

Earning Management Leverage and Firm Performance: Empirical Evidence from Pakistan

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Abstract

Using the regression analysis by taking year and industry impact, we conducted the study to see how debt can be used to mitigate the negative impact of earning management on the performance of the company. We take the sample of non-financial firms from Pakistan between year 2009 to 2015. Our results conclude that firms which are engage in earning management activities by AEM or REM both impacts negatively on the performance of the company. The role of debt has a positive impact on the performance of the company and it can be used by the shareholders to monitor the activities of managers and attenuate the negative impact of earning management activities. We emphasis that company managers are involve in earning management activities in the context of Pakistan and role of debt is important to mitigate its negative impact on firm performance.

Keywords: Profitability, Leverage, Earning Management, Pakistan

1. Introduction

Company stakeholders are looking at the profitability of the company to judge the performance and they decide on the accounting numbers about the profitability of the company. The importance of accounting numbers in assessing the performance of the company cannot be denied. The financial reports show how firm managers are working for the company and if they are producing any good results for the company or not (Watts and Zimmerman, 1978). There is always a deficit trust between investors and managers of the firm. Due to moral hazard and adverse selection problems managers tend to manipulate financial numbers to get personal benefits instead to work for the betterment of the overall company generally and particularly for the shareholders of the company (Jensen and Meckling, 1976). The accounting scandals of early 2000 not only alert the shareholders of the company but also force regulators to impose tighter rules to safeguard the interests of the shareholders. Zamri et al (2013), presents the fact that debt holders monitor the affairs of the firms, so to do earning management in firms with debt in capital structure is difficult for managers and hence debt have positive affect on the performance of the firm. This relationship between firm accounting numbers and firm performance in presence of leverage is an interesting topic of research, so we want to check how earning managements negative impact on firm performance is affected in the presence of leverage in the capital structure of the company.

Modigliani and Miller (1958), by their study make a relationship between firm performance and use of debt in the capital structure. They argue by relaxing some of the conditions that firm value will go up by use of debt due to tax shield incentive for the company. The other researchers criticized the work of Modigliani and Miller and come up with the trade-off theory which posits that up to a certain amount of debt firm can achieve positives of debt after that firm value will go down due to bankruptcy cost. The main findings are that in certain environments firm value will go up using debt and if it is used strategically by company than it is better for shareholders of the company.

The studies on the role of earning management and profitability point out that managers of the companies are involve in EM activities to meet or beat the analyst forecast or to hide the bad things happening in the company (Kasznik, 1999). The managers due to empire building or other self-interests ignore the benefits of the shareholders of the company and involve in the EM activities. The CEO's in the starting period of their career with a company try to manage earnings upward to give impression to shareholders that they are best and they are working in the best interests for principals of the company (Ali and Zhang, 2012). The agency problem which is created by managers of the firm must be addressed and related costs must be minimized. This agency cost is pay by the company to the management of the company to make later loyal to the shareholders of the company (Teoh et al., 1998). This cost which company bears impact profitability of the firm negatively. The agency relationship between management of company and shareholders become worsen if cost which company bear to make



managers loyal not works and manager still work for their own benefits rather in the best interest of the shareholders.

The role of debt is crucial in maintaining the discipline of the managers and creditors monitor closely the activities of the managers, as they are themselves interested in the performance of the company to get back their loan amount (Nur Ainna et al., 2018). The research which we have conducted give a new scope in the literature by checking how different firm level characteristics, which is in this study is leverage, helps firm to minimize the impact of management discretionary negative activities and give good results for the shareholders of the company. We extend the literature, by checking how company can mitigate the negative effects of earning management by including debt in the capital structure of the firm. As per our previous knowledge, this study first of its kind in the context of countries like Pakistan and it can help regulators of the country to check how to control EM activities of the firm and what policies should they adopt to discipline the activities of company management.

The data for the study is taken from non-financial sector of Pakistan for the period 2009 to 2015. The panel data techniques are used to check the hypothesis of the study. The rest of the manuscript is managed as follows. In the subsequent section we discuss literature review and hypothesis development of the study, in the section 3 we discuss methodology of the study, which is followed by results and discussion and we conclude with the conclusion for this study.

2. Literature Review and Hypothesis Development

There is a lot of literature discuss about the motives of managers to manage earnings and how it impacts fundamental firm related issues. There are some incentives of managers can be categorize as empire building activities, to meet or beat the analysts forecast in the financial markets, to present a rosy picture of affairs in the firm to its shareholders and to make a case for their own selves to get incentives from the firm (Dechow et al., 1995, Roychowdhury, 2006). The studies point out how these kinds of activities to hide the real performance of firm impacts the overall firm characteristics and how these activities impact the performance of the firm in the short and long term.

The managers are doing earning management to show the good performance of the firm to its stakeholders and they are of the view that if they show good numbers to their investors than their reputation as a successful manager will be increased and they will get more financial and non-financial benefits in future (Shuto, 2007). Also, managers are restricted by debt convents and they are in pressure to meet the requirements of those debt convents, so they try to manage earnings to satisfy the requirements of their bondholders (Healy and Wahlen, 1999). The other motivation for firm managers to manage earnings is to get maximum benefit from the financial markets of the economy. Myers et al. (2007), points out that as companies are getting good returns from the financial market, so managers don't want to lose this momentum and in the period of bad performance by the company, they manage the earnings to get positive returns from the financial market.

There are different ways of doing earning management by the firm. Man et al. (2013), point out that there are two models are developed by researchers and they categorize them as accrual based earning management (AEM) and real activities based earning management (REM). AEM is related to change the course of firm earning outlook in accordance with the accounting rules provided by GAAP or IFRS (Jones, 1991). On the other hand REM is the change in the course of business to get the results which not present true picture of the firm performance (Roychowdhury, 2006). The discussion among researchers point out that firms are more inclined to do REM instead of AEM after the SOX implementation as AEM is easily scrutinized by the auditors and regulators and managers face punishment if they distort the financial reporting of company by means of AEM (Tabassum et al., 2015). Cohen et al. (2008), describe REM as a method to hide the real performance of the firm and to make believe stakeholders of the firm that the firm have achieved the performance measures in the normal course of business. REM is done by the firm by means of giving discount to the firm customers to enhance sale for the period, to produce more products than the sale demand to reduce the cost of goods sold and to cut the discretionary expenses to enhance the earnings for the period (Gunny, 2010). These activities by the firm enhance the firm performance for the current period but it damages the firm profitability in future.

The earning management increases the agency cost of the firm and agency cost for the firm increases due to earning management activities by the management of the firm (Jensen, 1986). As the agency cost of the firm increases, firm needs to make more expenses to make managers working with loyalty with the company. Healy



and Wahlen (1999) provide a review of earning management activities and shows that as company is involve in more earning management activities the profitability and overall performance of the firm show a negative trend. The literature is not clear about what is the actual impact of misreporting by the company on the overall performance of the company. Graham et al. (2005), by their study shows that as firm involve in real earning management activities the overall performance of the firm show a positive trend as firms are doing the management of earnings to show positive outlook to the investors of the company. They also emphasized that companies which are involve in REM are showing more earnings than those companies which are involve in AEM. The companies by means of overproduction and enhancement in sales by means of relax credit terms also show good earnings than other firms in the same industry (Fazeli and Rasouli, 2011).

Cohen and Zarowin (2008), perform a study to check how earning management activities affect the performance of the SOE companies. They performed a thorough analysis on the topic by taking into consideration both the means of earning management i.e. AEM and REM. They come out with the results that performance of the firm is not only negatively affected by the accrual management by the firm but in future the real activities negative impact on the performance of the firm is more severe and dangerous for the continuation of the firm operations. Rangen (1998), conducted his study on the impact of earning management on the overall firm performance after Seasons equity offering (SEO) and finds that firm which are involve in AEM faces negative results in the future after the SEO event. The investors in the market because of earning management predicts that firm will perform better in future, but they get disappointed because of poor results and market performance of the company also get affected because of it. Shivakumar (2000), studied the same behavior and points out that investors are enough vigilant that they predict the AEM activities of the firm and they adjust their position in the stock market, so he emphasis that although firm profitability go down due to due to AEM but market performance of the firm is not that much affected. The earning management activities by means of accrual management impacts the performance of the firm negatively but the researchers are not conclusive that how it impacts the overall stock performance of the company.

As auditors become more vigilant after the accounting frauds of early 2000, so firms are reluctant to indulge in AEM activities instead that are involve in alteration in real activities of the firm to manage the earnings (Graham et al., 2005). The managers of the company are aware that accrual earning management are riskier and it will be difficult for the firm to hide those activities from the scrutiny of the company stakeholders. The firms are involve in selling off their non-performing assets to just show good accounting performance to the stockholders of the company (Bartov, 1993). The firms managers whose tenure of service is going to end in the near future try to show good accounting performance to the stakeholders by holding back necessary expenses of the firm and it impacts negatively to the overall future performance of the firm (Skinner and Sloan, 2002). Gunny (2010), is of the view that as firms are more involve in the real earning activities the future performance of the firm goes down and it harms firm more. Tabassum et al. (2014), in the context of Pakistan shows that firms which are involve in REM show good performance in the current period but overall performance of company is not impressive and due to it investor of company lose a lot of money.

From the above discussion we can infer that earning management activities at the firm level have a negative impact on the performance of the firm and as firm try to show good performance through EM, but it hurts firms badly in subsequent years, so as per our earlier discussion the first hypothesis of our study is as follows:

H1: The future performance of firm gets worsen due to Earning Management activities of the firm in the context of Pakistan.

Modigillani and Millar (1958), through their seminal work on the impact of capital structure on the performance of the company, shows that company performance is not related to capital structure and it has no impact on the firm performance. They take some of the assumption to prove their point but some of the assumptions are unrealistic and cannot be applied in the real-world scenario. So, afterwards tax incentive circumstances conclude that those companies use more debt are more profitable than other peers. The other branch of researchers presents the tradeoff concept, according to them the companies only can get high performance until optimal level of debt and after that as bankruptcy costs increases the profitability diminishes and firm may face bankruptcy if it keeps on taking debt after that optimal level. The signaling effect suggests that firm which are taking more debt will perform better in future than firms with low level of debt. Jensen and Meckling (1976), take the agency cost concept and point out that as agency cost of monitoring goes down with debt in the capital structure because



of efficient monitoring by debt holders of the company and it results in the increased profitability for the firm in future. Robb and Robinson (2009) and Ruland and Zhou (2005), studied the impact of leverage on the financial performance of the company and point out that performance of the company enhances with the use of debt in the capital structure. The firm debt cost in shape of interest is less than the benefits the firm reaps due to debt, so the overall performance of the company improves which translates into its profitability in future. There are some studies which points out that there is no significant relationship between firm performance and its leverage. The other studies on this topic shows that as firm gets more leverage into its capital structure it impact negatively on the performance of the company and company future profits gets down due to debt in the capital structure (Fama and French, 1998, Negash, 2001). The agency relationship arises between debt holders and managers of the firms and due to this company overall firm performance go down. Denis (2016), take the role of different kind of debts on the performance of the company and concludes that firms which take debt from banks perform better in the future. Ibhaguia and Olokoyo (2018), take the threshold level of size in determining how leverage impacts performance of the firm and they presents their facts that as size of firm is small the leverage impacts negatively on the firm performance and as firm size is big there is no such negative impact of leverage on the firm performance.

The above discussion shows that there are studies which reflects that debt has positive impact on the firm performance and there are some studies proves that debt and firm performance are negatively related to each other, so we conclude from the above discussion that as debt makes firm managers more discipline, so debt impacts positively on the performance of the firm and hence study second hypothesis is as follows:

H2: The firm performance improves in future as more debt is in the capital structure of the company in the context of Pakistan

The firms in the context of Pakistan are mostly take debt from the banks and banks monitor the performance of company regularly. The capital bond market of the country is not a strong one and companies relies mostly on debt from bank to satisfy the capital needs of the company. The leverage in the capital structure of company not only works as the watchdog on the managers but also helps to improve the quality of earnings of the firm which translates into future good performance by the company (Jensen, 1986). The earning management by the firm can be controlled if debt is present in the capital structure of the firm as they will monitor the activities of the company. Ge and Kim (2014), points out that cost of debt increases when firms are involved in the activities to distort the reporting quality which means the firm has to look for other cheap sources of capital to satisfy its capital requirements. The discussion points out that providers of debt to company also monitoring company fundamentals and they not like to give credit to those companies which are involve in misreporting. It takes us to the point that as there is debt in the capital structure of the company will help to attenuate the bad effects of EM and help company to improve its future performance. So, the third hypothesis of this study is as follows:

H3: The negative relationship between earning management and firm performance attenuates because of debt in the capital structure of the company in the context of Pakistan.

3. Data and Econometric Methodology

The study is done in the context of Pakistan and for that matter, we took the data from the economic environment of Pakistan. The data is taken from non-financial companies those are registered in Pakistan Stock Exchange (PSX) from the year 2009 to 2015. As financial sector accounting practices are different from non-financial sector, so we select non-financial sector for our study (Roodposhti and Chashmi, 2010). The total registered companies in PSX are 574 out of which 280 are categorized as financial sector firms (PSX, 2017). The remaining firms are non-financial firms out of which we have gathered 154 annual statements from year 2008 to 2016. To compute our analysis only data is available for 115 firms, so our final data is for 115 firms. The data is collected by hand through financial statements of companies listed in Pakistan.

The earning management is defined as concealment of performance measure of the company to show desired performance to the audience of the company (Healy and Wahlen, 1999). The companies try to manage their earning by either changing the course of accounting within the scope of GAAP (Dechow and Skinner, 2000) or by altering the real activities of the firm (Gunny, 2005). Roychowdhury (2006), shows that by three alternative ways companies can perform real earning management. These three are categorized as sales manipulation by extending discounts to customers, second one is by producing more products than demand of products to decrease the per unit cost and thirdly manipulate earning by reducing the discretionary expenses like research



and development and advertisement expenses to show better results today. In this study we use Jones model to ascertain the accrual earning management (AEM) (Jones, 1991) and the sales manipulation as a measure of real earning management (REM).

The unexpected accruals are identified as the sign of managing earnings and it is taken as a proxy for AEM which is calculated by Jones (1991). The calculation of this variable is based on discretionary and non-discretionary accruals. The discretionary accruals are one which are regarded as a sign of change in accounting measures to manage earnings. The model to measure the discretionary accruals is as follows:

$$accruals_{i,t} = \beta_0 + \beta_1 \Delta Rev_{i,t} + \beta_2 PPE_{i,t} + \epsilon_{i,t}$$
(1)

In the equation (1) accruals are the accruals of the firm measured as (changes in current assets of the company minus change in cash) minus (change in current liabilities minus changes in short term debt) minus depreciation. The other variables of the above model are defined as Rev is the change in revenue for the company, PPE is the net expenditure made by company in the year on the Plant, property and equipment and ∈ shows the residuals for the equation. All variables in the equation (1) are scaled by lag year total assets. The residuals from the above equation are proxied as discretionary accruals. We take the absolute value of accruals to see the earning management of the company and increasing number of accruals is categorized as more earning management from the company.

The real earning management in this study is measured by sales manipulation which is done by the management to show good performance of the company for this year. The sales manipulation increases the sales for the company for the current year, but it negatively impacts the cash flow generation of the company and cash flows of the company not increased as per the increase in the sales of the company. So operating cash flows can give us idea that if firm is engaged in earning management. The model for it is as follows:

$$CFO_{i,t} = \beta_0 + \beta_1 S_{i,t} + \beta_2 \Delta S_{i,t} + \epsilon \tag{2}$$

All the variables in the equation (2) are scaled by lag of total assets. The residuals from the above equation are taken as abnormal cash flows. The higher value of the residuals shows that higher REM done by the company through the sales manipulation. The CFO in the above equation is cash flow from operations, S is the Sales for the year, ΔS is the change in sales from last year and \in is residuals from the equation.

The dependent variable of the study is performance of the company. Return on assets (ROA) are taken as the measure of performance of the company and higher the value of the ROA indicates superior performance of the firm. To show the future performance of the firm the following year value of ROA is taken as proxy for performance of the firm.

The leverage of the firm can be taken in different ways. The studies shows that firm decide to take loan on the different firm level characteristics (Hale and Santos, 2008). The relationships include the company arrangements with different loan providing agencies and arrangements with other capital providers in an economic environment. The proxy of leverage is taken in different researches as total debt to assets, long term debt to assets or short-term debt to assets. In this study, we take total debt to assets as the proxy for leverage of the company.

Now we discuss about the econometric model for this study. As we have discussed about the variables for the study, so now we can have given the model for this study. The model (3) of the study will be dealing with the hypothesis 1, the two version of this model will be used. In the first version accruals are taken as the proxy for the earning management and in the second version real earning management measure are taken as a proxy of earning management.

$$Performance_{i,t+1} = \beta_0 + \beta_1 EM_{i,t} + \beta_2 Controls + \epsilon$$
 (3)

In the model (3) ROA is taken as proxy for performance, accrual earning management and real earning management are taken are proxy for earning management activities of the firm. Different control variables are also included in this study to check how different factors affect the performance of the company. The size of the firm, the financial distress, book to market value and last year firm performance is considered control variables in this study.



To check the second hypothesis of the study we take leverage as the independent variable and performance as the dependent variable, the model for it as follows:

$$Performance_{i,t+1} = \beta_0 + \beta_1 Lev_{i,t} + \beta_2 Controls + \epsilon$$
 (4)

The other variables are same as in the model (3) of this study, only change is the leverage which is proxied as total debt of the company for the year. Model (4) is used to see how firm performance is affected by the amount of debt in the capital structure of the company.

To check the hypothesis 3 of the study interaction term is introduced between EM and leverage is introduced in model (5). This model will tell us that how leverage in the capital structure of the firm will reduce impact of earning management and improve the profitability of the company. The model to check it as follows:

$$Performance_{i,t+1} = \beta_0 + \beta_1 EM_{i,t} + \beta_2 Lev_{i,t} + \beta_3 EM * Lev_{i,t} + \beta_4 Controls + \epsilon$$
 (5)

In the model (5) interaction term is introduced to check how leverage in the capital structure of the company will help company to reduce the negative consequences of earning management on the overall firm performance. The other variables of the model (5) are same as of model (3 & 4).

4. Results and Discussion

The study is conducted to see how performance of firm is affected by the earning management activities of the firm and if leverage lessen the bad effect of earning management on firm performance. The earning management in this study is taken by two means first one is the accrual earning management and second one is the real earning management. First, we run the regression by taking AEM as the independent variable and in the second version we run REM as the independent variable. The fixed effect of year and industry are also taken into consideration when we run the regression analysis (A. COLIN CAMERON and TRIVEDI, 2009).

In the table 1 of the study we illustrate the descriptive of the study. The mean value of AEM and REM shows that average firm in Pakistan is not involve in the earning management activities as its mean value is near to 0. The minimum and maximum values for AEM and REM are 1.47, 10.3, -0.43 and 4.56 respectively. The mean value for performance measure of the study is about 10%, which shows overall average Pakistan firm is earning 10% returns on its assets. The firms in Pakistan are moderately levered which we can see from the mean value of leverage which is 47% of total assets. The proxy for size variable is log of total assets of the firm, which shows that average company in Pakistan is of reasonable size with maximum value for this variable stands at 12.34. The book to market value shows that companies in Pakistan are growing and to compete in the world market the companies need to show more growth.

Table 1: Descriptive of the Study

Variables	Mean	Median	Std Dev	Min	Max
ROAt+1	0.095	0.089	0.125	-0.22	0.43
AEM	0.04	0.024	1.13	1.47	10.3
REM	0.05	0.032	0.54	-0.43	4.56
Lev	0.47	0.42	0.34	0	0.78
Size	8.76	8.33	2.38	7.45	12.34
Z Score	1.93	1.78	0.97	0.23	6.51
BM	0.36	0.29	0.52	0.01	4.12
ROA	0.09	0.085	0.127	-0.22	0.43

In the table 1 variables are defined as ROA_{t+1} is the profitability for next year, AEM is the accrual earning management, REM is the real earning management, Lev is the debt to asset ratio, Size is the log of assets, Z score shows the financial distress of the company, BM is the book to market value and ROA is the current year profitability of the company.

In the table 2 of the study we elaborated the correlation matrix between the variables of the study and show the VIF results to check the multicollinearity between the independent variables of the study. The results reveal that



performance of the firm is negatively associated with real earning management activities of the firm and positively related to accrual earning management. We can also see that leverage impacts positively on the overall performance of the firm which is as expected as per our hypothesis of the study. The other variables of the study show that size, distress measure and last year firm performance are positively correlated with the future performance of the company. The firms which are growing are positively correlated with the profitability of the company which we can see from the book to market value variable of this study.

Table 2: Correlation Matrix and VIF

Variables	ROAt+1	AEM	REM	Lev	Size	Z Score	BM	ROA	VIF
ROAt+1	1								
AEM	0.12	1							2.13
REM	-0.24	0.17	1						1.54
Lev	0.09	-0.12	0.07	1					1.25
Size	0.06	0.05	0.18	-0.12	1				1.76
Z Score	0.34	-0.22	-0.14	-0.37	-0.15	1			1.97
BM	-0.27	0.06	0.11	0.23	-0.21	-0.43	1		3.2
ROA	0.67	0.1	-0.18	0.07	0.08	0.31	-0.29	1	7.23

All variables are defined same as in Table 1

Now we discuss the regression result of the study. Table 3 of the study presents the regression results for this study. The results are presented in five columns for different measurements to ascertain how two kinds of earning management, leverage and combine effect of EM and leverage impacts the company performance. The column 1 of the table 3 use AEM as the main independent variable, in column 2 REM is the independent variable, in column 3 leverage is the main independent variable. The column 4 and 5 of table 3 takes the interaction term between EM and leverage to see how leverage lessen the impact of EM on firm performance. In column 4 AEM is multiplied by leverage and in column 5 REM is multiplied by leverage.

Table 3: Regression Results

	1	2	3	4	5
Variables	ROAt+1	ROAt+1	ROAt+1	ROAt+1	ROAt+1
Constant	0.153***	0.176**	0.234**	0.122**	0.169***
EM	-0.035**	-0.065***		-0.023**	-0.056***
Lev			0.172**	0.198**	0.178**
EM*Lev				-0.074**	-0.067**
Size	0.043*	0.096**	0.076**	0.087***	0.079***
Z Score	0.004**	0.006**	0.025	0.0032*	0.0049*
BM	0.032	0.036	0.012	0.028	0.018
ROA	0.75***	0.70***	0.67***	0.76***	0.79***
Adj R2	0.45	0.42	0.58	0.54	0.49
F Value	38.67***	34.33***	28.43***	53.12***	43.26***
Year Effect	Yes	Yes	Yes	Yes	Yes
Industry Effect	Yes	Yes	Yes	Yes	Yes

^{***} indicates significance at 1%, ** indicates significance at 5% and * indicates significance at 10%. EM in column 1 and 4 shows the AEM, while in column 2 and 5 it shows REM. All other variables are same as defined in table 1 of the study.



The result of column 1 of table 5 shows that AEM activities are negatively impacts the firm performance. This result is significant at 5% significance level. It confirms study first hypothesis that firm performance is negatively affected if firm managers are indulged in earning management activities by managing the accruals. The adjusted R2 of the model in column 1 shows that 45% of variation in the dependent variable of the model is described by the independent variables. The overall model fit is good and econometrically model has the power to describe the result. The size, financial position and lagged firm performance variable are significantly and positively impacting the performance of the firm. The column 2 of the study takes the REM as the independent variable and the results indicates that real earning management activities are negatively affecting the overall performance of the company. The other model properties show that variation is described by the independent variables and model is overall fit. The column 3 of the table 3 shows that leverage is impacting positively on the performance of the firm (Davydov, 2016) and by taking more leverage the firm performance gets positive. The model measurements satisfy the overall model for these variables. In column 4 and 5 of table 3 we take the interaction term of AEM and leverage and REM and leverage. The results of these two models shows that as firm take leverage into its capital structure the negative impact of earning management are attenuated and firm performance is improved because of presence of debt in the capital structure of the company. The coefficient for column 4 and 5 for the table main independent variable are -0.074 and -0.067 respectively. The other measures for the model shows that goodness of fit of the model is good and model has enough explanatory power to describe the dependent variable of the study.

The research result indicates that the use of earning management by means of accrual or real activities impacts the firm performance negatively and it is not a good sign for the investors of the firm. The research also shows that leverage can be use by the firm to improve the performance of the firm by better monitoring and signaling. The study takes us to new dimension in the field of corporate finance by investigating that how debt in the capital structure of the firm impacts the overall performance of the firm in the presence of earning management activities performed by the managers. The result of the study indicates that debt can be used as tool to monitor the activities of the managers and it lessens the negative impact of earing management on the performance of the firm. So, we see debt as a tool to monitor the activities of management and it can help in the environment of Pakistan to safeguard the interests of the shareholders, as in Pakistan regulators are not as much vigilant to protect the rights of shareholders.

5. Conclusion

The firm managers to get extra benefits and to make things comfortable for them indulge in earning management activities. The accrual and real earning management are the ways for managers to present a cordial picture of affairs of company to the outside stakeholders of the firm. The researchers are working on different aspects of firm level characteristics and present their findings that how earning management activities of the firm are damages the performance of the firm and it give incentive to managers for making suboptimal decision for the firm. The debt is an important part of firm capital structure. Different researchers point out advantages and disadvantages of debt in the capital structure of the company. In the regimes where regulator role is minimum to discipline the firm management activities, debt can be an effective source to monitor and discipline the management activities. Debt is also regarded as signal by management to its stakeholders to show management confidence on the firm activities and bright prospects. The study is based to see how firm perform better in the scenario of earning management activity by the firm if firm use debt as a tool to monitor the activities of management.

The researchers use the data from Pakistan of non-financial companies those are registered in the Pakistan Stock Exchange (PSX). The data is taken from year 2008 to 2016 for 115 companies which are categorized as non-financial firms in the stock exchange of the country. The role of control variable is also taken to see how different determinants of performance impact the performance of the company.

The finding of the research reveals that firms in Pakistan are involve in both kind of EM activities, which is not a good sign for the external and internal stakeholders of the company. It is also revealed that as more regulators are taking strict measures to control accounting frauds by the companies in Pakistan, the companies are now more involve in real earning management activities to hide true performance of the company from outside stakeholders. The further investigation from the study revealed that earning management activities affects firm performance negatively and both type of EM activities is not good for the performance of the firm. The study also points out that as firm take debt, it become a good source for company to improve the performance of



company. The joint role of EM and leverage ascertains that presence of debt in the company capital structure helps to attenuates some negative effects of EM on the performance of the company.

The negative impact of EM can be minimized by level of debt in the capital structure of the company. The debt level in the capital structure of the company discipline the activities of management and company management left with fewer options to manage the earnings which helps company to minimize the bad effects of earning management on the performance of the firm. The study provides insight that how company management can be monitored better with the help of debt in capital structure and it can work better for shareholders of the company to protect their rights. This study is not without some limitations. We suggest the future work on different type of debt financing used by firm and its impact on the performance of company. The firm is taking loan from different sources and maturities, so these different types of loans should be investigated that how it effects the performance of company in presence of EM. Also, we suggest doing robustness check by employing different methods of computing EM. Also, endogeneity issue must be done in future studies to check if there is any problem of endogeneity between variables and if yes than how to deal with it.

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