Available online at http:// www.ijbms.org

International Journal of Business and Management Sciences
Volume 02(01), 2021

Real Earning Management in Family Firm: A Case Study of Pakistan Context

Shah Hassan[1], Umair Ahmed[2], Dr. Naveed[3], Muhammad Sohail Khalil[4]

Keywords:

Real Earnings Management, Family Firm, Non-Family Firm, Discretionary Expenses, Abnormal production cost

ABSTRACT

The study investigates the real earning management and its relationship with family firms in the Pakistani context. Family business and non-family business must have different impacts on the earnings of a firm. To investigate abnormal cash flows, abnormal Discretionary expenses and abnormal production cost is selected as dependent variables while Size of the firm, return on assets, growth, leverage ratio and firm age were selected as independent variables. For analysis descriptive statistics, correlation Metrix and regression were used for the data of 30 Pakistani firms selected from the Pakistan stock exchange. The time duration for the study was from 2015 to 2020. The study concludes that family firms are strongly associated with non-family firms and earning management is essential for both types of firms for future survival.

INTRODUCTION

Earning management is a purposeful intervention in external financial reporting to obtain some private gain. Earning management occur when manager use judgment in financial reporting and structuring transaction either mislead some stakeholder about the underlying economic performance of the company. Such intervention may be done to take advantage of the opportunity. A family firm occupation is a valuable business where the making of corporate-level decisions can be affected by the several family generations which are related to each other by marriages and by blood. They all are close to each other and known due to their ownership.

1 Lecturer Qurtuba University of Science & IT, Peshawar (shahhassan445@gmail.com|+923139920779)

2 Lecturer Qurtuba University of Science & IT, Peshawar

3 Associate Professor Qurtuba University of Science & IT, Peshawar

4 Assistant Professor Institute of Management Sciences, Peshawar

Real earning management involves the manipulation of real activity to meet some earning benchmark that may result in sub-optimization of the firm's resources. So, there is a paucity of research on family firm engagement in real earning management even though family firms offer an interesting experimental setting for the investigation of real earning management.

It may be argued that the activities that result in real earning management are more easily facilitated in the family firm. On the other side, the potential adverse effect deviating from the regular operation and investment activities may act as a deterrent to real earn management in the family firm. So the question arises why earning management is used so the best way to answer this question is the accounting technique window dressing is a company's decision to change the actual view of a business by modifying financial statements. Through this, they can attract investors and creditors. The main motive behind this practice is to attract new ventures and investors to show that the company is going well. Internal target is another way which a company chooses to use this earning management technique. Here the income smoothing is required because it plays a great role to show a proper growth of a company.

External expectations come into play when the company has already projected as to what their profit will be and investors know to expect that exact amount of profit or more. While the level of real earnings management can be decline due to the orientation of interest, the high level of earning management was tried by family firms because there was a big conflict between family members and the minority shareholders. As suggested in previous studies that the family firms cover the expansion of minority shareholders to mark the performance of the company (Jaggi *et al*. 2009; Leuz *et al*. 2003). It is a technique that is used in accounting to generate financial statements which are presenting the overall position of the company's view and its different activities.

Accounting rules and regulations and concepts are necessary for a company's management for decision making and judgments. It takes the extra benefit that financial statements can be generated and applied through these accounting principles and rules, it inflates earnings and all assets.

The objective of the study is to investigate the real earning management and family firm we carry out this study in Pakistani context measured by (accounting method choice). The current study attempt to answer the analysis of this mandate ownership about the impact of family ownership on real earning management and how it affects the earning management in family ownership structure. This supports the argument that earnings management in family firms is an empirical issue since it depends on the relative influence of alignment and entrenchment effects.

LITERATURE REVIEW

Earning Management

The basic objective of a manager of a firm is to maximize the shareholder's wealth by an increase in the fixed assets which can be acquired only by equity financing and debt financing. To increase the company's capital, different incentives are to be shown to the shareholders to invest more money, but for that purpose, they have to be shown a positive future performance of the firm. This is the logic behind the firm's positive earnings report which shows a positive increase by which forecasting can be easy for the analysts to collect more capital (Degeorge *et al.,* 1999); While it is mostly observed that all such kind of expectations which occurs much time are most the time unlikely able the firm to g*et al*l stock prices which are not willing to suffer decline. It can be concluded that earning management is essential for firms to sustain the shareholders to retain shares with them for a long period.

Real Earnings Managemnt

Maintaining a proper earning level is essential for any organization and firms can select a desired earning level by managing the fluctuations of the business activities from abnormal to normal and it may affect the future economic performance negatively.

According to Bange and Bondt (1998); Pincus and Rajgopal (2002) there are different methods to maintain the level of earnings by deviations from the normal activities of the business. All are sub-divided into several deviations from investing and operating activities of cash flows as well as the fluctuation from the business activities (Xu *et al.,* 2007).

Many possibilities can exist in the alteration of earning scale levels by which the cash flows are affected. These earnings can be more manipulated if some modifications can be brought in the level of accruals. The manipulation of earnings are as follows:

Most of the studies before that how earning management affect the firm performance. While several papers have documented evidence in support of income-increasing earnings management activities Around SEOs (Rangan, 1998; Teoh *et al.,* 1998; Kumar, 2000; and DuCharme *et al.,* 2000) they have studied accrual-based manipulation exclusively.

Accruals-based Earnings management activities have no direct cash flows consequences. Another paper explains that how contests for control for the largest shareholder and the existence of a controlling coalition in family-owned firms affect earnings management is considered. It was found that increases in the contestability of control by the largest shareholder reduce earnings management in family-owned firms (Jara, 2011; Lopez, 2011).

Family firms are expected to have lower agency costs because family shareholders and management are more congruent in their pursuit of mutual firm goals and seek lower levels of earnings management (Paiva, Lourenco & Branco, 2016).

Earning Management –Accrual Basis

Accruals are the common part of every business and the main motive is to increase the performance by recording revenues earned and expenses incurred during a specific period, rather they show the cash in and outflows. As we know that accruals have the main aim to reflects the actual performance and return of a business, so it must need proper management. Likewise, Bad debt; is then an event that suggests a loss to the firm, impairments of the assets. When all of this is estimated values-based and not affecting the real economic performance so Accrual earning management must be applied (Healy & Wahlen, 1998).

That's why there are two options to manage the earnings i.e. i) Real earning Management, ii) Accrual earnings Management. Firms may give preference to apply these earning management strategies in a proper way to determine the related expenses for all the strategies for more in comparison with others (Zang, 2012). They show the real earning management was more applicable as a match with accrual earning management when there is a huge cost of accrual earnings management or vice versa.

Constraints on real earnings management

If there is a decrease was found in real earnings as a comparison to accrual earning management so as a result real earning is more applicable than the accrual earning (Zang, 2012). He argued that cost which is applied in real management can be parallel to the consequences of economic deviation for the betterment of business activities which are affecting the value of the firm. While these economic constraints vary from firm to firm because of the operational environment.

Rowchwdhury (2006) shows that a higher level of institutional ownership can reduce the applicability from real earning management because of a higher level of monitoring. The increase shown in the book value of income can applicable to real earning management instead of the application of accrual earning management can increase the higher level of taxable income. So, higher marginal tax rates are also a constrain for the firm to be used in real earning management which increases earnings (Zang, 2012).

Reduction in Discretionary expenses

Under accounting rules, research & development expenditure must be charged as an expense incurred because of the unusual fluctuations and uncertainty of future benefits which are associated with an investment in research & development (Shahzad *et al.,* 2017). As a result,

managers are interested in the boost in investment for the current period income that would be chosen to cut investment in research & development, particularly if the realization of the benefit is related to the forfeited research & development project can beneficial for the firms in the future period without any barriers to current period earnings. Selling, general & administrative expenditures are also the essential part of the analysis because the part of this expense may be subject to managerial discretion. Generally Accepted accounting principles don't recognize consistently the intangible assets i.e. brands, technology, customer loyalty, human capital, and employees' commitment as intangible assets.

Many studies suggest evidence that managers can cut discretionary expenses to get their earnings targets. Baber *et al*. (1991) suggest that research & development expenditures are significantly lower when expenditures can report positive and an increase in the current period. Cheng (2003) shows evidence for the consistent compensation committees that mitigating opportunity cost reduction in research & development expenses. It provides the evidence except for the managerial bonuses and incentives.

Dechow and Sloan (1991) suggest that CEOs relatively spend less for research & development in the final year at the firms. Bushee (1998) showed consistent evidence on institutional investors to mitigating the different investment problems. Bans *et al*. (2002) suggest that many managers can cut research & development and capital expenditures while facing problems regarding earnings per share can dilute due to stock options practice.

According to Holthausen *et al*. (1995) found that managers cannot cut Research & development, advertising costs, or capital expenditures to an increment in the managerial bonuses.

Timing the scale for fixed assets (report gains)

Herrmann, Inoue, and Thomas (2003) evaluate the Japanese manager's that they scale the fixed assets to manage their earnings. They further found that many firms can increase (decrease) in earnings by modifying the scale of fixed assets and marketable securities while current operating revenue is falling or below the management forecasted operating income.

The control over sales of assets is up to the choice of the manager, and since again it must report in the income statement for the time of the scale which is known as the difference between the net book value and the current market value. The timing in the sales of assets can be used as a way through which they can manage the reported earnings.

Bartov (1993) showed the evidence which relates to the managers who selling fixed assets through which they can reduce the negativity of earnings growth and debt covenant violations.

Overproduction

Roychowdhury (2003) suggests that the abnormality of huge production expenses at a fixed sales scale can be suggestive for both: i) sales can be manipulated due to abnormal price discounts, and (2) Cost of goods sold expense can be manipulated by overproduction. Manipulation refers to the manager's behavior that can increase or decrease the sales during a specific period and in an effect to increase the reported earnings. They can do over-production by cutting prices or by expending the lenient credit limits and terms towards by the end of that year in which sales were accelerated from the next fiscal year as compared to the current year. The firms are willing to sacrifice the earnings expected in the future to an addition to the book value of sales for the period. The probable cost of the manipulated sales includes the loss possible in the future.

Hypotheses of the study:

H1: Family firms in Pakistan are more likely to engage in real earnings management (REMs) than non-family firms.

H2: There is a curvilinear relationship between family ownership and the level of REMs in Pakistan; the level of REMs tends to rise to a threshold and then declines with the increase in family ownership.

H3: Firms that engage in REMs in Pakistan have lower future performance than firms that do not engage in REMs.

RESEARCH METHODOLOGY

The study is based on secondary data and used positivism philosophy. The study examines panel data over six years from 2015 to 2020. During this period, all the listed companies in Pakistan were required to disclose the corporate governance compliance report on a 'comply or explain' basis (PSX, 2006). The sample consisted of 30 firms, selected from the Pakistan stock exchange on the purposive sampling technique.

Variable of the study

a) Dependent variables

i. Abnormal Cash Flows (from operations) AB_CFO:

The ordinary level of CFO is considered to be a linear function of sales and changes in sales accordingly, the following cross-sectional regression is employed for each industry and each year to estimate the normal level of CFO.

$$\frac{CFOit}{(At-1)} = a1\left(\frac{1}{At-1}\right) + a2\left(\frac{SALESit}{At-1}\right) + a3\left(\frac{\Delta \text{SALESit}}{\text{At}-1}\right) + \varepsilon it$$

Cash Flow from Operating Activities = Net income + Noncash Expenses + Changes in Working Capital.

ii. Abnormal discretionary expenses (AB_DISC):

According to Suprianto and Setiawan (2018) & Roychowdhury (2006), the following model is applied to estimate the normal level of:

$$\frac{DISCEXPit}{At-1} = ao + a1\left(\frac{1}{At-1}\right) + a2\left(\frac{SALESt_{-1}}{At-1}\right) + \varepsilon it$$

Where:

DISC_EXPt = discretionary expenses for the period

t, and all other variables are as previously defined.

Discretionary expenses include Advertising costs; research and development and selling & administrative expenses.

iii. Abnormal production costs (AB_PROD):

The AB_PROD is the difference between the actual production costs and the expected normal level. Production costs (PROD) are the combination of the cost of goods sold and the rate of change in Inventory. The production cost's nominal level can be estimated by the following cross-sectional regression

$$\frac{PRODt}{At-1} = ao + a1\left(\frac{1}{At-1}\right) + a2\left(\frac{SALESit}{At-1}\right) + a3\left(\frac{\Delta SALESit}{Ait-1}\right) + a4\left(\frac{\Delta SALESit_{-1}}{At-1}\right) + \varepsilon i$$

b. Independent variable: The **firm-level factors** are the independent variable.

i. Firm size (SIZE)

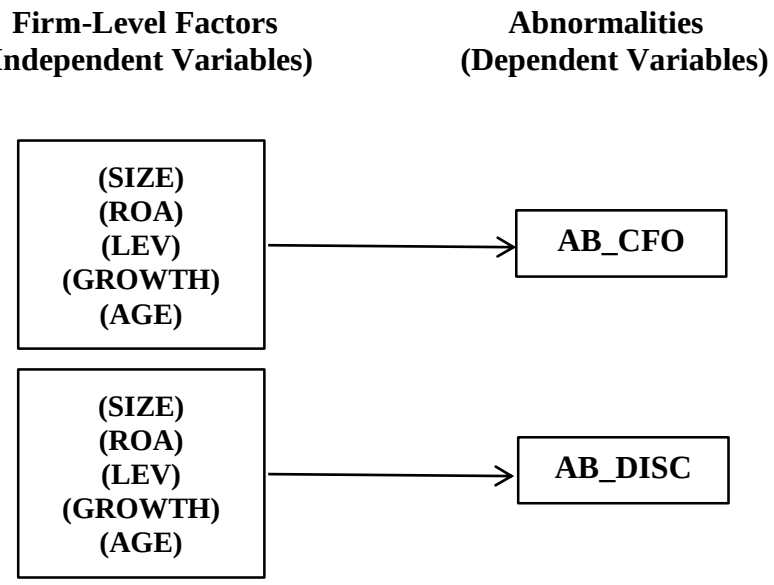
ii. Return on Asset (ROA)

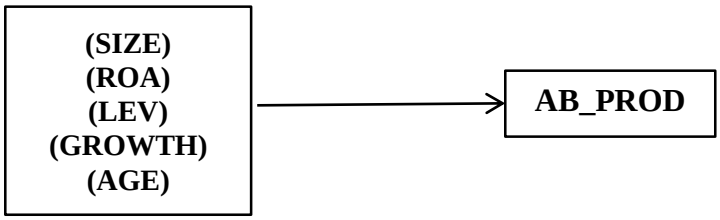
iii. The ratio of Total Debt to the total asset (LEV)

iv. Growth (GROWTH)

v. Firm Age (AGE)

Theoretical Framework





ANALYSIS

Descriptive statistics

Panel A (Non-Family Firms)

Variable	Mean	St Dv	Min	Max
AB_CFO	-0.006	0.10	-0.044	0.43
AB_DISC	-0.007	0.07	-0.630	0.55
AB_PROD	0.002	0.13	-0.699	0.79
SIZE	19.45	1.50	13.452	25.02
ROA	0.051	0.09	-0.451	0.59
LEV	0.556	0.42	-5.784	1.13
GROWTH	0.506	5.15	-1.00	93.56
AGE	24.985	11.01	3.00	56.00

Panel B (Family Firms)

Variable	Mean	St Dv	Min	Max
AB_CFO	-0.007	0.125	-0.895	0.830
AB_DISC	-0.009	0.082	-0.231	0.352
AB_PROD	0.003	0.138	-0.064	0.635
SIZE	20.968	1.645	16.215	24.12
ROA	0.057	0.133	-0.613	0.851
LEV	0.781	0.862	0.041	6.523
GROWTH	0.417	2.387	-0.981	46.13
AGE	26.970	12.986	6.000	62.00

In general average family, owners have 36% of the total equity in family firms. And the average of sponsors or promoters and executive director's holdings is up to 76% which belongs to family ownership (Annual Reports, 2019).

The above table suggests the descriptive statistics of each variable in the study. The results show that Family firms show the lower cash flows abnormality and also for the discretionary expenses than the other. These results reflect that the real earnings are higher for all such kinds of firms because they have a higher magnitude. On the other hand, the abnormal production cost is greater in family firms compare to non-family firms. In respect of firm size, family firms are found lower than the other one; return on assets was found lower and leverage was also found lower as compare to Non-family firms. The growth rate of the family firms is found higher as compared to non-family firms in Pakistan.

Panel Diagnostic Test

Panel Diagnostic test was carried to check the random or fixed effects of data.

Test Name	Ho	H1
Breusch-Pagan test	Pooled OLS	Random ☑
Chow Test	Pooled OLS ☑	Fixed

Hausman Test	Random ☑	Fixed

In the above table, it was observed that the random effect model is suggested twice by Panel Diagnostic test.

Correlation Matrix

	AB_CFO	AB_DISC	AB_PROD	SIZE	ROA	LEV	GRPWTH	AGE
AB_CFO	1							
AB_DISC	0.035	1						
AB_PROD	-0.387	-0.365	1					
SIZE	0.014	0.055	-0.028	1				
ROA	0.354	0.065	-0.284	-0.036	1			
LEV	-0.341	0.097	0.254	0.295	0.0109	1		
GROWTH	-0.003	0.013	-0.002	-0.006	0.215	-0.013	1	
AGE	0.018	0.115	0.004	-0.098	0.367	0.152	-0.021	1

In the above table, Abnormal Cash flow is negatively correlated with Abnormal production cost, Leverage, and growth in sales; however, it was found positively correlated with abnormal discretionary expenses, firm size, return on assets as well as firm age. Ab normal discretionary expenses were found to be positively correlated with all variables except abnormal production cost because it has no relation to the production cost. Abnormal production cost was found negatively correlated with size, return on assets, and growth while it was positive with leverage and age.

Regression

Variables	(M1) AB_CFO Coefficient (t-stats) (P-value)	(M2) AB_DISC Coefficient (t-stats) (P-value)	(M3) AB_PROD Coefficient (t-stats) (P-value)
Constant	0.741 (3.066) (0.000)	3.117 (1.781) (0.002)	2.021 (-3.247) (0.005)
FAM	-11.221 (-3.924) (0.006)	-7.111 (-6.002) (0.000)	11.210 (3.891) (0.014)
SIZE	-15.117 (-0.551) (0.171)	-12.541 (-1.237) (0.131)	20.021 (3.182) (0.006)
ROA	5.247 (3.327) (0.012)	12.918 (3.688) (0.000)	-21.081 (-2.984) (0.108)
LEV	-3.026 (-3.156) (0.004)	-2.021 (1.524) (0.236)	6.024 (2.368) (0.001)
GROWTH	4.213 (-2.014) (0.014)	-1.252 (1.011) (0.426)	-2.114 (-0.561) (0.551)
AGE	3.157 (2.142) (0.000)	10.214 (1.741) (0.041)	5.681 (1.102) (0.498)
R-Squared	0.491	0.504	0.541

F-Stats	10.59	11.78	12.64
Prob>F	0.000	0.000	0.000

Empirical results of three models of different dependent variables suggest that the real earnings proxies with their family firms. All the three models were found significant because their p-values were less than 0.05 (Level of significance); it means that all the models were overall good fit.

In the first model, R-square is 0.491 it suggests that there will be a 49.1% change in the dependent variables due to change in the explanatory variables. As for individual explanatory variables are concerned FAM, ROA, LEV, GROWTH, and AGE were found significant at a critical value of $p<0.05$: however, SIZE was found insignificant because its p-value is greater than the critical value. Due to one unit change in ROA, GROWTH, and AGE dependent variable will be increase by 5.25, 4.21 & 3.16 respectively; while with an increase in one unit in LEV & FAM there will be a decrease in the dependent variable by 11.22 & 3.03 respectively. However, size is contributing nothing because it is found insignificant.

In model 2 it was found that the variations in the overall model are 10.4%. As for individual independent variables are concerned FAM, ROA, and AGE were found significant at 5% critical level while GROWTH, LEV, and SIZE were found statistically insignificant because their P-value is greater than 0.05. ROA & AGE contributing positively by 12.92 and 10.21 respectively by one-unit change; while FAM is contributing negatively by 7.11. All other variables were found insignificant in this model so they are not considering to be contributing.

In the third model, the overall variation between dependent and independent variables is 14.6%. As considering the individual variables FAM, SIZE and LEV are found significant towards family earning proxy at $p<0.05$. However, ROA, LEV, GROWTH, and AGE were found statistically insignificant because they were out of the critical range and having no impact on the dependent variable. LEV, FAM, and SIZE are contributing positively towards abnormal Production costs by 6.02, 11.21 & 20.02 respectively.

The overall results reflect that in model 1 and model 2 family firms are showing lower Abnormal Cash flows and Abnormal Discretionary Expenses as compare to the non-family firms. It shows that family firms have more focus on real earning management which showing low abnormalities. In the final model, the value of abnormal production is higher than the non-family firms which represents that abnormal production is more in family firms as compared to the non-family firms. It's a good sign for family firms because it creates abnormal returns.

CONCLUSION

The study investigates the real earning in the family firms and their relationship. The results show that family firms are strongly associated with non-family firms. the study found that firms

are suspected of engaging in real earning management are facing low operating performance in the future and the firms which are not engaged in Real earning management are facing high future performance. Due to family firm ownership, the level of concentration by sponsors or promoters and directors can be diverted so they have to hold minimum shares.

The empirical analysis shows that real earnings management has a statistically significant impact on the operating performance of a firm. The analysis further suggests that Earning is positively associated with Leverage, Growth of a firm, and Age of a firm. It has also a valuable relation with abnormal cash flow, discretions. It is only negatively associated with Firm size.

The above empirical result suggests that family firms are very much good at minimizing cash flows. The results are different from Shahzad *et al*. (2017) in the German market; however, a lot of similarities were found with Ali *et al*. (2007)

Future Research Recommendations

The following are some future research directions in the same area:

1. Compare the family and non-family firms based on their performance.
2. Can extend the sample size and period so it can give better results.

REFERENCES

Bange, M. M., & De Bondt, W. F. (1998). R&D budgets and corporate earnings targets. *Journal of Corporate Finance, 4*(2), 153-184.

Barber, B. M., & Lyon, J. D. (1996). Detecting abnormal operating performance: The empirical power and specification of test statistics. *Journal of financial economics, 41*(3), 359-399.

Bartov, E. (1993). The timing of asset sales and earnings manipulation. *Accounting review*, 840-855.

Bens, D. A., Nagar, V., Skinner, D. J., & Wong, M. F. (2003). Employee stock options, EPS dilution, and stock repurchases. *Journal of accounting and economics, 36*(1), 51-90.

Bushee, B. J. (1998). Institutional investors, long-term investment, and earnings management.

Chan, L. H., Chen, K. C., Chen, T. Y., & Yu, Y. (2014). Substitution between real and accruals-based earnings management after voluntary adoption of compensation clawback provisions. *The Accounting Review*, *90*(1), 147-174.

Cheng, Q., & Warfield, T. D. (2005). Equity incentives and earnings management. *The Accounting Review, 80*(2), 441-476.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting review*, 193-225.

DeFond, M. L., & Park, C. W. (1997). Smoothing income in anticipation of future earnings. *Journal of accounting and economics, 23*(2), 115-139.

Degeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. *The Journal of Business, 72*(1), 1-33.

DuCharme, L. L., Malatesta, P. H., & Sefcik, S. E. (2004). Earnings management, stock issues, and shareholder lawsuits. *Journal of financial economics, 71*(1), 27-49.

Dye, R., & Wagenhofer, A. (2005). Economic effects of tightening accounting standards to restrict earnings management. *The Accounting Review, 80*(4), 1101-1124.

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons, 13*(4), 365-383.

Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons, 13*(4), 365-383.

Herrmann, D., Inoue, T., & Thomas, W. B. (2003). The sale of assets to manage earnings in Japan. *Journal of accounting research, 41*(1), 89-108.

Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of accounting and economics, 19*(1), 29-74.

Hribar, P., Jenkins, N. T., & Johnson, W. B. (2006). Stock repurchases as an earnings management device. *Journal of accounting and economics, 41*(1), 3-27.

Jaggi, B., Leung, S., & Gul, F. (2009). Family control, board independence and earnings management: Evidence based on Hong Kong firms. *Journal of Accounting and Public Policy, 28*(4), 281-300.

Jara, M., & López-Iturriaga, F. J. (2011). Earnings management and contests for control: an analysis of European family firms.

Jara, M., & López-Iturriaga, F. J. (2011). Earnings management and contests for control: an analysis of European family firms.

Jara-Bertin, M., & López-Iturriaga, F. J. (2008). Earnings management and contest to the control: An analysis of european family firms.

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of financial economics, 69*(3),505-527.

Matsunaga, D. (1995). Do corporations award CEO stock options effectively? *Journal of financial economics, 39*(2), 237-269.

Paiva, I.S., Lourenço, I.C. and Branco, M.C. (2016), "Earnings management in family firms: current state of knowledge and opportunities for future research", *Review of Accounting and Finance*, Vol. 15 No. 1, pp. 85-100.

Pincus, M., & Rajgopal, S. (2002). The interaction between accrual management and hedging: Evidence from oil and gas firms. *The Accounting Review, 77*(1), 127-160.

Rangan, S. (1998). Earnings management and the performance of seasoned equity offerings. *Journal of financial economics, 50*(1), 101-122.

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of accounting and economics, 42*(3), 335-370.

Shahzad, F., Rauf, S. A., Saeed, A., & Al Barghouthi, S. (2017). Earning management strategies of leveraged family and non-family controlled firms: An empirical evidence. *International Journal of Business & Society, 18*.

Shivakumar, L. (2000). Do firms mislead investors by overstating earnings before seasoned equity offerings? *Journal of accounting and economics, 29*(3), 339-371.

Suprianto, E., & Setiawan, D. (2018). Impact of family control on the relationship between earning management and future performance in Indonesia. *Business and Economic Horizons (BEH), 14*(1232-2019-757), 342-354.

Teoh, S. H., Welch, I., & Wong, T. J. (1998). Earnings management and the underperformance of seasoned equity offerings. *Journal of financial economics, 50*(1), 63-99.

Wang, D. (2006). Founding family ownership and earnings quality. *Journal of accounting research, 44*(3), 619-656.

Xu, R. Z., Taylor, G. K., & Dugan, M. T. (2007). Review of real earnings management literature. *Journal of Accounting Literature, 26*, 195.

Zang, A. Y. (2011). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review, 87*(2), 675-703.