

Ownership Structure and Earnings Management: Evidence from the Casablanca Stock Exchange

Omar Farooq

*Department of Business and Management
Aalborg University, Aalborg, Denmark*

Hind El Jai

*School of Business Administration
Al Akhawayn University in Ifrane, Ifrane, Morocco*

Abstract

Does poor legal protection of minority shareholders provide enough incentives for majority shareholders to expropriate minority shareholders and hide their unscrupulous behavior through accounting manipulations? This paper attempts to study the effect of ownership structure (ownership of the largest shareholder and identity of the largest shareholder) on earnings management in Morocco. Using annual estimates of discretionary accruals, we document that the presence of institutions as the largest shareholder has a negative impact on earnings management. Our results show that firms with foreign or local institutions as the largest shareholders engage in significantly lower earnings management than other firms. Our results are consistent with prior literature that considers institutions – which have greater resources, more sophistication than individual investors, and more relevant expertise – as important monitoring device. Interestingly, our results show that ownership concentration – percentage shareholding of the largest shareholder – has no significant impact on earnings management. The result is in contrast to prior literature that suggests ownership concentration to either cause alignment effect and result in lower earnings management or cause entrenchment effect and result in higher earnings management.

Keywords: Earnings Management, Ownership Structure, Corporate Governance, Emerging Markets

1. Introduction

Prior literature documents a strong link between ownership structure and earnings management. For example, Bolton et al. (2006) find that higher ownership concentration is associated with higher earnings management. This strand of literature argues that ownership concentration is associated with introduction of agency problems between majority shareholder and minority shareholders. Agency conflicts arise because majority shareholder has incentives and means to expropriate minority shareholders in emerging markets where minority shareholder are not adequately protected (Morck et al., 1988; Leuz et al., 2003). However, prior literature also documents that if the ownership is accumulated by institutions, instead of individuals, it may have soothing impact on earnings management behavior of firms. Rajgopal et al. (1999), for instance, argue that increased institutional

ownership limits earnings management. One of the reasons cited for the positive impact of institutional investors on earnings management is that they are better equipped to monitor management and identify any malpractices.

Given the importance of ownership structure for earnings management, it is worthwhile to examine whether such a relationship exist in newly emerging markets, where understanding about corporate governance mechanisms are low. However, without conducting a more detailed analysis, it may be difficult to foresee, ex-ante, how ownership structure may impact earnings management in newly emerging markets. In this paper, we aim to document the relationship between earnings management and ownership structure in Morocco during the period between 2004 and 2007. Morocco is an interesting case to study the relationship between earnings management and ownership structure for a number of reasons. For example, our sample period is characterized by exceptionally high growth rates for firms listed at the Casablanca Stock Exchange. Prior literature suggests that controlling shareholders and managers are more inclined to manage earnings during periods of economic expansion (Strobl, 2008). Furthermore, prior literature suggests ineffectiveness of corporate governance mechanisms in Morocco. Belkahia (2005), for example, documents that Moroccan firms do not disclose information properly. He mentions that there is no information for investors about voting rights and that key executives do not disclose any information regarding their interest in any trade or other matters affecting firms. We believe that ineffective governance mechanisms increase incentives for firms to manipulate their accounting statements.

Using the data on absolute discretionary accruals, our proxy for earnings management, we document no significant relationship between ownership concentration and earnings management during the period between 2004 and 2007. Our result is in contrast to prior literature that suggests ownership concentration to either cause alignment effect and result in lower earnings management or cause entrenchment effect and result in higher earnings management. However, our results show that the presence of institutions – foreign and local – as the largest shareholder has a negative impact on earnings management. We show that earnings management is considerably lower in firms where foreign or local institutions are the largest shareholders than firms where individuals are the largest shareholders. Our results are driven by the fact that institutions have expertise, knowledge, and skills to effectively monitor management. As a result, they are able to increase the quality of information disclosure. Interestingly, we also show that there is no significant difference between monitoring skills of foreign and local institutions.

Our results have implication for investors trading in the Casablanca Stock Exchange. Our results indicate that institutions act as better monitoring and governance device and ensure better information disclosure by firms. Therefore, investors can trust information disclosed by firms where institutions are the largest shareholders. This is an important result in an economy where corporate governance mechanisms are weak. We also show that there is no relationship between ownership concentration and earnings management. Investors may not be able to relate the quality of information with shareholding of the largest shareholder.

The remainder of the paper will proceed as follows: Section 2 briefly discusses motivation and background for this study. Section 3 discusses the data used in this study. Section 4 presents assessment of our hypothesis, while Section 5 documents robustness of our results. The paper ends with Section 6 where we present conclusions.

2. Motivation and Background

Plentiful of prior literature documents inadequacies in corporate governance mechanisms in emerging market (Yeh et al., 2001; Claessens et al., 2000; Shleifer and Vishny, 1997). This strand of literature considers ineffectiveness of regulatory authorities, weak enforcement mechanisms, and presence of family control as the main causes behind ineffective governance mechanisms. One of the main consequences of poor governance mechanisms is lower levels of information disclosure. Leuz et al.

(2003) document that managers and insiders do not disclose the true information of their firms in emerging markets. An important mechanism via which managers and insiders lower information disclosure is earnings management. Earnings management allows management and insiders to mislead stakeholders about the actual performance of a firm. In this paper, we aim to document how ownership structure of a firm influences earnings management behavior of firms in emerging markets. Prior literature documents a strong link between the two by showing that, for example, higher ownership concentration, increased institutional ownership, presence of foreign investors as important factors effecting earnings management (Bolton et al., 2006; Rajgopal et al., 1999; Khanna and Palepu, 1999). Ownership structure effects earnings management due to its ability to determine how firms choose to disclose information. Firms with concentrated ownership, for example, vest more powers in the hands of controlling shareholder, who usually tend not to disclose all information in order to reap private benefits of control. While, presence of institutional investors in the ownership scheme result in better monitoring of management, and therefore better information disclosure.

In this paper, we will define ownership structure by two variables: (1) Ownership concentration and (2) Identity of the largest shareholder. We argue that both of these factors can significantly explain the earnings management behavior among emerging market firms. Following sub-sections will illustrate how these two variables impact earnings management behavior.

2.1. Ownership Concentration and Earnings Management

Ownership concentration is an internal governance device that allows the largest shareholder to gain control over management behaviour and decisions. La Porta et al. (1998) suggests that concentrated ownership is common in countries with poor legal protection of minority shareholders. In these countries, gaining control over management minimizes conflict of interests between management and shareholders and thus lowers the agency problems. However, control by one shareholder over firm's activities introduces agency conflicts between largest shareholder and minority shareholders (Gedajlovic and Shapiro, 2002). This stems from the fact that ownership concentration provides the largest shareholder with incentives and means to expropriate minority shareholders (Zingales, 1994; Morck et al., 1988). The expropriation can take a variety of forms. In some instances, the insiders simply steal the profits. In other instances, the insiders sell the output, the assets, or the additional securities in the firm they control to another firm they own at below market prices. Such transfer pricing, asset stripping, and investor dilution, though often legal, have largely the same effect as theft. We argue that low enforcement mechanisms in emerging markets induce controlling shareholders to evade effective disclosure of firm value (La Porta et al., 1998). We believe that this act of not disclosing properly is deliberate and is done to facilitate controlling shareholders to expropriate resources out of firms. Therefore, earnings management is expected to be higher in firms with high ownership concentration (Entrenchment Effect). Our arguments are consistent with Wang (2006) who investigates the relationship between family ownership and earnings quality and shows a negative relationship between the two at a high level of ownership concentration. In another related study, Ali et al. (2007) show that ownership concentration negatively effects earnings quality. Consistent with previous studies, we expect higher earnings management in firms with higher ownership concentration in emerging markets. In important to mention here that there are arguments that go against our above discussion. Plentiful of prior literature considers ownership concentration to be a monitoring device in emerging markets. This strand of literature argues that ownership concentration defines the degree to which corporate contracts are enforced in emerging markets. Claessens and Fan (2002), for example, note that ownership concentration affects owners' abilities and incentives to enforce their rights. Edwards and Weichenrieder (2004) document that controlling shareholder has the ability to limit the extent to which managers can act in their own interest at the expense of shareholders. They argue that ability of controlling shareholder to monitor and even fire the management helps align the goals of management and shareholders (Alignment Effect). As a result, concentrated ownership is associated with better monitoring and thus with lower earnings management.

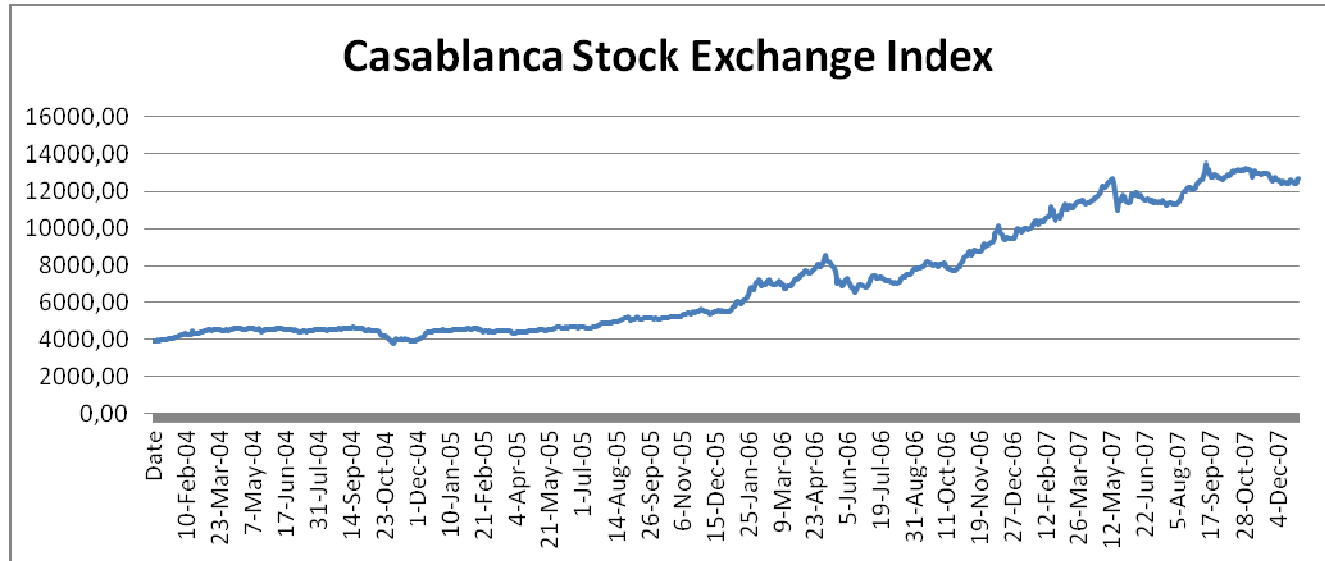
2.2. Institutions as the Largest Shareholders and Earnings Management

In this paper, we classify the largest shareholders as institutions or non-institutions. Prior literature considers institutions as an important channel via which minority shareholders are protected against expropriation of controlling shareholders in emerging markets (Oehl, 2000). This strand of literature argues that institutions have greater resources, are more sophisticated than individual investors, and have more relevant expertise to monitor management. As a result, they are able to force effective disclosure of information. In addition, this strand of literature also suggests that institutions have strong incentives to monitor management to increase firm value by focusing on long-term profitability instead of short-term earnings (Saunders et al., 2006; Mitra, 2002; Chung et al., 2002). Building on the arguments presented in the prior literature, Chung et al. (2002) find that institutional ownership is associated with less opportunistic earnings management. Rajgopal et al. (1999) and Koh (2007) argue that institutional investors are long-term oriented and act as corporate governance mechanism that tones down aggressive earnings management. They argue that as institutional shareholding grows, selling shares becomes more costly due to large discounts involved while selling large blocks of shares. Maug (1998) believe that it is this lack of marketability that makes institutional investors long-term investors and thus forces them to closely monitor firms. Therefore, when institutions collectively own a high percentage of stocks in firms, managers are prevented from opportunistically manipulating earnings (Chung et al., 2002). In a related study, Eng and Shackell (2001) find a significant positive relationship between firm's R&D investment intensity and institutional ownership. Since R&D investments have the immediate result of reducing near-term earnings, their result implies that institutional ownership do not necessarily put pressure on management to focus on short-term profitability and thus help in lowering earnings management.

Given the importance of institutions in curbing earnings management, this paper classifies institutions as foreign or local institutions. Extant literature documents superior of foreign institutions relative to local institutions in emerging markets. This strand of literature argues that due to their access to better resources and greater talent, foreign institutions can act as better monitors than their local counterparts in emerging markets. Seasholes (2004), for example, documents that foreign investors, mostly institutions, act like informed investors in emerging markets. As a result, we expect that presence of foreign institution as the largest shareholder should result in lower earnings management. Better monitoring by foreign institutions in emerging markets is, however, not a conclusive matter. A competing strand of literature argues that foreign institutions have information disadvantage relative to their local counterparts. Coval and Moskowitz (2001) documents that local investors firm can visit the firm's operations, talk to its suppliers and employees, and assess the local market conditions in which the firm operates in better than foreign investors. As a result, local institutions can monitor firms better than foreign institution. This strand of literature would, therefore, predict lower earnings management by firms where local institutions are the largest shareholders.

3. Data

This paper documents the relationship between ownership structure and earnings management for firms listed at the Casablanca Stock Exchange. Our sample consists of all non-financial firms during the period between 2004 and 2007. The choice of time period is driven by the fact that the Casablanca Stock Exchange experienced considerable investor interest during the period understudy. Figure 1 shows the evolution of the Casablanca Stock Exchange during our sample period. Close look at the data would show that the Casablanca Stock Exchange increased by more than 70% during 2006.

Figure 1: Evolution of the Casablanca Stock Exchange Index

3.1. Ownership Structure

This study uses two variables to represent ownership structure. The first one represents ownership concentration, while the second one represents the identity of the largest shareholder. Ownership concentration is measured by the shareholding of the largest shareholder, while largest shareholder is identified as an institution or not. Institution can be either foreign or local. The data for the above variables was provided by the Casablanca Stock Exchange. The descriptive statistics from Table 1 show that the average ownership of the largest shareholder during the sample period is more than 50%. The results point out towards conflict of interest that may be present between majority and minority shareholder in Morocco. The results also show that, on average, 75% to 80% of all Moroccan firms have institutions as the largest shareholders. As expected, our results show that most of the largest shareholders are local institutions. Our results signify influence that institutions may have on the functioning of Moroccan firms.

Table 1: Descriptive Statistics for Ownership of the Largest Shareholder

Year	Ownership of the largest shareholder (%)	Firms with foreign institutions as the largest shareholder (%)	Firms with local institutions as the largest shareholder (%)
2004	54.483	26.001	60.006
2005	51.806	26.404	60.404
2006	53.199	25.403	55.606
2007	53.212	20.552	54.802

3.2. Choice of Earnings Management Variable

Prior studies used total accruals to detect earnings management. Healy (1985), for example, uses total accruals as a measure of earnings management, while De Angelo (1986) uses total accruals of the previous period as a proxy for the next period earnings management. Both Healy (1985) and De Angelo (1986) use total accruals and assume that the change in non-discretionary accruals is equal to zero between periods. Empirical test proved that such assumption is far from reality (Kaplan, 1985). Further studies, therefore, developed models which distinguish between the discretionary and non-discretionary component of accruals. Jones (1991) uses an estimate of the discretionary component of total accruals. One of the limitations Jones model is the assumption that earnings are non-discretionary. The modified Jones model was built to overcome this limitation. This paper uses the modified Jones

model to come up with a proxy for earnings management. See Appendix – A for more details. The accounting data used to calculate discretionary accruals, our proxy for earnings management, was taken from yearly financial statements issued by firms. This data was collected from the Casablanca Stock Exchange's and the CDVM's websites. The CDVM (Conseil Déontologique des Valeurs Mobilières) is the main regulator of capital markets in Morocco. We use the following accounting variables for our analysis: current assets, current liabilities, short term debt, cash, revenue, receivables, total assets, property plant and equipments, and depreciation. Table 2 presents the descriptive statistics for each of these variables for the period under study. These statistics show us a gradual increase in all variables during our sample period, signifying increasing complexity of Moroccan firms over the period of time.

Table 2: Descriptive Statistics of Variables used in Discretionary Accruals Estimation

Panel A: Mean of Variables Used to Calculate Discretionary Accruals for Each Year

	2003	2004	2005	2006	2007	Total
CA/A _{t-1}	0.576	0.694	1.003	0.906	0.840	0.777
CL/A _{t-1}	0.290	0.460	0.622	0.589	0.491	0.473
Cash/A _{t-1}	0.049	0.061	0.196	0.095	0.089	0.095
STD/A _{t-1}	0.052	0.107	0.126	0.127	0.138	0.105
Dep/A _{t-1}	0.047	0.051	0.051	0.051	0.038	0.049
Rev/A _{t-1}	0.758	0.939	1.394	1.197	0.999	1.016
Rec/A _{t-1}	0.196	0.271	0.562	0.364	0.320	0.325
PPE/A _{t-1}	0.271	0.265	0.282	0.324	0.234	0.276

Panel B: Mean of Variables Used to Calculate Discretionary Accruals for Each Industry

	Chemicals	Distributors	Food and Beverages	Forestry, Paper, and Packaging	Holdings	Real Estate and Construction	Technology
CA/A _{t-1}	0.666	0.805	0.725	0.530	0.164	0.617	1.259
CL/A _{t-1}	0.506	0.456	0.386	0.541	0.248	0.325	0.728
Cash/A _{t-1}	0.056	0.094	0.055	0.028	0.001	0.064	0.217
STD/A _{t-1}	0.114	0.101	0.103	0.254	0.011	0.091	0.125
Dep/A _{t-1}	0.059	0.045	0.049	0.104	0.000	0.050	0.046
Rev/A _{t-1}	1.005	1.038	1.454	0.390	0.010	0.695	1.546
Rec/A _{t-1}	0.180	0.323	0.235	0.248	0.002	0.126	0.521
PPE/A _{t-1}	0.329	0.173	0.378	0.430	0.002	0.410	0.172

4. Methodology

Prior literature documents strong relationship between earnings management and ownership structure. This strand of literature documents that ownership structure is instrumental in inducing agency problems between majority shareholder and minority shareholders. To test this conjecture, we use absolute value of discretionary accruals (EM), our proxy for earnings management, as a dependent variable and variables representing ownership structure as independent variables. As described earlier, this paper defines ownership structure by shareholding of the largest shareholder (CONCENTRATION) and identity of the largest shareholder (FOREIGN or LOCAL). FOREIGN is a dummy variable that takes the value of 1 if the largest shareholder is a foreign institution and 0 otherwise, while LOCAL is a dummy variable that takes the value of 1 if the largest shareholder is a local institution and 0 otherwise. Our basic regression equation takes the following form. For the

purpose of completeness, we estimate the following regression equation with and without year and industry dummies.

$$EM = \alpha + \beta_1 (CONCENTRATION) + \beta_2 (FOREIGN) + \beta_3 (LOCAL) + \sum_{Ind} \beta^{Ind} (IDUM) + \sum_{Yr} \beta^{Yr} (YDUM) + \varepsilon \quad (1)$$

The above regression equation does not take into consideration the effects of some of firm-specific characteristics on earnings management. For example, larger firms have more visibility to analysts, investors, and regulating authorities. As a result, they manage lower earnings than smaller firms (Kim et al., 2003). In order to control for the effect of firm-specific characteristics on earnings management, we include a number of variables in Equation (1). For example, we add log of firm's market capitalization (SIZE) to control for the effect of size on earnings management. In addition, we also add payout ratio (PoR), debt (LEVERAGE), and type of auditor a firm chooses (AUDITOR) to control for the agency problems within a firm. We define PoR as the percentage of earnings paid out as dividends, LEVERAGE as total debt to total asset ratio, and AUDITOR as a dummy variable that takes the value of 1 if a firm is audited by one of the big-four auditors and 0 otherwise. All of these variables are commonly used as proxies for agency problems. We believe that firms with lower agency problems should have lower earnings management. We also add sales revenues of a firm (REVENUES) to control for firm's performance. As was done before, we estimate the following regression with and without year and industry dummies. Our modified equation takes the following form.

$$EM = \alpha + \beta_1 (CONCENTRATION) + \beta_2 (FOREIGN) + \beta_3 (LOCAL) + \beta_4 (PoR) + \beta_5 (AUDITOR) + \beta_6 (SIZE) + \beta_7 (LEVERAGE) + \beta_8 (REVENUES) + \sum_{Ind} \beta^{Ind} (IDUM) + \sum_{Yr} \beta^{Yr} (YDUM) + \varepsilon \quad (2)$$

The results from the above set of regressions are documented in Table 3.

Table 3: Relationship between Earnings Management and Ownership Structure

	Equation (1)		Equation (2)	
CONCENTRATION	0.521	0.561	0.480	0.513
FOREIGN	-0.405***	-0.409***	-0.367***	-0.376***
LOCAL	-0.400***	-0.385***	-0.350***	-0.331***
SIZE			-0.010	0.012
LEVERAGE			0.061*	0.076*
PoR			0.001	0.001
REVENUES			-0.056	-0.060*
AUDITOR			-0.026	-0.050*
Industry dummy	No	Yes	No	Yes
Year dummy	No	Yes	No	Yes
R ²	0.228	0.265	0.247	0.286
Adjusted-R ²	0.205	0.169	0.184	0.145
F-value	9.836	2.741	3.899	2.029
No. of observations	104	104	104	104

The results in Table 3 show that shareholding of the largest shareholder does not significantly affect earnings management behavior of Moroccan firms. Our results, from both equations, show insignificant coefficient of CONCENTRATION. The result is in contrast to our earlier arguments that suggest ownership concentration to either cause alignment effect to take place or result in entrenchment effect. The results in Table 3 also show that whenever institutions, either foreign or local, are the largest shareholders, they exert significantly negative impact on earnings management. We report significantly negative coefficients for FOREIGN and LOCAL. For example, the results from Equation (2), show that a significantly negative coefficient of 0.376 for FOREIGN and a significantly

negative coefficient of 0.331 for LOCAL. Our results are consistent with our expectations of negative relationship between earnings management and presence of institutions as the largest shareholder. We argue that due to their superior skills, institutions can effectively monitor the disclosure and accounting practices of firms. Our results also show that foreign institutions marginally perform better than their local counterparts in curbing earnings management. Our results show more negative coefficient for FOREIGN than for LOCAL. We argue that our results may be due to less personal relationships that exist between management and foreign institutions in comparison to relationships that exist between management and local institutions. Lesser personal relationships result in better monitoring of management. This result may also be due to superior monitoring and governance skills of foreign institutions.

5. Robustness of Results

In this section, we check the robustness of our results by estimating equation (2) for a sub-sample of firms with ownership of the largest shareholder greater than 50% and for a sub-sample of firms with ownership of the largest shareholder less than 50%. The results of this analysis are reported in Table 4.

Table 4: Relationship between Earnings management and Ownership Structure for Different Sub-samples

	Ownership concentration > 50%		Ownership concentration < 50%	
CONCENTRATION	-0.789	-1.016	0.438	0.890
FOREIGN	0.007	0.161	-0.873***	-0.787***
LOCAL	-0.135	-0.172	-0.836***	-0.731***
SIZE	-0.101	-0.036	0.030	0.108
LEVERAGE	-0.054	-0.009	0.125*	0.138**
PoR	0.002	0.003	0.001	-0.002
REVENUES	0.052	-0.083*	-0.075	0.107
AUDITOR	-0.194*	-0.332	0.036	-0.106*
Industry dummy	No	Yes	No	Yes
Year dummy	No	Yes	No	Yes
R ²	0.347	0.586	0.528	0.600
Adjusted-R ²	0.173	0.284	0.461	0.455
F-value	1.996	1.942	7.833	4.148
No. of observations	39	39	65	65

Interestingly, our results show no relationship between ownership structure and earnings management for a sub-sample of firms with ownership of the largest shareholder greater than 50%. We report insignificant coefficient for CONCENTRATION, FOREIGN, and LOCAL. Our results seem consistent with Ding et al. (2007) who document that assets expropriation stops increasing when ownership concentration reaches a certain threshold. They argue that when majority shareholder gains effective control of firm, any increase in voting rights does not further entrench him. Moreover, higher cash flow rights lead to a decreasing marginal net private benefit from further corporate assets expropriation. As expected, the results of second sub-sample of firms – firms with ownership of the largest shareholder less than 50% – confirm our previous findings of negative relationship between the presence of institutions, either foreign or local, and earnings management. We report significantly negative coefficients of FOREIGN, and LOCAL.

6. Conclusion

This paper examines the impact of ownership structure on earnings management in Morocco. Our results show that firms with foreign or local institutions as the largest shareholders engage in significantly lower earnings management than other firms. We argue that due to better expertise, greater talent, and more resources, institutions are able to monitor management more stringently than

individual investors. As a result, information disclosed by firms with institutions as the dominant shareholder is more truthful than other firms. Interestingly, our results show that ownership concentration – percentage shareholding of the largest shareholder – has no significant impact on earnings management. The result is in contrast to prior literature that suggests ownership concentration to either cause alignment effect and result in lower earnings management or cause entrenchment effect and result in higher earnings management. Our results indicate that investors can trust information disclosed by firms where institutions are the largest shareholders. This is an important result in an economy where corporate governance mechanisms are weak.

References

- [1] Ali, A., Chen, T., and Radhakrishnan, S., 2007. Corporate Disclosures by Family Firms. *Journal of Accounting and Economics*, 44, pp. 238-286.
- [2] Belkahlia, R., 2005. The State of Corporate Governance in Morocco. Corporate Governance Trends, Center for International Private Enterprise.
- [3] Bolton, P. Scheinkman, J. and Xiong, W., 2006. Executive Compensation and Short-termist Behavior in Speculative Markets. *Review of Economic Studies*, 73 (3), pp. 577-610.
- [4] Chung, R., Firth, M., and Kim J-B., 2002. Institutional Monitoring and Opportunistic Earnings Management, *Journal of Corporate Finance*, 8, pp. 29-48.
- [5] Claessens, S., Djankov, S., and Lang, L.H.P., 2000. The Separation of Ownership and Control in East Asian Corporations, *Journal of Financial Economics*.
- [6] Claessens, S. and Fan, J. P. H., 2002. Corporate Governance in Asia: A Survey. *International Review of Finance*, 3 (2), pp. 71-103.
- [7] Coval, J. D. and Moskowitz, T. J., 2001. The Geography of Investment: Informed Trading and Asset Prices. *Journal of Political Economy*, 4, pp. 811–841.
- [8] De Angelo, L., 1986. Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders. *The Accounting Review*.
- [9] Ding, Y., Zhang, H., and Zhang, J., 2007. Private vs. State Ownership and Earnings Management: Evidence from Chinese Listed Companies. *Corporate Governance: An International Review*, 15 (2), pp. 223–238.
- [10] Edwards, J. S. S. and Weichenrieder, A. J., 2004. Ownership Concentration and Share Valuation. *German Economic Review*, 5, pp. 143-171.
- [11] Eng, L. L. and Shackell, M., 2001. The Implications of Long-Term Performance Plans and Institutional Ownership for Firm's Research and Development Investments. *Journal of Accounting, Auditing and Finance*, 16 (2), pp. 117-139.
- [12] Gedajlovic, E. and Shapiro, D., 2002. Ownership Structure and Firm Profitability in Japan. *The Academy of Management Journal*, 45 (3), pp. 565-575.
- [13] Healy, P., 1985. The Effect of Bonus Schemes on Accounting Decisions. *Journal of Accounting and Economics*, 7, pp. 85–107.
- [14] Jones, J. J., 1991. Earnings Management during Import Relief Investigations. *Journal of Accounting Research*, 29, pp. 193-228.
- [15] Kaplan, R., 1985. Evidence of the Effect on Bonus Schemes on Accounting Procedure and Accrual Decisions. *Journal of Accounting and Economics*, 7, pp. 109-113.
- [16] Khanna, T. and Palepu, K., 1999. Emerging Market Business Groups, Foreign Investors, and Corporate Governance. *NBER Working Paper No. 6955*.
- [17] Kim, Y., Liu, C., and Rhee, S. G., 2003. The Relationship of Earnings Management to Firm Size. *Working Paper, University of Hawaii*.
- [18] Koh, P. S., 2007. Institutional Investor Type, Earnings Management and Benchmark Beaters. *Journal of Accounting and Public Policy*, 26 (3), pp. 267-299.

- [19] La Porta, R., Lopez-de Silanes, F., Shleifer, A. and Vishny, R., 1998. Law and Finance. *Journal of Political Economy*, 106, pp. 1113-1155.
- [20] Leuz, C., Nanda, D., and Wysocki, P. D., 2003. Earnings Management and Investor Protection: An International Comparison. *Journal of Financial Economics*, 69.
- [21] Maug, E., 1998. Large Shareholders as Monitors: Is there a Trade-off between Liquidity and Control? *Journal of Finance*, 53, pp. 65-98.
- [22] Mitra, S., 2002. The Impact of Institutional Stock Ownership on a Firm's Earnings Management Practice: An Empirical Investigation. *Working Paper, Louisiana State University*.
- [23] Morck, R., Shleifer, A., Vishny, R. W., 1988. Management Ownership and Market Valuation: An Empirical Analysis. *Journal of Financial Economics*, 20, pp. 293-315.
- [24] Oehl, D., 2000. Activism Out of Brazil. *mimeo*, Institutional Shareholder Services: Rockville.
- [25] Rajgopal, S., Venkatachalam, M., and Jiambalvo, J., 1999. Is Institutional Ownership Associated with Earnings Management and the Extent to which Stock Prices Reflect Future Earnings? *Working Paper, University of Washington*.
- [26] Saunders, A., Ivashina, V., Nair, V. B., Massoud, N., and Stover, R., 2006. Bank Debt and Corporate Governance. *EFA 2004 Maastricht Meetings Paper No. 4601*.
- [27] Seasholes, M. S., 2004. Re-examining Information Asymmetries in Emerging Stock Markets. *Working Paper, University of California at Berkeley*.
- [28] Shleifer, A., and Vishny, R., 1997. A Survey of Corporate Governance. *Journal of Finance*, 52, pp. 737-783.
- [29] Strobl, G., 2008. Earnings Management and Cost of Capital. *Working Paper, University of North Carolina at Chapel Hill*.
- [30] Wang, D., 2006. Founding Family Ownership and Earnings Quality. *Journal of Accounting Research*, 44.
- [31] Yeh, Y. H., Lee, T. S., and Woidtke, T., 2001. Family Control and Corporate Governance: Evidence from Taiwan. *International Review of Finance*, 2, pp. 21-48.
- [32] Zingales, L., 1994. The Value of the Voting Rights: A Study of the Milan Stock Exchange. *Review of Financial Studies*.

Appendix-A: Construction of Earnings Management Variable

The modified Jones model calculates total accruals as follows:

$$TA_t = \frac{(CCA_t - CCL_t - CCash_t + CSTD_t - Dep_t)}{A_{t-1}} \quad (A)$$

Where TA_t is total accruals, CCA_t is change in current assets at t, CCL_t is change in current liabilities, $CCash_t$ is change in cash, $CSTD_t$ is change in short-term debt, Dep_t is depreciation, and A_{t-1} is one period lagged total assets.

According to modified Jones model, the total accruals are comprised of two components: Discretionary and non-discretionary component of total accruals. The non-discretionary component or the inherent part of total accruals is not influenced by any managerial decision. It represents the accruals that are affected by the changing economic conditions of the firm. The non-discretionary component of accruals is estimated as follows:

$$NDA_t = \beta_1 \left(\frac{1}{A_{t-1}} \right) + \beta_2 (CREV_t - CREC_t) + \beta_3 (PPE_t) \quad (B)$$

Where NDA_t is non-discretionary accrual at t, $CREV_t$ is change in revenues at t, $CREC_t$ is change in net receivables at t, and PPE_t is property, plant and equipment (fixed assets at t). The values of β_1 , β_2 , and β_3 are estimated by regressing total accruals against the inverse of one period lagged total asset, PPE, and CREV.

$$TA_t = \beta_1 \left(\frac{1}{A_{t-1}} \right) + \beta_2 (CREV_t) + \beta_3 (PPE_t) + \varepsilon_t \quad (C)$$

The inverse of one period lagged asset explains the non-discretionary accruals related to firm's size. Change in revenues and account receivables are used as explanatory variables because they control for any earning management technique using revenues. While, property, plant and equipment are used to explain the portion of non-discretionary accruals related to depreciation expense.

Discretionary accruals are accruals resulting from direct manipulation of estimates by managers. The discretionary component of accruals, DA, is obtained by subtracting equation (B) from equation (C).

$$DA_t = TA_t - NDA_t \quad (D)$$

Each firm has its own motivation to either manage their earnings upward or downward. For instance, the firms seeking external funds, debt or equity, tend to manage their earnings upward, while the firms seeking tax reduction or government protection lower their earnings (Chao et al., 2004). Opposing directions of earnings management may result in canceling the effect of each other and therefore may show zero average earnings management in the sample. To overcome this limitation, we use the absolute values of discretionary accruals as the measure of earnings management (Krishnan, 2003).