholding is in the bracket of the top quartile, they practice accrual-based earnings management with the motive of entrenching minority shareholders. Our finding aligns with Sarkar et al. (2013). Contrary to the above, when family shareholding is in the bracket of the bottom quartile, there is less motive for entrenching minority shareholders. This relationship is not significant.

Auditor engagement from the big three audit firms is not curtailing accrual-based earnings management practices. Contrary to the above, firms belonging to litigation-prone industries

practice lower levels of earnings management than that of others. Sales and the price-to-book ratio are significantly associated with earnings management. This shows that larger firms and firms experiencing higher growth indulge in higher levels of earnings management.

Next, we will present the results for the practice of real activity earnings management with the motive of entrenching minority shareholders.

Table 5 *Ownership and the Real Activity Earnings Management*
Dependent Variable: ABS (REM_1) and ABS (REM_2)

Variable	ABS(REM_1)			ABS(REM_2)		
	Coefficient	Standard Error	T-Stat	Coefficient	Standard Error	T-Stat
Constant	0.7235	0.0769	9.4047	0.1456***	0.0148	9.8299
Ownership	0.0022*	0.0013	1.6986	0.0041*	0.0021	1.9523
H*Ownership	0.0010**	0.0004	2.2033	0.0007*	0.0004	1.7236
L*Ownership	-0.0007	0.0009	-0.7895	0.0001	0.0001	0.7708
Auditors	-0.0889***	0.0298	-2.9748	-0.0018	0.0066	-0.2816
Litigation	-0.0703***	0.0215	-3.2624	0.0047	0.0042	1.1207
LNS	-0.0172***	0.0038	-4.5294	-0.0052***	0.0008	-6.5847
PB	0.0005	0.0011	0.0479	0.0027***	0.0006	4.1297
ROA	0.0198	0.0226	0.8771	0.0145*	0.0088	1.6456
Adj. R Square	0.0476			0.0276		

Notes: Ownership is the percentage of shareholding, H*Ownership is an interactive variable, it is calculated as Ownership*H Ownership, L*Ownership, is an interactive variable, it is calculated as Ownership*L Ownership Auditors is a binary variable, which is

coded as 1, if the auditors of the firm belong to big three audit firms, else 0, Litigation is a binary variable, which is coded as 1, if the family firm is a member of a litigation prone industry, else 0, LNS is the natural log of sales, PB is the price to book ratio and ROA is the return on assets for the company. The above regression has been estimated using the fixed effects model with both period and cross-sectional fixed effects. We have used White's robust standard errors.

*** Significant at 1% level of significance, ** significant at 5% level of significance, and * significant at 10% level of significance.

It could be observed from the above table that our model explains 4.76 percent and 2.76 percent with regard to REM_1 and REM_2, respectively. Family shareholding is positively associated with both ABS (REM_1) and ABS(REM_2), indicating that they indulge in revenue- and cost-based

real activity earnings management to entrench wealth from minority shareholders. When the family shareholding is in the bracket of the top quartile (H*OWNERSHIP), they practice real activity earnings management. The motive for the same is the entrenchment of wealth from minority shareholders. However, when the family shareholding is in the bracket of the bottom quartile, there is less motive for entrenching the minority shareholders. However, this relationship is not significant.

Contrary to our expectations, the engagement of auditors from the big three audit firms and membership in the litigation-prone industry reduced the practice of cost-based real activity earnings management. However, no such effect was observed regarding revenue-based earnings management.

Sales were negatively related to both ABS (REM_1) and ABS (REM_2), indicating lower income levels increasing real activity earnings management. The price-to-book ratio is positively associated with ABS (REM_2), indicating that growth firms indulge in higher revenue-based income-increasing earnings management. The positive association between ROA and ABS (REM_2) showed the practice of revenue-based real activity earnings management, which could improve current-year performance. However, no such relationship exists regarding cost-based real activity earnings management.

From the above analysis, the following interesting findings emerged. Family firms entrench wealth from minority shareholders by practicing a higher level of real activity-based earnings management. When the family shareholding is in the higher bracket (75 percentile and above), they tend to practice earnings management (real and accrual) with the intention to expropriate wealth from minority shareholders. But, we could not find any support for lower entrenchment levels amongst the firms where the family holds a lower stake. This finding is contrary to Sarkar et al. (2013), where they have indicated a nonlinear U-shaped relationship between ownership and

earnings management. Our analysis also indicates that cost-based earnings management is the preferred technique by family firms over revenue-based earnings management. One plausible reason for the same could be a higher opacity associated with cost-based earnings management.

Conclusion

In this study, we have investigated the motives for the practice of earnings management by family firms. Earlier studies on the use of earnings management for entrenchment has produced mixed results. Our study indicates that the major motive for the practice of earnings management was the entrenchment of wealth from minority shareholders using both the earnings management techniques (Accrual based earnings management and Real activity earnings management). Further, we have observed that when family shareholding is higher (75th percentile and above) higher level of entrenchment happens by practicing both methods of earnings management. Our findings are in line with Sarkar, et al. (2013), who documented those higher levels of entrenchment happens with increase in family shareholding. At the same time, we could not find any support for lower level (25th percentile and below) entrenchment with lower levels of family shareholding. This can be viewed as a support for our analysis provides support for Type-II agency theory, where concentrated owners opportunistically entrench minority holders.

Our findings are useful to policy makers, regulators and investors as it throws light on the possibility of the entrenchment by the family owned businesses. Policy makers and Regulators should be mindful of the same and better governance and monitoring needs to be exercised for controlling the entrenchment of the minority shareholders. Investors need to vary of the possible entrenchment before making the investment decisions.

Our study is subject to the following limitations. The study was carried out using the Indian data and since the family firms around the world are heterogeneous generalizing the findings might not be possible. Future studies can address the same by studying the cross-country data. The earnings management can be viewed as an indirect measure of entrenchment and further studies can be carried out using the direct measures of the same.

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