

**Mediating Role Of Credit Risk And Earnings Management In The Association Between Cash Compensation And Bank Performance In Pakistan**

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**Abstract**

This study aims to examine the relationship between cash compensation and bank performance and income recognition accounting dynamics of role credits risk and income management; mediated by bank performance. The subject of this study are financial companies as stock exchange listed companies in Karachi stock exchange which are ranked from 2009-2017. In 2008, there were economic crises, so there is a need to be careful. The data was taken after the tenure of the crisis. The data used in this research is secondary data. Panel data methods will be used for the estimation of data. Published financial statements of listed companies of Pakistan will be used as a source for data. Total bank is 42 and 24 banks were selected for data collection. The data is gathered from all the financial companies. What were the reasons for its selection? The fact that non-financial companies are not included is not due to a difference in regulations or regulatory and requirements framework. The sampling technique in this case is systematic sampling technique which is to select all the stated banks of Pakistan. Data estimation was done using STATA. The findings indicate that there is a direct relationship between cash compensation and bank performance. The present study has two control variables. The size of banks and bank growth. Bank size shows a positive effect on bank performances. Bank performance also is positively associated with growth. ROA and ROE are accounting-based measures and Tobin's Q is the market-based measure. ROE, ROA, and Tobin's Q variables are used for bank performance. ROE has a positive impact on credit risk, and ROA has also a positive impact on earnings management. Tobin has also found a positive relationship between his Q and the executives' salary, bonus or profit compensation proxies as well as with the risk of credit. For credit risk proxy nonperforming loan is used. In this study earnings management proxy is used for accruals. Mediating variables are used in the case of credit risk and earning management. Credit risk mediating role in cash compensation and bank performance. There is positive mediation between cash compensation and bank performance through credit risk. The moderating effect of earnings management on the relationship between cash compensation and bank

performance has also been analyzed. There is positive mediation on cash compensation and bank performance.

**Keywords:** Credit Risk; Cash Compensation; Earnings Management; Bank Performance.

### Introduction

Nowadays is the biggest economic organization in the world. Whereas, there are many risks in banks but the most common is Credit risk which is the most common risk most of the commercial banks face, since most of the commercial banks' income comes from lending money to people. The aim of the research is to make clear information about cash compensation and bank performance. Banks take a deposit from people who want to invest it and have it to borrow it. All larger than the globe banks today in the country play vital role. Risk is facing the commercial banks during its functioning. A bank that is profitable is a large bank that loans money and take deposits from people, and can give their products to the public and their services. The end of a bank loan is extremely crucial as it will decide the efficiency and future performance of the bank. In recent years, banks might be more cognizant of the type of customers they are selecting and want to avoid the downfall of the small loan and sloppy loan that the people may not have the capacity to pay. This problem of negligence loans have received increasing attention in recent a period of ten years (Akhter & Kumar, 2017) Banks performance is a sign of bank capability to bear risk or enhance their investment. It indicates organization' competitor and asses the excellence of the management. One of the primary concepts in my study is bank performance. The topic of the research is impact of cash compensation on bank performance. They assume that this relationship could be due to overlooked firm complication, and /or to director or the manager of excess compensation. They get result that additional compensation (both for director and Chief executives' officer) is linked with the company lower performance. That means they will be ending that which they pay out more common back-scratch or favoritism means. Therefore, the higher compensation is also found to be independent effect on firm performance from poor governance which is discussed in the previous studies as an indication. Despite the common investigations in executive compensation practice in the US and UK, there is little organized evidence of compensation packages received by top managers in other industrialized countries. Continuous debate surrounded by employees, regulator and the popular journalists about the level, the company structure and the role of executive salaries in different countries are triggering a lot of academic attention as well. An attention getting examination from empirical research of the larger body is that there is no convincing support of a big and significant pay-performance relationship. Some studies have suggested that these do not have an association, or even a negative association (Duffhues, 2006). Assess the strength of a country could be study by the (FP) financial profitability of the organization, if the profitability of the bank is well it means the country has a good performance of the bank (Sharma, and Haque 2011). Later on banking together with financing business

have been evolved into precision in that very day in the country, as it is finding an improvement in amount as well as range of terms of the institution or business action respectively. It has been still dealing with the challenges that arise when solving and a successful outcome of this development or through the bank and financial organisation, further focused effort is required. Although to increase the superiority and variety to their harvest or to services and in the direction of maintain speed by the quick development captivating position in this world. profitable bank (CB) has been attacked by the development and the opposition (By the institute of non-financial banking) or unpredictable marketplace self-motivated pressure (Case et al, 2006). Thus, the organisation are to trying towards discover an original way on the road to develop their examines. The managers and the guiding principal makers have agreed to value for the greater presentation or great effort, which is the main problem? "What will be the drive performance? Therefore, it is at the focus of researchers' efforts to raise this question that they are centered to their efforts occurring the ready data (Zenios and Soteriou, 1999). This is associate necessary requirement to answer that question is that the measurement of gain. Most of the typically accustomed measures to assess the performance of the business banks are come back on assets (ROA) and are available on equity (ROE). This procedure has been used by analyst as well as bank regulator in the following (a) measuring the manufacturing performance (b) predict the market arrangement trend (this is used to forecast the bank failures and the mergers) or (c) additional purpose how profitability measure gets (Wheelock and Gilbert 2007). All more than the previous a number of years, a growing concentration have been collected by the financial organization (FI) especially (CB) taking place in the performance examination in this result, focus of the analysis has been shifted from characterize performance to the common magnitude relation specified come on assets and come On the Equity within the direction to the systems of three-dimensional perception. Although the supposing information is significant and thus connected with bank's money performance may be given by the financial and accounting magnitude relationship, still it will be the association between totally different issue such as property, revenue, profit, value, sort of employees, investments and client. Satisfaction can be used to boost the productivity of banks (Seiford and Zhu, 1999). This is a very crucial thing which is concluded by the bank at the end of the term because it is the one that determines the next bank on whether it will earn enough at the end of the term or not. The new banks are getting more and more aware in the market. High director compensation policy that encourages risk taking will led to increase in the earnings management conducted by the director. Earnings management is seen as an action near reschedule the recognition of costs or speed up the recognition of revenue and that it will have an impact on the future performance. The method of earning restatement is to reduce the value allowance for impairment losses in order to compensate for credit that can't be collected. Earnings management behavior is an action by the director who provides financial report is not as it should be and could have an impact on the losses to the user of financial information (FI). Previous few decades have witnessed the Problem of non-performing loan, in which the issue was given priority and special focusing. Amount of the bad loan are not only

important in newly developing countries; except they are as well important into terms of their ability to bankruptcy. fundamentally the firms level features of bank performance involve. Features of the single organization that is affected their profit of their stakeholders and administrative visions and their activities characteristics; So, they are also different from the company to company. These contain cash dimension, size of deposit of the liabilities and the size of the composition of the credit collection. The policy of the rate, labor potency, state of the data technology, level of risk management quality, the scale of the bank, bank growth , reorganization, possession, possession concentration, control-ownership inequality and structural association Although a stakeholder and executive decisions and their activities cannot directly influence on the bank age , this is currently attribute that are different from company to company; So this is suitable to mention it is the firms level consideration of bank performance. The risk that a borrower face will be unable to make payment of interest or principal in a suitable manner. Credit risk management is a significant for financial institution managers because it is determining the facial appearance of several loans for example, Interest rate, maturity, collateral and other covenants. universal perception says that companies with superior money fortune in their assets with investments.

Under bonus plan hypothesis, managers act for the self-interest and bonuses as a result the firm performance destroyed. Also, with the higher pay. They are not concerned on the basic bench mark of their benefits while granting loan. So, firstly this study investigates channel cause of compensation through credit risk. Similarly, managers also involve in earning management to grant loan and other benefits. Also, the study can explore the mediation impact on the Bank of earnings management on the association between compensation and performance. this could be the last word awareness that tells America that the compensation of the chief military personnel (CEOs) is very high within the gift years, the main attention has been paid to rising their pay levels. The company sector can provide a brief rationalization for this growing development in business leader pay, which are somewhat greater than the past 20 years or so; the writer (1976) describes the disconnection of the possession and therefore, the management, as a very well mentioned concept, which implies that if the management is paid sufficiently well, the stockholder value of deduction is less. The business performance measuring has set up money procedures. These measures communicate the performance and accomplishment within the money conditions as well as at interval the chart of the accounts and provided a high level of aggregation information. notably, the money measures are the well-recognized and followed by the Accounting Accepted Principles (GAAP). Among the foremost companies, the money live are best known for their ability to measure, capture and express feelings of customers via a measure of satisfaction called customer satisfaction share quality, which also involves measuring market and human resources, all in terms of a monetary value (Hassan & Adam, 2018).

### Review of Literature

The goal of interests of shareholders is to achieve success in presentation of performance the bank. Productivity is a sign of banks' capability to hold risk and/or enhance their capital. It indicate banks' competition and power are dealings the standard of the management (Li, Zou, & Lions, 2014). Key attention is the Bank performance in USA, Europe and other countries. Banks are an important aspect of the business. The business can get the competitive edge through their performance. In the business competition, manager offer the chance to sell the most effective strategies. (J. Bikker & Bos, 2008) Banks are the backbone of all the economies of the world and the basis of all the financial system. The context of their operations, however, is the financial stability that they operate in, a context that is a result of deregulation and liberalisation, to which they should be subject to prudential regulation, which is supposed to focus on their performance. This study try to focus on the international banks regulations.(Zgarni, 2019). In present years, larger competition in the banking industry has been motivated by the globalization. The customer demand to increase due to the changes in global changes in financial markets. The investor is drawn to invest the company based on the financial performance. But, improvement in the income level also results in improvement of the performance of the banks. This change can also observe in the services industry in different countries. (Chai, See, & Shong, 2016).

### Bank performance in Pakistan

The word "effectiveness" represents the effectiveness of the importance of the financial institution. It has been extensively studied due to its importance. Specifically, the following institution: (1) those which use simple aggregate banks, and (2) frontier technique; efficient frontier (Laeven 1999). There are two methods of measuring broad approaches and nonstructural. Using a selection of financial procedures that detain many aspects of the performance. Mostly firm use the unstructured approach. It represents the performance among the banks. Which also represent the regulation of the banks. The other side is the nonstructural which represent the how technology can be used in the bank performance. It looks for evidence of agency problems in correction of performance measures and variables characterizing the quality of banks' governance (Hughes & Mester, 2013). The banking industry is facing the challenges for accurate the performance. Because the measurement of performance is so difficult in the banking industry. There are many indicators which can be affect the performance'. Sometime researcher adds theses factor and sometime ignore these factors. There are many regulations which also effect the banking business. The board of director is also playing the key role in the performance. It shows the effectiveness of the banking industry.(Gafoor, Mariappan, & Thyagarajan, 2018). The role of the establishment within the banking system is most significant. The consumer behavior of the financial institution of customer directly and indirectly relates with the banking performance. The other stake holder and investor also need the financial institution also effect the customer of the banking industry. When customers are interested to buy the financial product. They need the

banking information for the investment of the financial product. So, these behaviors are also effect the cost of the product. The market competition is also effect the performance and as well as behavior of the investor .(J. A. Bikker, 2014).

### Cash Compensation

The few percent of the communists were the base salaries and the bonus was the devas, while the few were the communist stock options and the long-term compensation plans..(Croonen & Castiglionesi, 2012). This could be a universal awareness that the compensation of CEOs is extremely high and in gift years and has right smart attention. They have been paid to their rising pay levels. Company sector provide USA a correct clarification for the increasing movement in king pay inside the past twenty years some, since thus, the capitalist worth maximize has become the foremost purpose of the management. Division of possession and management as review completely by author (1976) provides the most plan of that if the management is stipendiary effectively, the wealth of the corporate confiscation is low. The Rules of the sport are terribly simple. Associate in Nursing Agent's performance is calculated by varied means that so it'll be salaried. Currently the question is available the mind whether or not corporations of the (BOD) are creating loads of price for shareholders in Islamic Republic of Pakistan and compensation is gained by this might be mitigating it? A comprehensive thoughtful of the determinants of Board of Director compensation at intervals the foremost cash sector of Pakistan is fantastically necessary for the event and growth of this section as a result of the banking sector is very important for developing economy where the market learning national economy is either at an early stage or not this might be showing any reach fulfill wholly completely totally different business needs (Zakaria & Zakaria, 2008). The compensation of state is made to rearrange during a very line company agents' (CEOs and completely different executives) incentive with those of its shareholders. The pay of govt is usually composed by mounted wage, bonus, stocks granted, choices and future encouragement strategy. There are Some compensation pays are a lot of the performance based (i.e., bonus) and some of are wont to manufacture the CEOs by themselves (equity-based incentives). Some Specific changes among the compensation to the employees' incentives and alter in their behaviors, significantly in risk- bearing and shifting of compensation was already implemented to resolve the agency issues (Chiu & Wagner, 2012). The managers are entrusting on the because of formulate the foremost effective use of the money the capitalist, On the selection hand it's at intervals the manager's their own best interest to want advantage of its own prosperity. They'll be used their powers to advantage themselves at the expenditure of the shareholders. By doing arduous showing methodology If the behavior isn't good punishments for unhealthy behavior and incentives for good behavior. These incentives are additionally inflated to the value of share and are galvanized by the compensation agreement. These agreements are designed to ensured that the manager should induce the get pleasure from maximize the worth of the shareholder. Firstly, decision-making compensation are connected to the money presentation the choice to shop for stock at a sensible worth. The upper worth of the stock is, a lot of valuable

the choices or second, manager have incentive to perform well for his or her future profit, for the explanation that the great performance is that a lot of to be expected to an encouragement. Additionally for improved liberal arts managers need to be in high demand within the Laboratory market and might consequently command higher salaries. Government compensation packages have raised tons of concern among stakeholders over the years, particularly as executives are believed to be excessively paid. This concern, contributed partially to company governance reforms geared toward regulation government compensation practices. Company governance reforms targeted at government compensation are advocated for compensation practices that are aligned with performance (Yusuf & Abubakar, 2017). The total compensation system of the bank managers that they face at huge money establishments was one in every of several conducive factors to the financial plight that began in 2007. The shortage of the convention around compensation apply are created to knowledgeable surroundings wherever high short-run profits cause overgenerous bonus payments not together with adequate concerns of employees the long risks they obligatory on their establishments (Zoltan, 2016).

### **Credit Risk**

Credit risk can be described as the real risk that is inherent in the single risk threat that accompanies the bank's operation (Boffey & Robson, 2007, p.66). It is the potential risk that their counterparts will fail to make timely principal and interest payments on debts and derivatives (Koch & MacDonald 2000, p. 109). (Li et al., 2014). Character of their actions is one of the foremost important risks in banking sector and is called Credit Risk. The ability of top-notch management to credit risk skills not only allows them to manage their own affair effectively, but also helps to ensure a stable and orderly distribution of capital in the country. (Margaritis, Psillaki, Tsolas 2010, p.873). Alshatti, 2015) The failure to pay of a tiny low variety of consumers could also be the results of an awfully massive loss for the bank (Gestel & Baesems, 2008). Credit Risk might be delineated as 'the performance that an agreement party are fail to fulfill its obligation within the in-agreement terms'. Credit risk is also described that otherwise is failure to pay risk, performance risk or counterparty risk. These all primarily refers to the similar issue that influence of the credit on a corporation transaction. (Brown, 2016). There is main three options that delineate credit risk:

Introduction (to a party that may be maybe failure to pay or experience an unfavorable change in its capability of the performance).

This possibility is that this party will be fail to pay on its responsibility (the defaulting prospect).

This improvement speed (Under the default rate of default taxpayer).

Importance credit management are a requirement for an: economic organization constancy and continued performance while practical credit risk organization could be decreased and minimized prepared risk. while securing reasonable returns. In the next set of steps is to make sure managing law and risk board accepted policy is the area of credit risk such as mob and brokered loans and attention of lending to persons and their connected parties companies, partnerships or relatives (Volumes et al., 2005).

This downside of the credit risk management, additionally as moving out a quantitative analysis and credit risk and rating of borrowers, has relevancy to the individual and therefore, the legal entity concerned altogether over the banks involved. In general, once business banks funding loans to the people and entities legal, quantitative credit risk is characterize by the subsequent parameter: risk as a result of the prospect of the debtor's repaying the loan; acceptable risk; average risk; loan potential losses given default; the common worth of losses; the foremost allowable losses; the of loans given by the bank; The potential range of various loans is that the number of cringe loans (Konovalova, Kristovska, & Kudinska, 2016). he's credit risk management of credit portfolio is therefore one altogether the foremost important functions of the financial liquidity and stability of the banking sector with enlarged sensitivity to the banks' credit risk and changes at intervals the event of the worth of economic instruments. (Kiseľková and Kiseľák, 2013). The most convenient course may be to increase the range of styles and terms of the business banks that would eliminate every potential borrower and ensure loan reimbursement, but to make sure the effectiveness of the credit risk management, it's required to associate order. Then, the following step is to find a split in an extremely set of conditions and terms with each cluster, based on the characteristic options they have. The assignment of bank purchasers into separate groups should be done according to the principles of arranging different elements into compact groups based on the similarities of the elements under consideration. This methodology of categorization has to reproduce the structured of the supply data and to ensure the foremost decent division of the info into the teams. conventionally, cluster and networking has been engaged to realize that goals. in an exceedingly case of multidimensional samples, each of those ways manufacture divisions of objects into categories (Konovalova et al., 2016). All production takes several quite the risks. a lot of corporations characteristically create obtainable credit sales to their people. they offer them the prospect to procure the products and services later. It supports sensible business relationships with its customers Adamkus, Birt, Kliestik (2014) explicit that the stipulation of credit sales is associate self-made implementation country within the common place company take credit risk terribly oftentimes credit risk is non-payment by their client (Anna Boris). and Ivana, 2015). Knowing the trustworthiness of the business associate could be a demand for creating the proper call to provides credit sales. Credit management can be defined as the management of the sales made on credit to minimize the credit risk to the corporate. Due to the increase in the number of sales proof of purchase, credit managers are involved in multiple aspects of loans. They affect the number to that it's appropriate to support this increase and once it is essential to be stopped. The credit of management accomplishment is accustomed by making the credit standards for every of the solid assortment of the customers within the company (Chai et al., 2016).

#### **Earnings Management.**

Earnings management is the use of a tool or process within the bounds of the Generally Accepted Accounting Principles (GAAP) to influence the financial results or present the results in a way that is preferable to the external user of the financial

statements (Cimini, 2015; Healy and Wahlen, 1999; Schipper, 1989). Teoh et al. (1998) have pointed out that earnings management relies on opportunities that are provided. Generally speaking, earnings management is primarily driven by the interest of income smoothing, and businesses can take a number of steps to achieve this end. As mentioned by Alhadab and Own (2017), on the one hand managers try to decrease their reported earnings while their previous results are high and on the other hand they try to increase their reported earnings when the previous results are comparatively low (Tabassum et al., 2014; Zang, 2012). Further, executives use earnings management to maintain good performance and to achieve personal objectives based on contractual accounting numbers (El Sood, 2012; Goulart, 2007). Executives can inflate their numbers to show their numbers in good light and that can have an impact on how they're paid, based on future prospects of the company. So, earning management can have positive or negative impacts on a company's performance, depending on the managerial tactics used (Bornemann et al., 2012). Earning management can be expressed in several ways due to the wide variety of estimates that necessitate judgment and expertise in making the periodic financial statements (Saidu & Ibrahim, 2017). When a company is not successful in achieving the goal of maximizing shareholder value, it may be tempted to engage in activities that are designed to make the numbers look better for the shareholders and other stakeholders (Joosten, 2012). The case for executives engaging in earnings management is well documented (Roychowdhury 2006: 336). The impacts of earning management (EM) can be serious and could cause business failure (Abner & Ferrer, 2018). There are two different types of earnings management: well-structured and opportunistic. It is considered well-organized when it enhances the informativeness of wages in communicating private information (Siregar & Utama, 2008, p. 2). and it is opportunistic if it is aimed at maximizing management's utility (Cornett, Marcus, & Tehranian, 2008; Siregar & Utama, 2008). Most of the studies conducted focus on opportunistic EM, in fact, most definitions of EM assume opportunistic nature and lastly, that EM is about manipulating financial reports for maximizing management utility (Healy, 1985; Healy & Wahlen, 1998; Joosten, 2012; Scott as cited by (Siregar & Utama). Earnings management is printed because the selection of accounting policies or several actions – as voluntary prognostication earnings, voluntary revealing, and estimation of increase, for instance – have an effect on earnings in a deliberate way. In a functioning capital market, management could jeopardize the credibility of the monetary statements that provide useful information to the capital market's stakeholders (Man, Kong, Wong and Kong, 2013). A number of explanations exist for earnings management, based on the political-contractual theory (Watts and Zimmerman, 1986). The bonus hypothesis plan is compatible with the following idea: managers use accounting policies that change the policies in order to meet their interests through delaying the results in the future. New social control compensation policy coupled with performance is intended to incentivize managers to make decisions that would benefit shareholders' interests. Several studies, however, suggest that such a policy does not allow for the corporate to enhance its performance due to the timeserving behavior of the managers as Healy (1985) discovered a positive

relationship between earnings management and increase in profit between the upper and lower limit of the range of the bonus. Similarly, Healy (1985) demonstrates that earnings management downward occurs when earnings are made at, or below the boundary. However, Gaver et al. (1995) argue that managers manage earnings upward once it's below the lower limit that they decide earnings management downward once earnings exceed the boundary (Charfeddine & Sr, 2013 earnings management is created public as a result of the selection of a manager's accounting policies or completely different actions likewise as voluntary prognostication earnings, voluntary revealing (Schipper, 1989 ) Earnings management is accomplished by manipulating accounting tools such as records and income statements, and while these adjustments may comply with the law, they have the potential to mislead certain stakeholders (Wu, 2014). This definition highlights the opportunistic nature behind why managers undertake this type of activity, but others believe that earnings management is about maximizing shareholder value. A literature review has unveiled two perspectives on earnings management: the opportunistic perspective and the informational perspective. The opportunist paradigm sees earnings management as a tactic that can be used by managers to deal with certain circumstances that could affect the company and this approach can mislead shareholders about the company's health. In this sense, the behavior of managers to other investors can be seen as a signal of whether objectives are attained or not, based on a gain to the managers that occurs when incomes increase and an anticipatory loss when incomes decrease. This interlaced aspect of earnings management corresponds to the positive accounting theory. Earnings management also allows managers an element of protection as it presents better incomes even when the firm is going through a rough patch. This way, executives can try to maximize their incomes and secure their job or place in the organization (Miloudi, 2020).

### **Materials and Methods**

This section is connected to the methodology of the variables. In this chapter we define the population, sample, sample size, research design, operationalization of the variables and in this chapter, we also discuss about the variable how we define and measure of our variables. In this chapter cash compensation, bank performance credit risk and earnings management are presented.

### **Population:**

The Population consist on schedule financial firms that are listed in Pakistan. This study of the Population consists of all the Pakistan Stock Exchange listed banks of financial sector are under the boundary of the Population frame.

### **Sample:**

We collect the data from all the financial listed banks. Only those banks are included which having the available data in the sample period.

**Sample Period:**

This study consists on the panel figures of 8 years (from 2009 to 2017). That research is based on secondary data.

**Source of Data:**

The data is gathered from different sources as from the sites of PSX, financial statements provided website of firms. The data is gathered from the financial statement the financial statement of company and the BUSINESS RECORDER provided by the State Bank of Pakistan.

**Sampling Technique:**

Convenient sampling technique is picked up all the listed banks of the Pakistan.

**The model**

We use credit risk and earnings management as a mediating variable for the relationships among cash compensation and bank performance. The latest critique which is modified by Zhao, Lynch, and Chen (2010) We followed Baron and Kenny (1986) for regression and considered. Baron and Kenny (1986) give suggestion that mediation analysis can be performed in three steps as follows: first, mediating variable regress on the special independent variable. Second, dependent variable regress independent variables. Third, on both independent and dependent variable regresses between variables. In first two model's independent variable should be significant. The third model should be expected to show all the independent variables as significant and mediator should be expected to show them as significant.

**Econometric Equations:**

**Relationship between cash compensation and bank performance**

$$BP_{i,t} = \beta_{i,t} + \beta 2Cc_{i,t} + \beta 3BS_{i,t} + \beta 4BG_{i,t} + e_{i,t}$$

**Relationship between credit risk and cash compensation**

$$CR_{i,t} = \beta_{i,t} + \beta 1Cc_{i,t} + \beta 2BS_{i,t} + \beta 3BG_{i,t} + e_{i,t}$$

**Combine consequence of CR on bank performance and cash compensation**

$$BP_{i,t} = \beta_{i,t} + \beta 1Cc_{i,t} + \beta 2_{i,t} CR + \beta 3G_{i,t} + e_{i,t}$$

**Relationship of earnings management and cash compensation**

$$EM_{i,t} = \beta_{i,t} + \beta 1Cc_{i,t} + \beta 2BS_{i,t} + \beta 3BG_{i,t} + e_{i,t}$$

**Combine effect of earning management on bank performance and cash compensation**

$$BP_{i,t} = \beta_{i,t} + \beta 1Cc_{i,t} + \beta 2EM_{i,t} + \beta 3BG_{i,t} + e_{i,t}$$

**Relationship between of bank performance and credit risk**

$$BP_{i,t} = \beta_{i,t} + \beta 1CR_{i,t} + \beta 2BS_{i,t} + \beta 3BG_{i,t} + e_{i,t}$$

**Relationship of earnings management and bank performance**

$$BP_{i,t} = \beta_{i,t} + \beta 1EM_{i,t} + \beta 2BS_{i,t} + \beta 3BG_{i,t} + e_{i,t}$$

Whereas,

EM = Earnings Management  
CC = Cash compensation  
BS = Bank Size  
GW = GW  
CR = Credit risk

#### MEASUREMENT OF VARIABLES:

##### Dependent Variable:

##### Bank Performance

Performance is presented the bank is indicate how much success is the goal of the interests of shareholders. Performance is a sign of bank ability to get risk and hence on their resources. It shows that banks competitiveness and measure the excellence of management..(Li et al., 2014). There are some other reasons to calculated the performance of a bank to determined their operational findings and their all over the financial terms; compute their assets superiority, management worth and competence, and the achievement of their objectives; in addition to ascertain their earnings quality, liquidity, capital adequacy. Cash compensation helps to improve the economic development of the country by increasing the performance of the Bank. Bank performance is measured through two measures. The performance of the Bank is calculated by the following variables.

- ROA
- ROE
- Q Tobin's

Return on assets (ROA) and return on equity (ROE) are accounting based measures and Tobin's Q is market-based measure.

##### Return of Assets

ROA is that the quantitative relation of profit to total assets, may be a confirm of however, gain and skilled the bank management relies on the total assets (Guru et al., 1999, p.7). This alternative may be a show however, the helpful of a company is to comparative to all or any its assets. On alternative words, that live is thoroughly the operative potency of the overall business. For the general public firms, return on assets (ROA) will vary wide and this is extremely keen about the business. Come on assets provide a plan to investors however, the effectiveness of the corporate management is at management its assets to supply profits or what earnings were generate from invest cash. Larger quantity of the come-on assets provides the knowledge that the company use its assets effectively to serving the shareholders' economic interests. Lower worth of the come on assets data are the company's earning less cash on higher investment (Latif, 2018).

ROA = NI / TOI \* TO INCOMES/A LL VALUE ASSETS.

### Return of Equity

In a way that is appropriate to the particular circumstances to the starting the model of DuPont, they show that pecking order of Ratio. After that the middle of attention on the detailed reason ROE and ROA, to increase the justification. (ROE) worth on the whole of the income that cannot be changed per dollar of equity (Marcia, and Saunders 2011, p. 23).

Return on equity = NI / TEC

### Q Tobin's:

Q Tobin's is employed whereas an alternate for the bank performance. It's a market base quantify. Tobin's Q is employed to see the firm's performance. This magnitude relation show of the company's total market price and the whole quality value by Tobin's Q of Yale in 1969 (Doğan & Yildiz, 2013).

$$Tobin's - Q Ratio = \frac{TMV}{TAV}$$

Tobin's Q is usually used during a market-based live to imagine the performance as a result of it's the as a proof of a corporation. Market measures are those measured which incorporates the value of Tobin's Q, that represent the value of equity. Tobin's Q is wanting additional and reflects the shareholder's chance regarding the future performance of the corporate, that relies on the previous or gift performance of the corporate.

### Independent Variable:

#### Cash Compensation:

Executive compensation is typically created to support company agents such as (chief officer and different executives) incentives with its of its neutral. Chief officer pay is generally poised. By mounted remuneration, bonus, stocks granted, choices and future incentive plans. Some compensation pay is additional performance based mostly (i.e., bonus) et al. are accustomed build the chief officer themselves are (equity based mostly incentives). A selected amendment in the compensation staff incentives and alters their behaviors, notably in risk- bearings and giving ways leading fitting a capital structure, mistreatment debt and at last increasing/ decreasing financial condition risk for a firm .(Chiu & Wagner, 2012). The compensation of cash based is the base salary and the bonus whether the equity based compensation is the sum of stock options and long-term incentive plans (Croonen & Castiglionesi, 2012). It is a common perception that the CEO of compensation are very high and in the present years has been fairly concentrated given their increasing their pay levels. The all value of the cash compensation director are the amount of cash received by the directors throughout the year which is includes the basic salary plus bonuses and another compensation work such as bonus, gratuity, production. (Murphy,1999). This study uses a variable change in director cash compensation and is calculated by the average cash compensation received by the director of the last year minus the average of the last two years cash compensation. (cash compensation (t)=cash compensation (t-1) cash compensation (t-2)).

The following are the Cash compensation variables:

- Bonus
- Salaries
- Profits
- Other annual

### **Mediating Variable (Earnings Management or Credit Risk)**

#### **Earnings Management:**

Earnings management (Alhadab & Own, 2018) is a tool or process used by the internal parties to comply with the limitations imposed by Generally Accepted Accounting Principles (GAAP) and to manipulate the reported figures or earnings to favour the external parties. However, companies only engage in earnings management in the face of good opportunities (Teoh et al., 1998). Earnings management is usually the main purpose of manipulating earnings and there are a variety of ways companies do it to achieve that goal. On one front, managers seek to decrease reported earnings following periods of high earnings. On the other hand, managers make an effort to inflate their reported earning when they are low relative to previous earnings (Zang, 2012; Tabassum et al., 2014). Furthermore, CEOs employ earnings management to maintain favorable performance and fulfill personal contractual targets related to accounting numbers (Bortoluzzo, Sheng, & Gomes, 2016). There are numerous empirical studies about earnings management in the accounting and financial literature. These empirical studies use different measurements a substitute of earnings management such as (Dechow et al., 2010).

- Discretionary accruals
- Smoothness
- Loss avoidance
- Investor responsiveness

#### **Credit Risk:**

Credit Risk may be viewed as the arguably risk of a customer defaulting on a payment short of fulfilling their obligation under the agreed terms. Credit Risk is differently referred as a failure to pay a risk, performance risk. All these ultimately result in the same: the impact of credit on a company performance (Brown, 2016). There are three popular skins which described the credit risk:

- Introduction (to a customer that may be fail to pay or suffer an unfavorable change in its capability to perform).
- This probability that customer will be failure to pay its responsibility (the failure to pay their chances of occurrence).
- That recovered rate (that is how much can be retrieved if a person failure to pay their obligation).

#### **Non-Performing Loan**

Remarkably, the banking sector was downsized all over 2007, and it seems that several banks are suffering from significant losses on their credit books (Boudriga,

2009, p. 286). Most organization has knowledgeable universal emergency and every one over the monetary intercessor. The expertise of the catastrophe will increase concern over the soundness of the economic system and therefore, they would like for the higher management and disposition activities and the organizations, and diversify and written assessments are created to anticipate undesirable exposure (Boudriga, 2009, p. 286). The percentage of non-performing loans (NPLs) are often calculated as a soundness. Loans are generally considered non-performing when the customer doesn't pay their debt on time (Kauko, 2012, p.196). In geranial , loss are typically made public among the subsequent ways:

- The due date on non performing loan interest rate is 90 days
- Maturity date of non-performing loan is 90 days
- Reorganization of the borrower's loans

Filing for the bankruptcy, of the director's condition, and so on. In any case, at some point the degree Non humanities loan will be written off as a non-payment loss (Choudhry, 2011, p. 131). Typically, the depreciation that needs to be paid as a capital contribution to the bank can be as high as 100 per cent of the notional value. The bank is also enhancing a share, albeit at some point down the road. (Choudhry, 2011, p. 131). Generally, the non-performing are represented as the loans of the whole loans ( Yang, 2010, p.2019). The equation is usually given by the form

$$NPL = \frac{NPLs}{Total\ loans}$$

Following:

Non-Performing Loan = Non-Performing Loan Ratio

NPLs = Non-Performing Loans

The NPLR jointly identifies a cash and jointly the responsibility provides evidence of the quality of bank loans (Park 2012, p. 909). Although its significance has been continuously decreasing over the past decade (Park, 2012, p. 909), the excellence of bank loans is a horribly necessary part of the ultimate bank responsibility, one of the foremost actions of banking institution in making loans. To remain with principle, non-acting loans might even be unfavorably authority ability in the risk management and investment (2010, p. 2019). Bank of commercials exposed themselves to the possibility of fail to pay their loan of the borrowers. With adequate credit risk assessment, risk management and adequate authorization, the dangerous and uncertain loans to banks' credit risk can be minimized (Kwambai and Wanders, 2013 p. 169). With a high level of non performing assets, the assets do not seem to be adequately protected against default risk provisions (Kwambai and Wanders, 2013, p. 169). Klein in addition finds NPLs are sensitive to bank-level factors. higher level of bank management that's measured by gain of previous quantity generates s maller NPLs (2013, p.20). The bank's excessive risk taking is rewarded by the loan to asset ratio and otherwise by the bank's loan speed to cause a rise in the number of NPLs in the following period. It is important to have these bank level effects both pre-crisis and post-crisis (Klein,2013, p.20).

### **3.9 Control Variables:**

That part shows the quantity of the control variables that may be influence on the Bank performance. To avoid unfair consequences, I added several control variables, whose impact on cash Compensation, Credit Risk, Earnings Management and the bank performance is well recognized by earlier study. Concretely, in our investigation I defined bank size, growth as following.

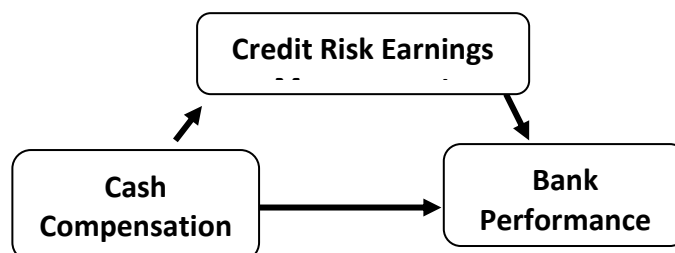
### **Bank Size**

There are some uncommon literatures relating to the dimensions of the bank and thus the performance. Some people suggest that common place sized banks are a great deal of well-organized than huge and small banks (Berger et al., 2005; Noulas et al., 1990; Mester, 1992; Clark, 1996). Drake and Hall (2003) they found a durable association among bank size and technical ability and scale ability at intervals constant manner El-Chaarani (2014) found bank size to be statistically positive impact on the company governance and performance in Lebanese Banks (Lamichhane, n.d.). The present financial problems have triggered a discuss on the most favorable size and structure of the banks. It is not just this bank had combined lending and selling and services activities are at the midpoint of the present problem, but also for the reason that of the size of large banks and the quantity of their appointment with Market-based activities has been increased significantly on the past two decades. (Saltzman, 2016) The size of the bank is often measured by because the logarithm of the worth of total assets within the America dollar. A bank structure may be changed for having a one owner or having a wide or diversified structure. Some banks managed and controlled by individual person. Otherwise, some banks will hire independent managers to run such banks. Every of those could has a major impact on bank performance (Johnson et al., 2008).

### **Growth**

The measurement of growth rate can be assessed using metrics such as sales, assets, and the number of employees. In this study, growth rate is specifically quantified by calculating the variance between current sales and the previous sales of the company, as indicated by Dixon, Guariglia, and Vijayakumaran (2015). Previous literature findings demonstrate a positive correlation with exports, indicating that firms with a high growth ratio are more likely to engage in international sales, penetrating overseas markets, and exhibiting an elevated level of export intensity as their growth increases.(Of, In, & Sciences, 2016).

### **Theoretical Framework**



### Results and Dissuasion

In chapter three, the econometric models and research design for testing the hypotheses were outlined. Following the data collection from the sources mentioned in the preceding chapter, this section unveils the study's discoveries. Section 4.1 presents the descriptive analysis of bank performance, cash compensation, credit risk and earnings management. Section 4.2 presents the measurement of cash compensation, correlation matrix of cash compensation, bank performance, credit risk and earnings management.

### Descriptive analysis

Working with a lot of data can be really tough. Descriptive statistics help researchers make sense of the data in a way. This study uses statistics to make the data easier to understand. The study looks at data from 2006 to 2015 which is a ten year period.

Table 4.1 shows the statistics for the study variables. These variables include cash compensation, bank performance, credit risk, earnings management and control variables. The table has the number of observations mean and median values and measures of dispersion. It also has the minimum values for all variables in the sample. The study looks at things like return on assets return on equity, Tobin's-Q, cash compensation, credit risk, earnings management, bank size and growth.

The average return on assets in this study is 0.0052093. The values range from 0.0718 to 0.0372. The standard deviation is 0.0169807. These numbers are similar to what other studies have found, like Yassers study in 2011 and Ahmed Sheikh, Wang and Khans study in 2013. The average value of Tobin's-Q is 1.179118 with a deviation of 0.6307037. The minimum value is 0.4397329. The maximum value is 3.959083. These findings are similar to what Afza and Nazir found in their study in 2014.

The average return on equity is 0.071198 with a value of 2.3471 and a minimum value of -1.99. The standard deviation is 0.3140204, which shows how spread out the values are. The average cash compensation is 15.42786 with a deviation of 1.615529. The smallest value is 6.37332 and the largest value is 18.24038. The average credit risk is very small, 1.54e-09 with a deviation of 4.96e-09. The smallest value is 0. The largest value is 6.91e-08.

The average earnings management is 0.0769919 with a deviation of 0.1483195. The minimum value is -.5083094. The maximum value is .788056. Bank size is a control variable in this study with a value of 18.82695 and a standard deviation of 1.402252. The largest value is 21.52006 and the smallest value is 14.7109. Growth is another control variable with a value of 2.44791 and a standard deviation of 4.815299. The largest value is 39.64808 and the smallest value is 0.0121792. These results are similar to what other studies have found in Pakistan like Sheikh, Wang and Khans study in 2013 and Kamran and Shahs study, in 2014.

**Table 4.1 Descriptive analysis**

Variable	Obs	Mean	Std. Dev.	Min	Max
Return on assets	240	.0052093	.0169807	-.0718	.0372

Return on eq	240	.071198	.3140204	-1.99	2.3471
Tobin's Q	230	1.179118	.6307037	.4397329	3.959083
Cash compensation	232	15.42786	1.615529	6.37332	18.24038
Credit risk	240	1.54009	4.96009	0	6.91008
Growth	240	2.44791	4.815299	.0121792	39.64808
Bank size	240	18.82695	1.402252	14.7109	21.52006
Earnings management	240	.0769919	.1483195	-.5083094	.788056

**Correlation analysis**

Table 4.2 shows us the correlation matrix which tells us about the relationships between ROA, Tobin's-Q, ROE, CRK, CC, EM, BS, GW and control variables. We look at correlations for reasons in different studies. In this case we use the correlation matrix to see how the independent variables are related to each other and to check for multicollinearity. What is interesting is that the cash compensation variable is related to bank performance indicators like ROA and ROE in a way. On the hand cash compensation is related to Tobin's Q and credit risk in a negative way.

The first control variable, Growth is related to Tobin's Q, credit risk and cash compensation in a way but it is related to ROA and ROE in a negative way. The second control variable, bank size is related to ROA, ROE and Tobin's Q in a way. Growth is related to cash compensation and growth in a way but growth is related to credit risk in a negative way. The other variable, earnings management is related to ROA, ROE and cash compensation in a way and it is also related to bank size in a positive way. However earnings management is related to Tobin's Q, credit risk and growth in a way. Bank size is related to ROA, ROE, Tobin's Q, growth and bank size in a way but it is related to credit risk in a negative way. Tobin's Q, which is a measure of bank performance is related to ROA in a way and to ROE in a negative way. Return on equity, which's also a measure of bank performance is related to ROA in a positive way.

When we look at the correlation matrix we can see that there is no problem with multicollinearity among the variables we studied because the correlation coefficients are all below 0.70. We also checked the variance inflation factor for each variable and they are all below 10. These findings are similar, to what Kamran and Shah found in 2014.

**Table 4. 2 Correlation Matrix of Variables**

Variables	ROA	ROE	TQ	CRK	CC	GW	BS	EM
Return Assets	on1.0000							
Return equity	on0.6651	1.0000						
Tobin's Q	0.0579	-0.0304	1.0000					

Credit risk	-0.4578	-0.1850	0.0163	1.0000				
Cash compensation	0.4701	0.3138	-0.0387	-	1.0000			
Growth	-0.0046	-0.1086	0.7238	0.0214	0.0156	1.0000		
Bank size	0.5119	0.3138	0.0442	-	0.7631	0.0701	1.0000	
Earnings management	0.0645	0.0595	-0.0558	-	0.0250	-0.0176	0.0499	1.0000
				0.0426				

**Regression Results**

The bank performance variables were compared to the bank size using regression analysis. This is a way to see how things are related. Regression is a method that a lot of people use to measure how well banks are doing. People who work with data use regression models in fields, including science and technology as well, as social sciences, economics and finance. In this study we looked at the results of the regression analysis to see how the bank performance measures are related to the bank size, based on what we thought would happen. We used bank performance measures as the variables to see if our ideas were correct.

**Credit risk as mediating relationship between cash compensation and performance.**

**Table 4.3.1 Fixed effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	5.050011	1.40009	0.071*
Bank Size	.0054241	.0073811	0.063*
Growth	0.0012386	.0025579	0.029**

R-Square: 0.3179

Dependent variable: Credit risk

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table No. 4.3.2 Random effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	-1.5100-09	5.280010	0.041**
Bank Size	2.1900-10	6.390010	0.732 ***
Growth	4.340011	7.120011	0.543 **

R-Square: 0.0000

Dependent variable: Credit risk

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table 4.3.3 Hausman Test**

**Hausman Test**

H0 - Fixed effect is an appropriate  
 H1 - Random effect is an appropriate  
 Prob>chi2 = 0.0129

Hausman test indicates that p-values is less than 0.05 which reject the Ho and accept the H1. It means that random effect model is an appropriate model. Further, applied the random effect model.

**Table No..4.3.4 Fixed effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	.0041626	.0011115	0.000 ***
Credit risk	-1012900	138000.7	0.000 ***
Growth	-.0000282	.0001544	0.855 ***
Bank size	-.0031561	.0014657	0.032**

R-Square: 0.5811

**Table No 4.3.5 Random effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	.0042348	.0010994	0.000 ***
Credit risk	-978422.4	135802.6	0.000 ***
Growth	.000025	.000148	0.866 ***
Bank size	-.0013674	.0013362	0.306 **

R-Square: 0.6898

Dependent variable: ROA

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table 4.3.6 Hausman**

**Hausman Test**

Ho –Fixed effect is an appropriate  
 H1-Random effect is an appropriate  
 Prob>chi2 = 0.0544

Hausman test indicates that p-values are less than 0.05 which reject the Ho and accept the H1. It means that random effect model is an appropriate model. Further, applied the random effect model.

**Table No.4.3.7 Fixed effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	-.0303626	.0175542	0.085 ***
Credit risk	1.420008	1.080008	0.077***
Bank Size	.0256456	.0238935	0.284*
Growth	.0164569	.0029194	0.000***

R-Square: 0.3460

Dependent variable: Tobin's Q

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table No. 4.3.8 Random effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	-.0316156	.0171285	0.065 ***
Credit risk	1.060008	8.840007	0.082 ***
Bank Size	.0272639	.0208423	0.191 ***
Growth	.0182232	.0027774	0.000***

R-Square: 0.3925

Dependent variable: Tobin's Q

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table 4.3.9 Hausman Test**

Hausman Test
Ho-Fixed effect is an appropriate
H1-Random effect is an appropriate
Prob>chi2 = 0.0000

Hausman test indicates that p-values is less than 0.05 which reject the Ho and accept the H1. It means that random effect model is an appropriate model. Further, applied the random effect model.

**Table: 4.4 Results of direct and indirect relationship**

Variables	Model Mediation Credit risk	1Model 2 ROA	Model 3 Tobin's Q
Cash compensation	0.004* (1.5100)	0.065*** (0.0316)	0.085*** (0300)
Credit risk		0.082*** (1.0600)	0.077*** (1.4200)
Bank size	0.732*** (2.1900)	0.191*** (.0272)	0.284** (.0256)
Growth	0.543** (4.3400)	0.000*** (0.0182)	0.000*** (.0164)
R-Square	0.3179	0.5811	0.3460

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

Cash compensation has a positive relationship with credit risk at the 1% significance level with credit risk. The findings suggest that contractual compensation tends to make directors avoiding risk. Regarding the control variables result, bank size (BS) and growth (GW) has a positive relationship with credit risk at 10% significance level. Cash compensation has a mediating role of credit risk on bank performance it has a positive impact on bank performance. If give high compensation to employees than it has impact on credit risk also if we give high non-performing loans to people, it will

less the performance of the bank if will manage the credit risk than the performance of the bank is high. Within cash compensation credit risk has a mediating effect on bank performance. Bank size shows positive relationship with ROE with a coefficient of 0.0272. This result indicates that with a one percent increase in the firm's bank size, there is 0.080 percent increase in return on assets (ROA). The more growth of bank is modified the more performance and less growth of bank is modified the less performance of bank. In model 2 cash compensation has a positive relationship with return on assets (ROE) at 10% significance level. The findings suggest that if we give more compensation to executives than the performance of bank is improve. Higher compensation increases the performance of bank. Lower compensation decreases the performance of bank. Credit risk has a positive relationship with return on assets (ROE) at 10% significance level. The findings suggest that if we give higher loans to people the performance of bank is improve more. Bank size (BS) has a positive relationship with return on assets (ROE) at 10% significance level. Big size of bank is good for the good performance of the bank. Lower size of bank is not good for the bank performance. The growth (GW) has a positive relationship at 10% significance level. The more growth of bank is modified the more performance and less growth of bank is modified the less performance of bank. The model 3 findings suggest cash compensation positive relationship with Tobin's Q at 10% significance level. Credit risk has a positive relationship at 10% significance level. Bank size (BS) has a positive relationship at 5% significance level. The findings suggests that larger size of bank is good for bank performance. Growth has positive relationship at 10% significance level. The findings suggest that more growth of bank is modified the more performance and less growth of bank is modified the less performance of bank.

**Earnings management as mediating relationship between cash compensation and performance**

**Table 4.5.1 Fixed effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	5.0500	1.4000	0.071*
Size	0.0054	0.7381	0.063*
Growth	0.0012386	0.0025	0.029**

R-Square: 0.313

Dependent variable: Earning management

Note: \*, \*\*, \*\*\* represent 10, 5, 1 percent significance level.

**Table 4.5.2 Random effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	1.7300	8.6300	0.041**
Size	0.0058	0.0066	0.005***
Growth	-0.0015	0.0021	0.053**

R-Square:0.381

Dependent variable: Earning management

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table 4.5.3 Hausman Test**

Hausman Test	
H0 =Fixed effect is an appropriate	
H1 = Random effect is an appropriate	
Prob>chi2 =	0.009

Hausman test indicates that p-values is less than 0.05 which reject the Ho and accept the H1. It means that random effect model is an appropriate model. Further, applied the random effect model.

**Table 4.5.4 Fixed effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	2.060	1.2900	0.012**
Earning management	1.7600	2.7890	0.004**
Size	0.0010	0.0006	0.022**
Growth	-0.0003	0.0002	0.015**

R-Square:0.49

Dependent variable: Return on assets (ROA)

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table 4.5.5 Random effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	3.8000	9.8700	0.000***
Earning management	2.8701	5.9020	0.023**
Size	0.0011	0.0006	0.098*
Growth	0.0008	0.0120	0.016**

R-Square:0.51

Dependent variable: Return on assets (ROA)

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level

**Table 4.5.6 Hausman Test**

Housman Test	
Ho-Fixed effect is an appropriate	
H1-Random effect is an appropriate	
Prob>chi2 =	0.0336

Hausman test indicates that p-values are less than 0.05 which reject the Ho and accept the H1. It means that random effect model is an appropriate model. Further, applied the random effect model.

**Table 4.5.7 Fixed effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	5.9600	4.010	0.039**
Earning management	4.890	2.8901	0.045**
Bank Size	0.0780	0.2010	0.000***

Growth	0.0992	0.0079	0.000***
R-Square -0.52			
Dependent variable: Tobin's Q			
Note: *, **, *** represent 10,5,1 percent significance level			

**Table 4.5.7 Random effect model**

Variable	Coefficient	Standard Error	P-value
Cash compensation	5.9400	2.800	0.034**
Earning management	4.6501	2.560	0.0240**
Bank Size	0.0655	0.0193	0.001***
Growth	0.1049	0.0073	0.000***
R-Square :0.53			
Dependent variable: Tobin's Q			
Note: *, **, *** represent 10,5,1 percent significance level			

**Table 4.5.8 Hausman Test**

Hausman Test	
Ho-Fixed effect is an appropriate	
H1-Random effect is an appropriate	
Prob>chi2 =	0.0204

Hausman test indicates that p-values is less than 0.05 which reject the Ho and accept the H1. It means that random effect model is an appropriate model. Further, applied the random effect model.

**Table 4.5.9 Random effect model**

Variable	Model 1 (Earnings management)	Model 2 (ROA)	Model 3 (Tobin's Q)
Cash compensation	0.041** (1.7300)	0.000*** (3.8000)	0.034** (5.9400)
Earning Management		0.023** (2.8701)	0.0240** (4.6501)
Bank Size	0.005*** (0.0058)	0.098* (0.0011)	0.001*** (0.0655)
Growth	0.053** (-0.0015)	0.016** (0.0008)	0.000*** (0.1049)
R-Square	0.381	0.51	0.53

Note: \*, \*\*, \*\*\* represent 10,5,1 percent significance level  
 In this section, the analysis of the impact of earnings management on bank performance is presented, using ROA and Tobin's-Q as proxies for bank performance. In Model 1, cash compensation demonstrates a positive and statistically significant impact on earnings management at a 5% significance level. The detailed results are provided in Table 9, which reports the regression outcomes for models analyzing the effect of earnings management, as a dimension of bank performance, on various

indicators of bank performance. Specifically, ROA is employed as a proxy for bank performance, and its variation in relation to earnings management is examined. The findings reveal a significant and positive association between earnings management and bank performance, as evidenced by the p-value. Improved earnings management of future events based on available accounting information instills confidence in investors dealing with firms exhibiting high predictability in earnings. As a result, directors compensation will encourage earnings management behavior. Directors tends to act to maximize their own interest, further if compensation related to bank performance than they encouraging to directors to take opportunity actions through the selection of accounting policies to secure directors prosperity. Earnings management has a positive and significant effect on bank performance at 5% significance level. Cash compensation has mediating effect through earnings management on bank performance. The result found that is an, increase in cash compensation improve the bank performance is due to earnings management practices conducted by the bank director. Bank size (BS) also a significant and positive impact on bank performance and earnings management at 10% significance level. The result suggests that if we have a large size of bank, it has a good performance for bank. The growth (GW) has an also significant positive impact on bank performance at 10% significance level. The findings suggest that more growth of bank is modified the more performance and less growth of bank is modified the less performance of bank. In model 3 Tobin's Q is the proxy of bank performance. The results suggest that cash compensation has a positive impact on bank performance at 5 % significance. if we give high compensation to our executives, they work hard than the performance of bank is increase. Earnings management has a positive relationship with Tobin's Q at 5 % significance level. The results, positive accounting theory explain that earnings management is done my directors to reduce fluctuations on company performance. Earnings management is done by selecting accounting policies that will boost reported earnings by recognizing the faster income and defer the recognition of costs and loss. Bank size (BS) and growth (GW) are control variable has a positive impact on bank performance at a 10 % significance level. The findings suggest that more growth of bank is adapted the more performance and less growth of bank is adapted the less performance of bank. Numerous studies explore the relationship between bank size and performance. Some researchers argue that medium-sized banks exhibit greater efficiency compared to both large and small banks (Berger et al., 2005; Noulas et al., 1990; Mester, 1992; Clark, 1996). Drake and Hall (2003) identified a robust correlation between bank size, technical efficiency, and scale efficiency. Their findings suggest that a larger bank size contributes positively to overall bank performance.

**Table 4.6 Heteroskedasticity**

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Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
H0: Constant variance
Variables: fitted values of roe

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$$\begin{aligned} \text{chi2}(1) &= 32.16 \\ \text{Prob} > \text{chi2} &= 0.0000 \end{aligned}$$

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Breusch-Pagan test applied to test the heteroskedasticity. The results indicate the p-values is less than 5% which reject the Ho and accept the H1. It means there no homoscedasticity.

**Table 4.7 VIF Test**

Variable	VIF	1/Vif
Cash compensation	1.223	0.8177
Earning Management	1.4567	0.8864
Credit risk	1.8761	0.0001
Bank Size	1.3456	0.7431
Growth	1.8901	0.0001
Mean VIF	1.5583	0.4894

The VIF is used to test the robustness of the results. If the value of VIF is more than 10, it indicates that there is a serious problem of multicollinearity. The Vif results indicates all variable values are less than 10 which shows there is no serious multicollinearity.

### Key Findings and Conclusions

The primary outputs of the financial system are financial reports, and their crucial objective is to disseminate essential financial information to stakeholders, aiding them in informed decision-making. In the literature, it is evident that earnings figures stand out as the most significant element in these financial reports. However, accounting irregularities, errors, and misrepresentations pose significant challenges globally. To counteract these detrimental activities within the accounting system, cash compensation serves as a crucial monitoring mechanism. This study initially delves into the role of cash compensation in enhancing bank performance. ROA (an accounting measure), ROE (an accounting measure), and Tobin's-Q (a market measure) are adopted as metrics to quantify bank performance. The study found that, as hypothesis 01 is outlined, that the cash compensation has a significant positive effect on both ROA, ROE and Tobin's-Q measures of bank performance. Finally, Fried states that there are good theoretical and empirical reasons for concluding that the design of executive compensation in companies with a separate ownership and control is affected by managerial power. Cash compensation has a positive impact on bank performance in Pakistan because if give a high compensation to managers they work hard for the good performance of the bank. Therefore, within the context of Pakistan, cash compensation emerges as a significant factor influencing the valuation of listed firms and appears to be relatively effective in enhancing bank performance. These results align with previous studies such as those conducted by Javid & Iqbal (2008), Yasser (2011), and Azeem et al. (2013), but are inconsistent with (Zulfiqar, Shah, Butt, & Hassan, 2009) in the Pakistani context. The potential reason for the inconsistency could be attributed to variations in methodology, sample periods, and

the relatively small sample size. This study's contribution lies in highlighting the importance of cash compensation mechanisms for bank performance within an emerging market like

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