FACTORS AFFECTING EARNING MANAGEMENT: EVIDENCE FROM BANKING SECTOR OF PAKISTAN

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ABSTRACT

The purpose of this study is to analyze the motivational factors behind the manipulation of the earnings. Earning management is defined as judgments of the managers while reporting the financial earnings. It is mostly used, to retain the financial position of the firm in their downfall. Firm size, profitability, financial leverage and effective tax rate are taken as the motivational factors behind earning manipulation. The study is done on the banking sector of Pakistan. It has used the convenient sample technique for the selection of 10 different banks. Impact of independent variables on the earning management is measured through regression and correlation analysis. The study found that whenever firm faces decline in their profit, the managers may utilize the future predicted earnings in the current year to retain its positive image. When the firm is financing its capital using debt, it will also lead the managers to misreport the bad figures. Firm size and tax rate found to be negative but insignificant in explaining the earning management.

Keywords: Earning Management, Firm Size, Tax Rate, Leverage, Profitability

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Introduction:

Reporting accurate information to the decision making department and in front of shareholder is very important. The financial statements and the decision, is then based on the information which is provided to the managers. When any firm faces decline in their financial position, they try to use different manipulation techniques to cover up their losses. Some of the firms like 3.com default due to reporting the wrong figures of their earnings. In order to attract more shareholders, and to raise capital the most important method firm use to manipulate earnings, by reporting future earnings in current year with expectations that they will surely receive those earnings. (Breu, 2005).

The earnings of any organization are very important for the shareholders and investors because they have to invest based on the financial position of that organization. So true financial reporting will be beneficial for the firm and investors. Sometimes, reporting wrong earnings, when they predict future loss, will also be beneficial for the firms to regain their financial position.

The earning management techniques are applied by the financial managers to change the original figures into favorable figures. The most common method they use to manipulate the financial figures is to report the future earnings in the current year, with the expectations that they would deceive the stakeholders. Total net income is the component (which is used for the manipulating the financial image of the organization) where they use the upcoming incentives to increase the income Beneish (2001).

Following organizations were caught after they used earning manipulation techniques:

Freddie Mac (2003) intentionally understated the financial figures and manipulated the firm's position. This organization was caught under the SEC investigation.

World Com (2002) underreported the line cost and they manipulated revenues by fake accounting entries. They were caught by the internal audit department.

Financial reporting or financial figures which do not reflect the underlying performance of the firm or do not reflect the performance trend and showing the poor guide to the future earning is placed under the "Fraudulent earning management" (Breu,2005). The objective of fraudulent earning management is to invest the excess profit by reporting less in the current year and to make the financial position strong. The purpose of this earning management is to go for long term benefits by cutting short term extra benefits.

Nurdiniah & Nerlina (2015) analyzed the factors behind the earning management using the sample size of 12 companies. They have also used discretionary accruals in order to find the earning management. Motivation bonus, motivation debt and cost of political motivation were the factors behind earning management, ROA, leverage and size of the firm were taken as the proxy for the measurement of these independent variables. Results show that all the three factors had positive and significant relationship with the earning management.

There are two different scenarios that are used to get escape from a bad phase. First, when the managers face an excess

amount of profit or extraordinary financial performance from the organization and Second, when the firm faces decline in the earnings or financial performance. Organization when earn more than the expectations, they can save the excess amount of earning which is above the benchmark, to report those in the bad phases of the future. Similarly, when the firm doesn't reach up to the benchmark, then they try to report the excess amount saved in the pas to misreport earnings or to report the receivables in the year to manipulate (Klinefelter, 2008).
For this purpose the major four factors which are taken under consideration after studying the previous researches, are firm size, profitability, financial leverage and effective tax rate. (Nasirzadeh,2012) studied the impact of three independent variable out of four which are mentioned above and found that only financial leverage had a significant but inverse relationship with the earning management. Tax rate and firm size found to be insignificant.
Behind the earning manipulation what are the different factors or reasons, this is to be analyzed in this research. When a firm has liabilities more than their assets and they do not able to meet the obligations then they use earning management techniques to attract more investors to overcome their liabilities. So, primary objective is to find out the factors behind earning management.

1.1. Overview of Banking Sector of Pakistan:

Banking sector plays an important role in the process of economic development of any country. Development of any sector, mobilization of funds, availability of funds, creator and distributor of money etc. are the key role for any bank. In the recent years, the need of the banking sector has been increased in Pakistan. Development of banking sector in Pakistan was exceptional in the last few years and it is still going upward. After the independence, State bank of Pakistan was established in July, 1948 and currently above 50 banks which include private, public, foreign banks, are actively working in Pakistan. SBP administer and directs the banking sector of Pakistan.For this study the following 10 different banks are taken as a sample:

1. AL Baraka Bank
2. Allied Bank
3. Askari Bank
4. Bank Al Habib
5. Bank Alfalah
6. Bank of Punjab
7. Habib Bank Limited
8. JS Bank
9. Muslim Commercial Bank
10. United Bank Limited

1.2. Problem Statement:

Whenever any firm faces decline in their financial position, for the recovery they may use many manipulation techniques in order to get more capital from the shareholders. One of the most prominent tools used to manipulate earnings is earning management. Although many studies have found the reasons behind this manipulation, in this research we will capture maximum factors which can become the basis for the earning management. Factor which is more prominent will be highlighted behind the earning manipulations.

1.3. Significance:

The contribution of this research paper is that the shareholders and other investors which are interested in investing their capital in different banks can use this information to understand the basic factor behind manipulations, misrepresentation and misspecification, if any.
For the auditors this study will help them to know the basis of earning management in any organization, if occurs.
This study will be helpful for the researchers, when studying the earning management on other target population. They can include other factors which they think can be the reason behind manipulation of earning.

LITERATURE REVIEW:

Previous researches conducted on earning management and its determinants are discussed in this chapter. Researches had explained different factors behind earning management, using those studies in the identification of variables and methodology. Alaei, Nassirzadeh & Salehi (2012) examined the factors affecting earning management in Iran. They have used 114 companies which are listed on Tehran stock exchange as a sample size, using the data from 2006 to 2010. In order to find the relationship or impact correlation and regression analysis were used. They studied four factors behind earning management, debt to equity ratio, effective tax rate, firm size and motivation bonus. Result indicates that there exist inverse and significant relationship between debt to equity ratio and earning management. There exist direct and significant relationship between firm size and earning management. Effective Tax rate and bonus for the motivation found insignificant in this study. They recommended in their research that any other accrual method can be used to measure the earning management as they used discretionary accruals method.

Salteh at el. (2012) found the relationship between weighted average cost of capital and earning management. To find out earning management discretionary accruals and non-discretionary accruals were used. They used the companies which are listed on Tehran stock exchange between the years 2003-2009 as a sample. They studied when business units suffers from the capital cost due to weak performance, decline in stock prices then managers in an attempt to escape in such bad phase use management techniques. To find the results multivariate linear regression model was used. Results suggest that there is weak but significant relationship between weighted average cost of capital and discretionary accruals. There exist insignificant relationship between WACC and non-discretionary accruals. They proposed in their research to add different factors to measure the impact on earning management.

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Wensheng & Jie in their study, factors affecting manager's earning management, used four sections. They explained the concept of earning management and the reasons behind earning management. Then ethically they have explained the concept of earning management. Management compensation and capital market incentives were used as the influencing factors behind earning management, in this research. Both factors are considered as the most important reasons behind the manager's willingness to manipulate earnings. The purpose of this study was basically to help the investors individually, when the individual is making his own decision based on the financial information. They also suggested that earning management should be discouraged because every investor sometime somewhere uses those statements in making his investment decision.

The manipulation in the financial earnings in order to make investment decision was examined. For this study a large sample of public emperies from the year 1978-2002 had been taken. The study examined how the fixed asset investment is affected when the firm faces any manipulation in earnings. Public firms caught while doing misrepresentation by SEC (accounting regulation) shareholders (improper accounting) and when restrained their financial statements. They have found, not doing the over. Investment and consistency in fixed asset investment when the public firms used earnings manipulations. Findings of study suggest that earning manipulation when done to impact external decision have also impact internally (Merlichols & Stubbens, 2008).

Whenever firm faces decline in their earnings, then they prefer to go for the earning management for the short term. Usually they prefer to report wrong income and operating cost. The cash flow from operating activities and charges in working capital mostly used to increase the low income when found. Two theories were highlighted in this study i.e. Information processing heuristics and prospect theory. Just to avoids the loss in the earning when faced. That is why they prefer to go for earning management techniques. Findings of the study suggest that that the frequency of manipulating earnings is very high when the firm faces decline in their earnings (Burgtahler & Dicher,1997).

After the collapse of corporate Giants such as WorldCom, has informed many of the shareholders to pay more attention to the ethical issues in accounting system. The use of financial statement is a growing concern. During the last few decades, the most problematic issue in financial institutions are facing is earning management. Financial statement then does not reflect the accurate financial position of the firm. This participates in introducing the Islamic practice can be used to reduce the practice of earning management. The Islamic practice for this purpose is Aqidah. Introduction of such practice was necessary when the violation of earning started affecting the stakeholders (Demikha & Obid, 2011).

For the manipulation of the financial figures, different ways to manipulate the earnings are defined. Five different methods are commonly used in earning management.

i. The Big bath: In this type all the expenses and loses are recorded in a given year so that in future positive image can be reflected.

ii. Create acquisition accounting: In this method when any acquisition is done then the current and future earnings can be manipulated.

iii. Cookie Jar Reserves: This method is used to report the future upcoming expense in the current year or to report the future upcoming profit in this year, in order to control the current and future earnings.

Iv. Materiality: to get where the analyst forecasted by allow the companies to slightly judge their numbers.

v. Revenue recognition: Dealing with the Revenue of the company to manipulate the loss comes under Revenue recognition.

For the shareholder finding earning per share is of vital importance as they base their decision on such findings. Managers try to estimate future earnings per share and represent it to the investors which consider it as important factor. The impact of earning management on cost of capital and stock return was the objective of this study. They had used listed companies on Tehran stock exchange. They studied two variables for earning management i.e. earning forecast frequency and earning forecast errors. Results suggested that there exist a significant inverse relationship between future forecast frequency and cost of capital and also significant but direct relation between earning forecast error and cost of capital, for those samples companies (Abad, Jamali, Rostami & Zarranji ,2013).

The purpose was to find out the influencing factor behind earning management. Return on asset (ROA) and return on total sale (ROS), both measures for the earning management were used on the basis, as they can measure the frequency of earning management. Both variables represent the different result for the same industry. It indicates that the scaling variable is questioned, that what the perfect measure for the earning management is. They indicated that through this study the legal and illegal activities can be identified. They also suggested that capturing the effect of other more factors behind the earning management. Introducing the new measures for the earning management shows different results (Dilgor & Graschitz).

Roychowdary (2006), in the article earning management through real activities the result indicates that real activities are done to handle the financial losses. Many of the real activities mentioned in the paper were: price discounting, reduction of discretionary expenditure. Both activities are used to level the cost of goods sold. This study is based on cross sectional analysis. Along with both real activities, some other factors are also taken into consideration in manipulating the earnings of the organization. Other real activities include organization membership, the stock of inventories, account receivable, and incentives given to the stakeholder by the organization. The basic purpose of all

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these real activities is to show the positive image to the shareholder and to cover/ hide financial loss.

Taking a sample of 99 public companies and 99 private companies, earning management is measured. It was discussed that many ways are available to measure the earning management but mostly discretionary accruals was used. First, the study found that earning management was captured through changes in the cash flows. Second, the earning management was captured through depreciation and amortization of the goodwill and assets. Third, whether the company uses the method of reporting the sales and other gains in the future time period. All the three methods are used to capture the earning management. The findings were earning management does exist in the sample whether we use any of the three methods to measure the earning management (Sundgren).

Beneish (2001) discussed few things in his article, what is the earning management? How it is measured? And how it is done? The basic reason discussed behind the earning management was the incentives offers in any organization. The earning management techniques are applied by the financial managers to change the original figures into favorable figures. The most common method they use to manipulate the financial figures is to report the future earnings in the current year, with the expectations that they would deceive the stakeholders. Total net income is the component (which is used for the manipulating the financial image of the organization) where they use the upcoming incentives to increase the income.

Herlia & Noraina (2015) studied the motivational factors behind the earning manipulation technique in Indonesia. The sample they used was consisted of 12 companies using their data from 2011 to 2013 to find the results. The study find the few motivational factors which include, bonus motivation, debt contract motivation and political cost motivation using the financial statement of these firms they derived the values of the variables. They used the modified jones model and found the following results:

1. Motivation bonus, found using ROA had no significant negative effect or earning management.
2. Motivation leverage has a positive effect and significant on earning management.
3. Political Cost motivation (measured by the size of the firm) has no significant effect but positive impact on earning management.

Ahadiat & Hafzi (2012), while investigating the earning management practice, they found that earning management is done in corporate sector just to achieve any specific objective. Many objectives should be considered behind earning management such as moral philosophy and ethical ideology. Using the questionnaire technique the results of this study being captured. Actual reason named to the practices behind earning management. They explained the factors unlike profitability, financial loss they are the forces which lead, to the unethical practices. When the manager goes unethical earning management takes place. They also added a new thing in recommendation that while teaching the general accounting rule to the employees they must also teach the code of conduct i.e. ethical and non-ethical.

Hsharairi and Salama studied the impact of leverage on earning management. They studied the impact of leverage during the merger and acquisition. When the payment is made on the basis of leverage/asset then the firm which is being acquired can use the techniques to manipulate their financial position or financial figures. According to the results the study found the inverse relationship b/w leverage and pre-merger earning management. They also explained that leverage and payment method before merger and acquisition had an effect on earning management.

Klinefelter at el (2008) studied the difference between the cash accounting and accrual accounting. The major difference point explained in this study is the reporting time of the profit and expense in the book. They explained that when the cash is received from the receivables and expenses are paid which are pending, then the organization reports the entries in the book, whereas, accrual accounting is the process of reporting the financial activity when it is realized. This accrual accounting in the future leads to misreport and manipulated the financial figures in the bad phases, to retain the financial positive image.

Motivation factor behind earning management in public and private listed companies were examined (Koboyo & Wawwea, 2014). They used 56 listed companies as a sample, using the questionnaire techniques. The factors which are taken as the motivational factors were; incentives, wealth increase, poor financial condition, expectations of stakeholders, growth of the firm, account receivable. According to the regression results31% of the variation captured due to these factors in earning management and rest 69% is still unexplained. Concluding the research they indicate other variables are responsible for the variation in the earning management.

Impact of annul bonus scheme given by the organization to the employee on the manipulation of the earnings was the purpose of this study. The managers of the organization do earning management in order to get the maximum annual bonus. Authors found that when the earnings or profit is below to the benchmark, set for giving bonuses, the managers then change the earnings upward to get the benefit of the bonuses. Moreover, CEOs manipulate the earnings downward, when they are above the criteria set for giving the bonuses. This study is totally against the study of Healy (1985). The research was done on the two different sample groups which are divided on the basis of time period i.e. 1982 to 1984 & 1987 to 1991 of database firms. They also used discretionary accruals to find the manipulation in the earnings and proposed the total accrual method to find the earning management for future studies.

Chapman (2008) explained the effect of real earning management on the organization as well on the competitors. Past many researches explained that managers just use the verity of techniques in order to show positive image. Based on the new data analysis, it was found that the managers of

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the firms which are going well in the current year by beating the real earning of the last year will try to manipulate the market by using the stock price of the organization. In the best time period they will not make the stock price that much high which in the future, if fails to maintain earning, they cannot retain. So, they will lower down their stock price even in the period of good earning. Their main finding also says that real earning management have greater effect on the reporting period and on the competitors.

Rehman et al (2012) studied what are the motives and how to control the earning management. Earning of any organization is of vital importance. They explained that earnings are the basis for valuing the stocks of any organization. Investors consider the earning of any firm to analyze the stock and then base their decision on the current earnings. They also explained companies with lower earning have lower stock price in the market, whereas the Company with good earnings has high stock price. So that manipulation of the earning plays a key role in determining the stock price of any organization. Cookie jar, big bath and Big Bet are the techniques covered in this research paper for earning management. Measures to control earning management are to set rigorous accounting rules, awareness of audit committee, corporate governance and consciousness.

Leuz at el (2003) in their research compared the earning management across 31 countries. They proposed that firms use manipulation of the earnings just in order to protect their inside benefits, and to show positive image in front of the competitors. Investors' right protection is considered on the basis of insider benefit, whereas rights of the investors are not protected on the basis of outside benefit. They basically try to protect themselves on the name of protection of their investors. It is also explained that when the organization use the investor protection strategy the insiders may not get advantage. The regression results showed that earning management is negatively related to the quality of stakeholders right and legal activities.

Different consequences occur when the companies go for earning management was covered by Katherine (3005). She examined four types which companies prefer to go for after doing manipulation. First, when companies go for the manipulation they invest the capital which is being manipulated in R & D to increase their income. Secondly, they invest that capital in SG&A to increase income. Third, the company prefers to dispose of the long lived assets for the recognition of timing of the income and then if needed they prefer to go for the replacement of the assets. Fourth, they cut down their prices in order to boost their sales in the current period. The results are consistent in recognizing the all four types of consequences using the earning management by any organization.

Although many researchers found different motivational factors behind the earning management but the four factors most commonly studied were firm size, profits, taxes and debt. Using different methods and target population, all the factors are considered as the determinants behind earning management in this study.

Methodology:

The conceptual framework, hypothesis to be tested, and many other aspects are defined under this section. An overview of how the research is conducted, statistical methods are used, variables and their measuring techniques are explained under this section.

3.1. Source of data:

This study is secondary in nature and the banking sector of Pakistan is studied in this research. Overall banking sector including public, private investment banks of the Pakistan is the population for this study. Convenient sampling technique is used for the selection of 10 public and private banks as a sample because of the data availability for the last ten years. Using the financial statements of those 10 different banks, the data for the analysis will be derived. Financial statements of each bank will be taken from their official websites. Specifically, from those financial statements balance sheet, income statement and cash flow statements are of more important for each bank.

3.2. Operational Definition of Variables:

3.2.1. Earning management:

Earning management is a technique used by the managers of the firms to change or manipulate the financial figures in order to represent the positive image of the organization in front of stakeholders (Beneish, 2001). This technique was used by different organization, with the intention that, it may help their organization in their financial losses. Sometimes it may work but when the organization fails to recover their position, it may lead the organizations to bankruptcy.

In this research, to measure the earning management, total accruals were used rather than discretionary accrual (Nurdiniah, 2015):

$$TA = \Delta CA - \Delta CL - \Delta CASH + (STDEBT - DEP)$$

CA = current assets

CL = current liabilities

STDEBT = short term debt

DEP = depreciation

3.2.2. Firm size:

It is considered that firm size of the organization is very important, in representing the financial position. Many investors and researchers can predict the organization as a profitable, on the basis of firm size. It is most commonly measured by the total sales, which represent the scope and market of the organization. Total assets can also be used to represent the size of the firm. For the analysis, in this study, natural log of total assets are used as a proxy to measure the firm size (kauser et al, 2011).

3.2.3. Financial leverage:

In order to finance its operations company use a mixture of owner's equity and debt. To finance capital using more debt, the higher will be the financial leverage of the firm. The higher amount of financial leverage has bad impact on the company's future earnings per share. It is for this reason, this factor is taken under consideration as it shows negative impact on the company's profile when the value of financial leverage is high. Debt to equity ratio is used to Measure Company's financial leverage. (Nasirzadeh at el. 2012).The formula for calculating D/E ratios:

Debt to Equity Ratio = Total Liabilities / Shareholders' Equity

3.2.4. Profitability:

Profitability is the ability of a firm or business to earn profit. It is the most important factor for any firm, on the basis of this factor; financial position of an organization is measured. To retain the positive image, firms do represent the consistency or growth in their profitability. There are different methods and ratios to calculate profitability, in this study the ratio used is Return on asset (ROA).

3.2.5. Effective Tax rate:

It is the rate at which any firm or individual is taxed. It is already predicted that when the tax rate increases it triggers towards the manipulation of the earnings sometimes. Mostly earning management is the process of getting the advantage of excess amount to hide their poor performance, so decrease in the tax rate may lead the organization to use excess amount saved by giving less amount of tax (Nurdinah & Herlina, 2015).

Effective tax rate = Total Tax Expense / Earnings before Taxes

3.3. Statistical Method:

Earning management is measured using a different proxy; it was always measured through discretionary accrual, which is calculated after subtracting non-discretionary accruals from total accruals (Nurdiniah, 2015). For the independent variables there are different ratios, which were used to find the desired results. To find the relationship or impact between dependent and independent variable, regression analysis and correlation analysis will be used by using balanced panel data technique (Alaei, Nassirzadeh & Salehi, 2012). Using the ordinary least square method the following is the regression equation for this study:

$$EM = \alpha + \beta_1 (FS) + \beta_2 (Pro) + \beta_3 (TD) + \beta_4 (Tax)$$

EM = Earning management

Alpha = Constant

Beta = coefficient

FS = firm size

TD = total debt

Tax = Tax Rate

3.4. Research Question:

The following are the research questions, which are focused during the research. The purpose of this study is to answer the following questions:

1. What is the most prominent factor behind the earning management?
2. Does firm size, profitability, total debt and effective tax rate forces the firm's managers to use earning management techniques?

3.5. Objectives:

The focus of this study is to find the significant factors which lead the managers to manipulate their earnings, just to present a positive image in front of stakeholders.

Specifically,

1. To examine the motivational factors behind the earning management technique.
2. To examine how it can be practiced in any situation, by the managers.

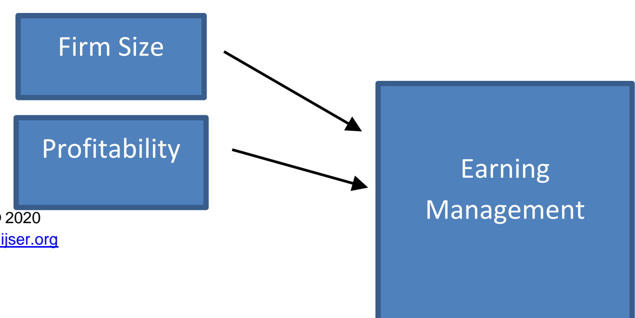
3.6. Hypothesis:

Hypothesis are the proposed or supposed statements but has not, yet, been proved. After the analysis the researcher can accept or reject the hypothesis to reach to the final outcome. Hypothesis for this study are:

H_1= There is no significant relationship between firm size and earning management.
H_2= There is no significant relationship between profitability and earning management.
H_3= There is no significant relationship between total debt and earning management.
H_4= There is no significant relationship between effective tax rate and earning management.

3.7. Theoretical Framework:

Theoretical framework is used to explain the relationship and direction of relationship between independent and dependent variable. Firm size, profitability, financial leverage and effective tax rate are independent variables in this research whereas earning management is dependent variable (Alei et al, 2012).



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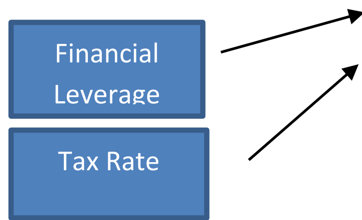

Results and Analysis:

In this chapter the results of the study are interpreted. For the analysis two of the basic techniques are applied i.e. regression and correlation to find the relationship between variables.

4.1. Correlation Analysis:

Correlation analysis is another tool to measure the relationship between the two variables, either between independent and dependent variable or between two independent variables. The value of correlation between the two variables shows the strength of the relationship and usually denoted by 'R'. To measure the multi- collinearity, we also consider the value of 'R' between two independent variables. The value of 'R' lies between -1 - +1. Value of R between two variables near to -1 indicate the negative but strong relationship between variables, near to zero represent weakest form of relationship and closer to +1 shows the positive and strong relationship.

	EARNING_MANAGEMENT	FIANANCIAL_LEVERAGE	TAX_RATE	FIRM_SIZE	PROTIFITABILITY
EARNING_MANAGEMENT	1.000000	0.026846	-0.729682	-0.703582	-0.218982
FIANANCIAL_LEVERAGE	0.026846	1.000000	-0.300690	-0.438123	0.046603
TAX_RATE	-0.729682	-0.300690	1.000000	0.473999	-0.557447
FIRM_SIZE	-0.703582	-0.438123	0.473999	1.000000	-0.475812
PROTIFITABILITY	-0.218982	0.046603	-0.557447	-0.475812	1.000000

The value of correlation between the financial leverage and earning management is 0.00268, which is almost closer to zero indicates that there exist positive but weak relationship between financial leverage and earning management. Both variables move in direct direction.

There exist a strong and negative relationship between the tax rate and earning management as its value of correlation is -0.729 i.e. closer to -1. Similarly, there is also a strong and negative impact of firm size on the earning management. The value of R between both is also closer to -1.

The value of the correlation between profitability and earning management is -0.2189, which near to zero and represent a weak negative relationship between variables.

The value of correlation between two of the independent variable shows multi-colinearity. If the value of correlation between two of the independent variable is greater than 0.7 or less the -0.7 then we can predict the presence of multi-colinearity. The presence of multi-colinearity in the model does affect the impact of independent variable on the dependent variable. In case of multi-colinearity, dropping the one variable from both independent variables, will remove the effect of multi-collinearity from the model.

4.2. Regression Analysis:

Regression analysis is used to measure the tendency with which one independent variable is impacting the dependent variable. Ordinary least square method is the most commonly used method for regression analysis.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.795111	0.973126	3.899919	0.0002
FIRM_SIZE	-0.112238	0.061740	-1.817918	0.0722
PROTIFITABILITY	-4.883280	1.310032	-3.727604	0.0003
FIANANCIAL_LEVERAGE	0.084150	0.016749	-5.024153	0.0000
TAX_RATE	-1.472004	1.488393	-0.988989	0.3252

Constant:

The value of the coefficient is 3.795111, which indicates that when the value of all the independent variable is zero then the impact on the dependent variable will be 3.795111. Based on the values of standard error, t-statistics and probability the impact of constant on the dependent variable is significant in nature.

Firm Size:

When the value of the firm size is one it will bring -0.112238 unit change in the dependent variable i.e. negative. When the value of the firm size is zero then it will bring zero % impact in the dependent variable. Value of standard error is 0.061740 which is greater than the half of the value of coefficient. (0.112238/2=0.056119), the value is less than the standard error and indicates that the firm size in explaining the dependent variable is insignificant.
T-statistics: The value of t-stat for the firm size is -1.8179 that is greater than -1.96, indicates the insignificance of the independent variable. If we measure the significance level on the basis of probability value, it also indicates that the variable firm size is insignificant in explaining the dependent variable. The value of probability is 0.0722 that is greater than 5% or 0.05.

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Profitability:

When the value of the profitability is one it will bring -4.883280 units change in the dependent variable i.e. negative. When the value of the profitability is zero then it will bring zero % impact in the dependent variable. Value of standard error is 1.310032 which is less than the half of the value of coefficient. (4.883280/2=2.44164), the value is greater than the standard error and indicates that the profitability in explaining the dependent variable is significant.
T-statistics:
The value of t-stat for the firm size is -3.727604 that is less than -1.96, indicates the significance of the independent variable. If we measure the significance level on the basis of probability value, it also indicates that the variable profitability is significant in explaining the dependent variable. The value of probability is 0.0003 that is less than 5% or 0.05.

Financial leverage:

The value of the coefficient is 0.084150 which shows the positive impact of financial leverage on the earning management. When the value of financial leverage is 1 the change it will bring in the earning management will be 0.084150. The value of standard error is less than the half of the coefficient i.e. 0.016749 indicates the significance of the financial leverage.

When the standard error shows the significance of the independent variable t-stat and probability will also leads to the significance as they are inter-related with other. The value of t-stat is -5.024153 which is far less than -1.96 showing the significance of financial leverage. The value of probability is 0.0000 which is less than 5% or 0.05 also representing the significance of financial leverage in explaining the earning management.

Tax Rate:

When the value of tax rate will be 1, it will bring -1.472004 unit changes in the dependent variable. On the basis of standard error, t-statistic and probability the tax rate found to be insignificant in explaining the earning management.
The value of standard error is greater than the half of the coefficient i.e. 1.488393.
The value of t-statistic is also greater than -1.96 which indicates the insignificance of the independent variable. Probability value is also greater than the critical value 0.05 also shows the insignificance of the tax rate.

R-squared	0.682407
Adjusted R-squared	0.669035
F-statistic	51.03123
Prob(F-statistic)	0.000000

R-Square is the most common statistical tool used to represents change in the dependent variable due to change in the independent variables. Out of 100% change in the earning management 68% change is due to the firm size, profitability, financial leverage and tax rate.
F-statistics is used to explain the significance of the regression model. The value of F-stat is 51.03, which is greater than 4.00; represent the significant of the regression model in this study. Probability of F-statistic represent the same result i.e. regression model is significant.
On the basis of t-statistics / standard error / probability for each independent variable, this study will reject or accept hypothesis accordingly:

This study rejects the following hypothesis:

H_1= There is no significant relationship between profitability and earning management.
H_2= There is no significant relationship between financial leverage and earning management.
And does not reject the:
H_3= There is no significant relationship between firm size and earning management.

H_4= There is no significant relationship between effective tax rate and earning management.

5. Conclusion:

The primary objective of this study is to find the significant factors behind the earning management. Earning management is the process of manipulating the financial figures to show a positive impact in front of stakeholders. Any organization in their bad phases does manipulate their earnings by reporting the wrong figures, to retain their financial position in the market (Sundgren, 2007). Earning management is considered as an important manipulation method to cover up the bad image of the organization.

Profitability, financial leverage, firm size and effective tax rate are the predictors used behind this earning management in banking sector of Pakistan. Measuring the relationship between predictors and dependent variable regression and correlation analysis were used specifically (Nurdinah & Herlina, 2015). Independent variable mostly found negatively correlated with the dependent variable.

Profitability and financial leverage were found significant on the basis of t-statistics/ probability. When there is negativity or not achieving the benchmark of profit in a certain year by the organization, they use manipulation technique to maintain positive image for example they can use the account receivable in the current year with the expectations of receiving receivable in the future date, this process is named as “cash- to - accrual adjustments”.

Similarly, when the firms finances their capital using debt that leads to increase in financial leverage, organization then try to manipulate the excessive debt amount to represent positive image. These are the two manipulation techniques any organization uses to manipulate earnings (kelinefelter at el, 2008). Tax rate and firm size found to be insignificant in explaining the earning management. Taxation in the banking sector is controlled by the State bank, so there are many rare

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chances of manipulation through taxation in the banking sector. Measuring the firm size which is usually measured through total sales but total assets was used as a proxy (Kartikasari, 2016), which has no significant relation and impact in manipulation, as operating activities and services leads the managers to manipulation.

5.1. Recommendations:

On the basis of the findings, following are the few recommendations, which can be taken under consideration by the top management of any organization, to remove earning manipulations.

1. Highly recommended thing for the top management is transparency of the activities, at

   Different level of management. It should be implemented in order to avoid manipulation of earning.
2. Auditors need to formulate policies and procedure in order to check and maintain the transparency of the financial data provided in the financial statements.
3. Code of conduct for the banks should be implemented in a proper way to prevent the organization from the illegal acts.

5.2. Future Suggestion:

Based on the results and past studies, following suggestions can be consider as a gap for the future studies:

1. Future research can be done by using the different measurement techniques in order to measure the dependent and independent variables.
2. Measuring the earning management, any other accrual method can be used, when the same predictors will be tested.
3. Adding more independent variables can be useful in explaining the earning management.
4. This study was specifically done on the banking sector of Pakistan, changing or diversifying the sample can bring different results.

5.3. Limitations:

Limitations which were faced during the research conducted are listed below:

1. The sample size was limited due to the availability of the financial data for the last ten years.
2. Time was major barrier, which did not allow the researcher to investigate the whole scenario in a broader perspective.
3. Variables used in the analysis were limited according to the nature of study and chosen sector.

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