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Impact of Ownership Structure on Earnings Management: Evidence from Pakistani Banking Sector

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Abstract
This study aims to find out the impact of ownership structure on firm s' earning management. Ownership structure is divided into two categories: ownership concentration and ownership mix. Banking sector of Pakistan was chosen for this study and 20 banks were selected. Study period was 2000-2012. Data was collected related to ownership concentration and ownership mix variables. Results showed that independent variables including major shareholders, directors, government and financial institutions negatively affect earnings management of banks. Ownership by local, foreign investors/companies and associated organizations' ownership positively affects earning management of banks.
Keywords: Ownership concentration, ownership mix, earning management

1 Introduction

Ownership should be separated from control and authority in firms and it is common in the today's business world as more organizations are listed on stock exchanges. However, this separation raises serious problems and conflicts between the shareholders of a firm and the managers. Managers are in authority and may have the incentive to transfer wealth in terms of bonuses or other benefits at the expense of the owners (Mashayekhi, 2008). In this regard, shareholders may face costs to observe the management and its activities from such unethical actions. This division of ownership and authority creates agency problems. This argument is consistent with (Levitt, 1998) who find a significant positive relationship between agency conflicts, and the degree of division between ownership and control. The result in the study shows that as the degree of separation between ownership and power increases, the agency problem and costs increases. Therefore, effective power and observation is needed to reduce agency problems and costs.

Prior research finds that effective corporate governance systems quality external audits and managerial ownerships will decrease agency problems in the organizations. Managers who own shares of an organization have less motivation to change reported accounting information. When ownership by managers increases, then gap between the motives and objectives of the managers and the shareholders decreases. They want to maximize their wealth at cost of shareholders. Therefore, we can say that as management ownership is more, the motivation to manipulate earnings will decrease. However, there are studies that do not find a negative relationship between managerial ownerships and agency problems (Bolton, Scheinkman, & Xiong, 2006).

Results in a study by Ali et al. (2008) may be used to explain the role of managerial ownership in minimizing the agency problems. It was found that organizational size is one important factor that can produce different results in previous research. However, the organization size effect has never been rightly researched that involve managerial ownership and earnings management and represent agency problems. Many studies used organizational size as main variable (Warfield, Wild, & Wild, 1995). In East Asian organizations, the relationship between managerial ownership and agency problem is compared to western countries. The existence of significant major shareholders ownership can become a good tool to keep an eye on managerial motives when there is a low level of managerial ownership. If the organizational size is a vital factor which determines the agency conflicts, it is good for the investors to have a good corporate governance system in the form of managerial ownership according to the magnitude of companies.

Banking sector of Pakistan is a well organized sector and is performing better in last few years. It contains different categories of banks i.e. local banks, foreign banks, Islamic banks, public and private banks. Ownership structure of every bank is different and it affects its financial performance. In this study ownership structure is explained by two types i.e. ownership concentration and ownership mix (foreign, government, outsiders and family

ownership) is studied to find out the relationship between ownership structure and earning management.

This study uses earnings management proxy as agency conflict measurement. This measurement is better than firm performance because the performance itself can be managed. There is a substantial amount of literature about the effects of ownership structure on earning management from developed countries like UK, US and European countries. However, there is a gap in systematic facts for developing countries, especially for Pakistan. This study is not done in Pakistan before and on banking sector. Banking sector plays an important part in strengthen the economy and it needs to be studied in relation with its shareholding patterns and its affect on its earnings management. The contribution of this paper is that it aims to contribute to the body of knowledge and it focuses on finding out the impact of ownership structure, whether it is concentrated or mix, on the earnings management of the banking sector in Pakistan.

2 Literature Review

Earlier empirical studies show that companies with family ownership are associated with higher earnings quality and greater earning information (Ali, Salleh, & Hassan, 2008). This has caught substantial interest from researchers especially in East Asia since family owned company is a common there. It is argued that controlling families hide their self-oriented behavior by manipulating earning numbers which result in agency problem. Earnings management occurs when managers use personal opinion in financial reporting and in structuring transactions to modify financial reports to either mislead shareholders about the financial performance of the company or to influence financial results that depend on reported accounting numbers. This can be related to the well known cases of accounting fraud and earnings changing at Enron and WorldCom which have caught the attention of investors and supervisory bodies (Warfield, Wild, & Wild, 1995).

Earnings management is main concept and issue of accounting research for the last two decades. However, different researchers have defined earning management in different words. Earnings management is defined as the process of taking purposeful steps within the limits of Generally Accepted Accounting Principles to bring about a desired level of reported income (Tanewski & Bartholomeusz, 2006). Earning management occurs when managers use personal judgment in financial reporting in shaping business transactions. It is also to change financial results to mislead some stakeholders about the current financial health of the company. Earnings management can be done by structuring of certain income and expense, changes in accounting practices and accruals management. Of all these mentioned earnings management techniques, accruals management is the most destructive to the worth of accounting reports because investors are unaware of the extent of such changes in accruals (Isenmila & Elijah, 2012).

Accrual is defined as the difference between the earnings and cash flow from operating activities. Accruals can be further divided into non-discretionary accruals and discretionary accruals. Non-discretionary accruals are accounting modifications to the company's cash flows managed by the accounting standard bodies; discretionary accruals are modifications to cash flows selected by the management (Fan & Wong, 2002). Ownership structure as explained by the agency theory is one of the most important corporate governance devices to solve agency problems and suggests that concentrated ownership will result in more effective observation of management activities. Researchers in developed countries focus on the motivations of outside shareholders and managers in a mix ownership, in Asia the agency issues shift to conflicts amongst the owners who control and the minority shareholders because ownership concentration structures are more common here (Saleh, Iskandar, & Rahmat, 2005).

The concentrated ownership results in agency issues between owners who control and minority shareholders, which are hard to minimize during the role of a board of directors. It is said that an efficient system can be used to limit earnings management and to develop a suitable ownership structure. It has also been found that division of ownership from the power of a company can engage managers in fraudulent financial reporting for the purpose of increasing their own personal benefit to the disadvantage of the interests of the investing public and bank depositors (Yang, Chun, & Ramadili, 2009).

An effective controlling system for the management is vital to make sure manager's action is in agreement with shareholder's interest. Conflict of interest between managers and shareholders becomes clear when there is a division between the people who own the organization and the people who manage the organization (Jensen & Meckling, 1976). In the current business ownership structure, this division is foreseeable particularly in large listed businesses i.e. the owners are more detached among shareholders and the appointed management may have very nominal shareholding. In these firms, failure to observe the management may lead to inefficient resource distribution and cause business disgrace (Johari, Saleh, Jaffer, & Hassan, 2008).

Earnings management practice has caught attention among controllers, accounting standards bodies and accounting profession. Although it is not new in accounting job it has been an undisclosed policy among company managers (Wang, 2006). Earnings management practices with the intention to manage earnings with personal judgment and opinion are considered unethical even though no accounting standards are breached (Levitt, 1998).

Accounting practitioners and regulators see earnings management as a problem that needs an urgent

control action. Research provides substantiation that majority of the people do not believe that earnings manipulation is ethical. On the other hand, some think that earnings management is done by organizations for the advantage of their investors. Financial reporting can boost firm value if financial earnings and firms' performance is consistent and available on time. So, accounting standards should provide the managers, with the alternatives needed to indicate private information on firms' performance (Healy & Wahlen, 1999).

Discretionary accruals symbolize the degree of earnings management. Discretionary accruals replicate biased accounting choices made by management. The size of discretionary accruals is indicated as a percentage of assets of a company. The higher the value of discretional accruals, the greater the earnings is maneuvered. In earnings management income may increase or income may decrease and it depends on accounting choices. Income-increasing exploitation means positive discretionary accruals whereas income-decreasing point out negative discretionary accruals. Incentives to engage in earnings management could be alleviated through effective corporate governance system such as board structure, ownership structure and capital structure (Elias, 2002). Besides internal factors, good corporate governance practice is also guided by the requirements of Registrar of Companies, Securities Commission, Bursa Saham Kuala Lumpur, Bank Negara, Foreign Direct Investment Committee and Ministry of Finance. However, having a good set of rules and regulations do not guarantee good corporate governance system unless regulatory authorities professionally put into effect these requirements. Board of directors' play an important role in establishing good practices in a company. Directors are in charge of monitoring and observing management to protect shareholders' interest. Directors have to make sure that the interest of shareholders and managers are lineup. The issue of interest between shareholders and management will arise if managers used earnings management to obtain personal gains (Weisbach, 1998).

Ownership structure of a firm can be categorized into two groups: proportion of shares owned by insiders and outsiders; proportion of shares owned by institutional versus individual shareholders. For the insider and outsider shareholders category, it was found that managerial ownership is negatively linked with earnings exploitation. Managerial ownership might decrease the agency conflicts as the objectives of managers are lineup closely to the objectives of other shareholders. Institutional investors are large investor, who uses personnel judgment over investment of others. Organizations which are considered as institutional investors are insurance companies, pension funds, investment trusts, financial institutions, investment companies. Institutional investors have the opportunity, resources and ability to monitor, discipline and control a manager's decision in the firm. McConnell and Servaes (1990) argued that institutional share ownership may have application for earnings management as they are able to manipulate the company's management. The results show that institutions with large shareholdings play a dynamic role in controlling managerial actions in managing the reported earnings. This is because when the institutions invest in the long term period, they are more concerned about the effectiveness of the companies and be vigilant of the use of discretional accruals to handle the earnings.

Earnings management let management and insiders to deceive stakeholders about the actual performance of the organization. Ownership structure of a firm affects earnings management behavior of firms in emerging markets. Previous literature shows a strong relationship between the two by showing higher ownership concentration, high institutional ownership, presence of foreign investors as a vital factors effecting earnings management (Bolton, Scheinkman, & Xiong, 2006).

Ownership structure effects earnings management due to its ability to decide how businesses choose to reveal its financial information. Organizations with concentrated ownership vest more powers in the hands of major shareholder who tend not to release all information in order to collect personal benefits of control. The presence of institutional investors in the ownership structure result in better observation and control of management and give better information about company. Ownership concentration is a governance system that allows the major shareholder to boost power over board behavior and decisions. Concentrated ownership is common in countries with weak legal protection of minority shareholders. In these countries, getting authority over administration decreases issues of interests between managers and shareholders and thus reduces the agency conflicts. However, control by one shareholder over organization's activities produce agency problems between major shareholder and minority shareholders (Gedajlovic & Shapiro, 2002).

3 Theoretical Framework

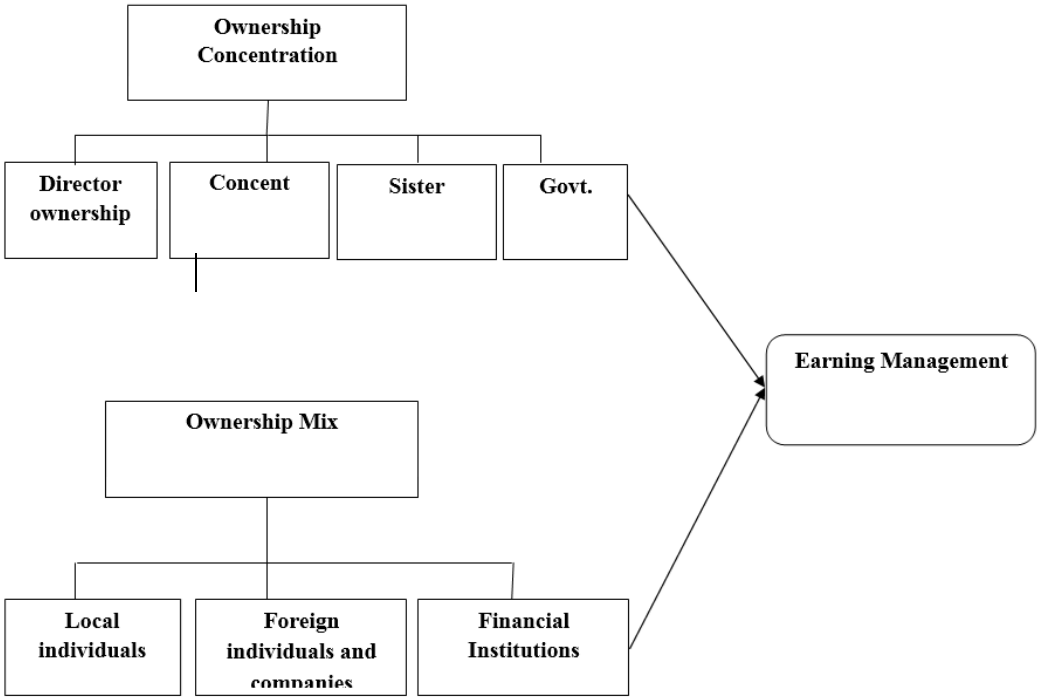

Fig. 1 Impact of ownership structure on earning management

Ownership concentration is divided into shares held by directors, major shareholders, associated companies and government. Ownership mix is divided into shares held by local individuals (general public), foreign investors/companies and financial institutions. Earning management is measured by using discretionary and total accruals. In this model Dir_own shows the percentage of total shares held by directors of a bank. Concent shows the percentage of total shares held by major shareholders of a bank. Sister shows the percentage of total shares held by associated or related companies of a bank. Govt shows the percentage of total shares of a bank held by government. Lown shows the percentage of total shares of a bank held by Local individuals. Fown shows the percentage of total shares of a bank held by foreign investor/companies. Finn shows the percentage of total shares of a bank held by financial institutions.

For we have formed following hypothesis

H_1: Ownership by Directors significantly impacts banks' earning management
H_2: Ownership by major shareholders significantly impacts banks' earning management
H_3: Ownership by sister organizations significantly impacts banks' earning management
H_4: Ownership by government significantly impacts banks' earning management
H_5: Ownership by local individuals significantly impacts banks' earning management
H_6: Ownership by foreign investors significantly impacts banks' earning management
H_7: Ownership by financial institutions significantly impacts banks' earning management

Methodology

Pakistani banking sector was chosen for this study. Data of year 2005-2012 were used in this study. Annual reports of 20 banks were used to collect the data on shareholding pattern and firm performance in form managing of earnings. Regression model was formulated to find the impact of ownership structure on earning management by banks. Following is the regression model for all dependent variables and independent variables:

$EM= \alpha + \beta_1(dir\_own) + \beta_2(concent) + \beta_3(sister) + \beta_4(govt) + \beta_5(lown) + \beta_6(fown) + \beta_7(finn) + \mu$

Dir_own= Director Ownership
Concent= concentration representing major shareholders' ownership
Sister= associated and related organizations
Govt= government
Lown= local individuals
Fown= Foreign individuals and companies
Finn= Financial institutions
EM= earning management measured by total and discretionary accruals

To measure earning management both total accruals and discretionary accruals are used. Following Haribar and

Collins (2002) total accruals are estimated as follow:

TA= ∆CA- ∆CL - ∆ CASH + ∆ STDEBT-DEP

In this model TA is the total accruals in year t for the firm, ∆CA is change in current assets from year t-1 to year t for the firm, ∆CL is the change in current liabilities from year t-1 to year t for the firm, ∆ CASH is the change in cash from year t-1 to year t for the firm, ∆ STDEBT is the change in short term debt from year t- 1 to year t for firm, and DEP is the depreciation expense in year t for the firm.

To estimate the discretionary accruals, the modified Jones model is used:

$$DA=\frac{1}{A_{t-1}}+\frac{\Delta REV-\Delta REC}{A_{t-1}}+\frac{PPE}{A_{t-1}}+\mu$$

Where it TA is the total accruals in year t for the firm, A_{t-1} is total assets in year t-1 for the firm, ΔREV is revenues in year t less revenues in year t-1 to year t for the firm, ΔREC is net receivables in year t less net receivable in year t-1 for the firm, PPE is gross property, plant and equipment in year t for the firm, and μ is stochastic term in year t for the firm (unexplained component of total accruals). After calculating earnings management by using above models data was transformed into binary numbers of 0 and 1. No autocorrelation was found due to transformation of variables. Method used for analysis is Generalized Least Square Method and Pooled EGLS panels are used. Cross section weights were used in order to control heteroskedasticity. Linear estimation after one-step weighting matrix is also applied.

Data findings

Table 1 is showing results for Pooled EGLS. This table is showing that ownership by directors, major shareholders, government and financial institutions have negative impact on earning management. It means that they can manipulate the earnings for their own interests. They also influence the decision making at top level. We can see that these values are highly significant with negative sign. If shares of a bank are owned by its sister organizations, local and foreign investors then they effect positively earning management. The values of these variables are highly significant at probability value. Value of R^2 and adjusted R^2 is not high but it is representing the contribution of these variables towards earning management in an organization. Adjusted R-squared measures the proportion of variance in the dependent variable that was explained by the variations in the independent variable. So H_3, H_5 and H_6 are accepted. Here 36.44% variance in earning management of bank is explained by variations in independent variables. F value shows overall significance of the model and here it is significant at probability value.

Table 1 Impact of ownership concentration and ownership mix on EM

Dependent Variable: EM				
Method: Panel EGLS (Cross-section weights)				
Periods included: 8				
Cross-sections included: 20				
Total panel (balanced) observations: 160				
Linear estimation after one-step weighting matrix				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.276855	0.093328	2.966486	0.0035
DIR_OWN	-0.006822	0.002136	-3.193208	0.0017
CONCENT	-0.002725	0.000997	-2.732581	0.0070
SISTER	0.003524	0.000940	-3.748480	0.0003
GOVT	-0.003440	0.001277	-2.693002	0.0079
LOWN	0.000370	0.001070	0.345648	0.0004
FOWN	0.002011	0.001562	1.287423	0.0013
FINN	-0.004546	0.001768	-2.570965	0.0111
	Weighted Statistics			
R-squared	0.392428	Mean dependent var		0.110818
Adjusted R-squared	0.364447	S.D. dependent var		0.237350
S.E. of regression	0.192098	Sum squared resid		5.609064
F-statistic	14.02514	Durbin-Watson stat		1.181513
Prob(F-statistic)	0.000000			

Table 2 is showing cross section fixed effect of independent variables on dependent variables. In we check the

value of Schwarz criterion. If it is small then we can include this effect in our model. Here its value is 2.46% which is small and it is good for model.

Table 2 Cross section fixed effects

Dependent Variable: EM
Method: Panel Least Squares
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.247139	0.291261	0.848513	0.3977
DIR_OWN	-0.001999	0.004637	-0.431072	0.6671
CONCENT	0.000673	0.002503	0.268669	0.7886
SISTER	-0.002129	0.002447	-0.870259	0.3857
GOVT	-0.005234	0.012589	-0.415753	0.6783
LOWN	8.74E-05	0.004325	0.020202	0.9839
FOWN	-0.000706	0.003596	-0.196256	0.8447
FINN	-0.008489	0.006282	-1.351442	0.1788

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.484475	Mean dependent var	0.075637
Adjusted R-squared	0.383696	S.D. dependent var	0.223041
S.E. of regression	0.175099	Akaike info criterion	-0.494259
Sum squared resid	4.077719	Schwarz criterion	0.024677
Log likelihood	66.54071	Hannan-Quinn criter.	-0.283537
F-statistic	4.807287	Durbin-Watson stat	1.860081
Prob(F-statistic)	0.000000		

Table 3 checks the combine effect of cross and time period fixed effect on variables included in the study. Again we examine the value of Schwarz criterion which is 8.95% and it is good for model of the study. We can also include time period effect in our model and equation specification along with cross section fixed affect.

Table 3 Cross section and time period fixed effect

Dependent Variable: EM
Method: Panel Least Squares
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012926	0.294110	0.043949	0.9650
DIR_OWN	-0.002526	0.004501	-0.561272	0.5756
CONCENT	0.001939	0.002475	0.783121	0.4350
SISTER	-0.000223	0.002431	-0.091539	0.9272
GOVT	0.005724	0.012929	0.442742	0.6587
LOWN	0.002521	0.004315	0.584261	0.5601
FOWN	0.000935	0.003509	0.266393	0.7904
FINN	-0.007986	0.006050	-1.319944	0.1892

Effects Specification

Cross-section fixed (dummy variables)
Period fixed (dummy variables)

R-squared	0.559469	Mean dependent var	0.075637
Adjusted R-squared	0.444092	S.D. dependent var	0.223041
S.E. of regression	0.166298	Akaike info criterion	-0.563964
Sum squared resid	3.484530	Schwarz criterion	0.089511
Log likelihood	79.11710	Hannan-Quinn criter.	-0.298610
F-statistic	4.849043	Durbin-Watson stat	1.996645
Prob(F-statistic)	0.000000		

However, not all fixed effects are significantly different from zero. Therefore in table 4 we tested whether there is unobserved heterogeneity. There are two ways of testing for unobserved heterogeneity. The first is a test called 'Redundant Fixed Effects Tests'. And second is Wald test which is shown in table 5. The p-values associated to the F-statistic and the Chi-square statistics are both 0.0000, which provides strong evidence against the null hypothesis that the fixed effects are all equal to each other. This suggests that there is unobserved heterogeneity.

Table 4 Redundant fixed effect test

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section and period fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.813034	(19,126)	0.0000
Cross-section Chi-square	72.678952	19	0.0000
Period F	3.064234	(7,126)	0.0052
Period Chi-square	25.152764	7	0.0007
Cross-Section/Period F	3.599561	(26,126)	0.0000
Cross-Section/Period Chi-square	88.875809	26	0.0000

Another way to test for unobserved heterogeneity is performing a Wald-test on the fixed effects coefficients. More specifically we test the H0= C(1)=0, C(2)=0, C(3)=0, C(4)=0, C(5)=0, C(6)=0, C(7)=0, C(8)=0. Table 1.2 shows the Wald test shows that all variables have significant impact on earning management. This can be seen by F value and probability value. So it rejects the null hypothesis that these independent variables do not effect earning management. This again suggests that there is unobserved heterogeneity.

Table 5 Restriction test

Wald Test:			
Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	17.99738	(8, 152)	0.0000
Chi-square	143.9790	8	0.0000
Null Hypothesis: C(1)=0, C(2)=0, C(3)=0, C(4)=0, C(5)=0, C(6)=0, C(7)=0, C(8)=0			
Null Hypothesis Summary:			
Normalized Restriction (= 0)		Value	Std. Err.
C(1)		0.276855	0.093328
C(2)		-0.006822	0.002136
C(3)		-0.002725	0.000997
C(4)		0.003524	0.000940
C(5)		-0.003440	0.001277
C(6)		0.000370	0.001070
C(7)		0.002011	0.001562
C(8)		-0.004546	0.001768
Restrictions are linear in coefficients.			

The random effects model assumes that the random effects are uncorrelated with the explanatory variables otherwise there would be an endogeneity problem, which in turn would make the estimators inconsistent. Here, firstly, we have applied cross section and period random effect individually in table 6 and 7 and then we have shown their two combine effect in table 8. The Hausman Test for Correlated Random Effects tests this hypothesis and it is shown in table 9. The test output is given below:

Table 6 Cross section random effect

Dependent Variable: EM				
Method: Panel EGLS (Cross-section random effects)				
Periods included: 8				
Cross-sections included: 20				
Total panel (balanced) observations: 160				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.159259	0.165497	0.962311	0.3374
DIR_OWN	-0.003217	0.003100	-1.037762	0.3010
CONCENT	-0.000654	0.001668	-0.392116	0.6955
SISTER	-0.001790	0.001742	-1.027626	0.3058
GOVT	-0.003385	0.002539	-1.333191	0.1845
LOWN	0.001557	0.002058	0.756659	0.4504
FOWN	0.001683	0.002428	0.692926	0.4894
FINN	-0.004230	0.003675	-1.151045	0.2515
Effects Specification			S.D.	Rho
Cross-section random			0.109229	0.2801
Idiosyncratic random			0.175099	0.7199
Weighted Statistics				
R-squared	0.088381	Mean dependent var		0.037295
Adjusted R-squared	0.046399	S.D. dependent var		0.179784
S.E. of regression	0.175564	Sum squared resid		4.685028
F-statistic	2.105194	Durbin-Watson stat		1.669859
Prob(F-statistic)	0.046201			

Table 7 shows period random effect of all explanatory variables on earnings management. Here we can see that sister organizations, local and foreign investors are positively impacting earning management of banks at 5% level of significance. All values are statistically significant and carry positive values.

Table 7 Period random effect

Dependent Variable: EM
Method: Panel EGLS (Period random effects)
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.257562	0.134977	1.908189	0.0583
DIR_OWN	-0.006697	0.002488	-2.692148	0.0079
CONCENT	-0.002497	0.001438	-1.735766	0.0846
SISTER	0.002932	0.001401	-2.092379	0.0381
GOVT	-0.004347	0.001843	-2.358430	0.0196
LOWN	0.000395	0.001537	0.256846	0.0476
FOWN	0.002426	0.002228	1.088761	0.0280
FINN	-0.003868	0.002462	-1.570800	0.1183

Effects Specification	S.D.	Rho
Period random	6.88E-08	0.0000
Idiosyncratic random	0.194548	1.0000

Weighted Statistics

R-squared	0.232257	Mean dependent var	0.075637
Adjusted R-squared	0.196901	S.D. dependent var	0.223041
S.E. of regression	0.199880	Sum squared resid	6.072721
F-statistic	6.568997	Durbin-Watson stat	1.352551
Prob(F-statistic)	0.000001		

in table 8 the top portion of the dialog displays basic information about the specification, including the method used to compute the component variances, as well as the coefficient estimates and associated statistics. The middle portion of the output shows the best-linear unbiased predictor estimates of the random effects themselves. The next portion of the output describes the estimates of the component variances. We see that the estimated cross-section, period, and individual error component standard deviations are 11.09, 8.21 and 16.63 respectively. As seen from the values of Rho, these components comprise 0.26, 0.14 and 0.59 of the total variance.

Table 8 Two way random effect

Dependent Variable: EM
Method: Panel EGLS (Two-way random effects)
Periods included: 8
Cross-sections included: 20
Total panel (balanced) observations: 160
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.131225	0.163047	0.804831	0.4222
DIR_OWN	-0.003218	0.002997	-1.073887	0.2846
CONCENT	-0.000491	0.001602	-0.306492	0.7596
SISTER	-0.001203	0.001692	-0.710987	0.4782
GOVT	-0.002952	0.002487	-1.187216	0.2370
LOWN	0.001888	0.002009	0.939690	0.3489
FOWN	0.001314	0.002347	0.560009	0.5763
FINN	-0.004091	0.003594	-1.138269	0.2568

Effects Specification	S.D.	Rho
Cross-section random	0.110935	0.2636
Period random	0.082054	0.1442
Idiosyncratic random	0.166298	0.5923

Weighted Statistics

R-squared	0.078206	Mean dependent var	0.024632
Adjusted R-squared	0.035755	S.D. dependent var	0.168200
S.E. of regression	0.165166	Sum squared resid	4.146517
F-statistic	1.842267	Durbin-Watson stat	1.749020
Prob(F-statistic)	0.083051		

Table 9 shows that the test fails to reject the null hypothesis at all confidence levels. This provides evidence that the assumption that the random effects should be uncorrelated to the explanatory variables is true for this dataset. Therefore it should not be problematic to estimate a random effects model.

Table 9 Hausmen test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section and period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.677028	7	0.0572
Period random	0.960319	7	0.9954
Cross-section and period random	8.309560	7	0.3061

Discussion and Conclusion

From the above results we have found that ownership by sister organizations, local and foreign investors positively affects earning management of the bank. Ownership by directors, major shareholders, government and financial institutions does not affect earning management of the banks. The companies with institutional investors are involved in more aggressive earnings management practices or companies with institutional investors tend to manipulate earnings upward more aggressively when their earnings before discretionary accruals are poor, and they downplay their earnings more than companies with individual investors when their earnings before discretionary accruals are exceptionally high (Rafik, 2002; Johri et al., 2008).

When we measure impact of ownership on earning management, discretionary accruals as a proxy for

earnings management is negatively related both to managerial ownership and to ownership concentration. The results suggest that both managerial ownership and ownership concentration improve the quality of annual earnings by reducing the levels of earnings management (Bolton, 2006).

The earnings management as represented by discretionary accruals have been regressed on the governance variables namely, ownership concentration, board size and proportion of independent directors. The results showed that sample with effective governance mechanism have insignificant relationship between ownership concentration and earnings management. The board structure however has significant relationship with earnings management. Regression results also show that earnings management is higher in a company with ineffective internal governance mechanism (Fan and Wong, 2002).

Recommendations

On the basis of results of study following steps should be taken by banks to improve earning management:

1. Banks should try to use mix ownership structure in order to improve its earning management and to improve its corporate governance.
2. Shares held by sister organizations can also bring about positive changes in managing the earnings of the banks.
3. Ownership by local and foreign investors can also help to improve the control mechanism in the organizations.
4. It will help to reduce agency cost and cost of capital in the organizations. Agency conflicts between managers and outsiders can be minimized by protecting their legal rights.

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