

Credit Risk and Earning Management Mediate the Relationship Between Cash Compensation and Bank Performance: Evidence from Indonesia

K.D. Karlina Aprilia, Abdul Rohman, Anis Chariri and Imam Ghozali
Faculty of Economics and Business, Diponegoro University, Semarang, Indonesia

Abstract: The objective of this study to investigate the association between cash compensation and bank performance and to observe whether credit risk and earning management mediate the relationship between cash compensation and bank performance. Data collected from 34 banks that listed on the Indonesian Stock Exchange for the period 2009-2014. The result showed that cash compensation has direct effect on bank performance. Credit risk was not a mediating variabel but earning management was able to mediate relationship between cash compensation and bank performance.

Key words: Credit risk, cash compensation, earning management, bank performance, Warppls, path analysis

INTRODUCTION

The global financial crisis in 2008, triggered by the subprime mortgage crisis and the bankruptcy of some of the companies in the United States (such as Lehman Brothers) have an impact for banking industry in Indonesia. Banking industry in Indonesia suffered liquidity problems as a result of massive capital outflow during the financial crisis. Statistical data of Bank Indonesia as of December 2008, recorded a profit after tax of commercial banks amounted to IDR 30.61 trillion. This figure decreased to IDR 3.86 trillion, if that seen from the profit before tax in November 2008 were recorded at IDR 34.4 trillion. The decline in profit was mainly due to the high cost of funds.

One of the causes of the financial crisis in banking sector was high remuneration policy (Swisher, 2012). The remuneration policy of bank director in order to obtain high quality director, causing operating expenses increased and in turn bank operating efficiency is low. In Indonesia, director compensation appears to be part of the academic concern, after the issuance of Bank Indonesia Regulation No. 8/4/PBI/2006 regarding the implementation of Good Corporate Governance (GCG). The regulation discussed the remuneration disclosure obligation and all facilities received as part of GCG report, particularly the compensation received by directors and commissioners. Bank director compensation become new topic after the publication of salary received by the directors of state-owned banks with fantastic large amounts. Phenomenon of bank director compensation in Indonesia was increase since 2009. According to the Bureau of Research Infobank in 2012, of total of 120 banks

in Indonesia issued a remuneration of directors and commissioners over IDR 2.81 trillion in fiscal year 2011 and IDR 2.41 trillion in 2010. Total remuneration of bankers grew 16% from previous year. The average compensation bank directors increased subsequently amounted to IDR 2,808 million in 2009, IDR 3.919 million in 2011 and IDR 5.901 million in 2014.

High director compensation policy that encourages risk-taking will led to an increase in earning management conducted by director. Earning management is seen as an action to defer the recognition of costs or speed up the recognition of revenue and will have an impact on future performance. Earning management is used to cover the credit that cannot be collected by lowering the value of Allowance for Impairment Losses (AIL), resulting in lowering provision for impairment losses and increased reported earnings. Earning management behavior is an action by director who provides financial report is not as it should be and could have an impact on losses to the users of financial information.

Study on the bank performance is a major concern to the researchers. This is due, the bank main function is to collect funds from the public and distribute it in the form of credit to its customers. Bank function allows businesses and households actors can overcome economic uncertainty, facilitate the flow of funds from donors to those in need of loans and increase the quantity and quality of real investment. Thus, the function of the bank can increase in per capita income and improving living standards in a country (Harker and Zenios, 2000). Research done by Taussig and Barker (1925) found empirical evidence supporting the relationship between director compensation and company

performance. Riani *et al.* (2014) found compensation for directors of banks in Indonesia is also positively related to the performance of the bank. Yu and Zhang found that the relationship between director compensation and bank performance in the United States is weak. While Ergin (2013) showed that director compensation of banks in Turkey is negatively related to the performance of the bank. Sari and Harto (2014) showed that director compensation of bank in Indonesia is positively related to ratio Operating Expenses to Operating Revenues (OEOR). High ratio of OEOR demonstrated low performance of bank so the higher the compensation of directors, the lower the performance of the bank. Research on consequence of bank director compensation on the performance of banks failed to produce a consistent results.

Barkema and Meija (1998) explains that by adopting a broader perspective and incorporate internal and external contingency factors may explain the relationship between director compensation and company performance. One important aspect is the director behavioral on the preference for risk (Stroh *et al.*, 1996; Sanders, 2001; Wright *et al.*, 2002). Few studies have examined the relationship director compensation against director risk-taking in the banking sector. The role of director compensation to risk taking was different between the non-bank sector and the banking sector.

In the non-bank, compensation was associated with the wealth of the director was function for the director to engage in risky investments in order to improve company performance (Sanders and Hambrick, 2007; Deutsch *et al.*, 2011). In contrast to the banking industry, the guarantee funds of depositors by the Deposit Insurance Agency (LPS) causes the shareholders through the director tends to increase the risk-taking of a burden for the bond holders and the government (Houston and James, 1995). John and John (1993) stated that the compensation scheme at bank must have a low sensitivity of performance payments to reduce the shift risk behavioral. Therefore, the compensation received by the directors of the bank can be served to increase risk-taking and to increase shareholder return or otherwise reduce excessive risk-taking in order to maintain prosperity of director and prosperity of lender (debt holder) (Smith and Watts, 1992; Houston and James, 1995).

Profit is a measure of performance that is most commonly used in seeing the success of the bank's performance (Lambert and Larcker, 1987; Jensen and Murphy, 1990). Achievement of earnings provides information about the actions of directors and an efficient

risk-taking among the various parties (Holmstrom, 1979). However, the pressure to achieve profit is subject opportunistic action director. Furthermore if prosperity director (compensation) is closely related to the performance of the bank. Earnings figures are prone manipulated by the director to choose accounting policies that accelerate revenue recognition and delayed recognition of losses (Watts and Zimmerman, 1978). Therefore, the earnings reported in the financial statements may be misleading to shareholders as well as for users of financial statements.

Rivard *et al.* (2003) described the bank continued to practice earnings management after the Basel Accord. Uygur (2013) showed the basic compensation is negatively related to earning management but bonus compensation not related to earnings management performed by the director. Fang *et al.* (2014) also find banks that perform actions of excessive risk-taking tend to perform earnings management. As well Duru and Tsitinidis (2013) found that profit before tax positively associated with high costs after a period of allowance for impairment losses implementation according to International Financial Reporting Standard (IFRS).

Empirical studies of director compensation effect on bank performance were carried out in developed countries, especially in the United States and Europe. In contrast to developing countries such as Indonesia is still lack of research and mostly interested in the antecedent factors that affect the director compensation (Darmadi, 2011). So far there were lack studies the role of director compensation and company performance. Muharam (2004) describes in terms of the theory that compensation of Chief Executive Officer (CEO) was related to corporate performance without empirical testing. Syoraya examined the effect compensation of the board of directors to managerial performance is moderated by business risk. As for the banking research, Sari and Harto (2014) examined the effect of director compensation, disparity in the salaries of employees and ownership structure on the performance of the bank and the bank risk. Riani *et al.* (2014) examined the association director compensation to the performance of banks and risk-taking.

The results of previous studies were still not consistent and the lack of director compensation research in Indonesia lead to encourage this topic. This research examines the influence of director compensation to the bank performance which is mediated by risk taking and earning management. It is expected by including some mediating variables could resolve inconsistent previous research on the direct relationship of director compensation to company performance.

Hypothesis development

Cash compensation and bank performance: Fama (1980) stated that the director compensation policy is one important factor in the success of a company. The main aim director compensation is to align the interests of directors with the interests of shareholders that director compensation should be highly correlated with the performance of the company (Tehrani and Waagelein, 1985). Agency theory states that directors are compensated with the basic salary only, not motivated to maximize the performance of the company (Fama and Jensen, 1983). Gerhart and Milkovich (1992) showed that companies using performance-based compensation has better corporate performance than companies that adopt basic compensation.

The results of the study done by Yu and Zhang suggested that the cash compensation directors of the bank in the United States related to the performance of the bank but the relationship is weak. Riani *et al.* (2014) found that total director compensation and compensation of individual directors of the bank in Indonesia was positively related to the performance of the bank, both accounting performance and share price performance.

The second objective competitive director compensation is to attract, retain competent directors, so as to reduce the agency problem. If the company wants to employ highly qualified directors, the company should be willing to pay higher compensation. In line with the Core *et al.* (1999) stated that the director of a high-quality company that will create a higher value.

Expectations theory stated that a person is motivated to engage in activities as far as these activities are expected to produce the desired results (Starke and Behling, 1975). The role of director compensation in motivating the director can be described into three-dimensional (Vroom, 1967). The first dimension of expectations (performance measures), compensation director of high quality encourages directors to increase its business by using the expertise and ability to improve the bank's performance. director compensation low quality lead director lowered his efforts, causing the bank's performance to decline. The second dimension of instrumentalists (performance-reward), the director who has improved (lowered) his business and has achieved an increase (decrease) in bank performance improvement expected for obtaining payment of compensation which then became the basis of an employment contract with the director shareholders in the next year. The third dimension (reward-personal goals), the magnitude of the increase (decrease) on which the compensation contract in the next year to determine how large the personal goals that have been achieved. The higher increase (decrease)

compensation as expected, the higher (lower) the satisfaction and encouragement director. Based on agency theory and the theory of expectations, the increase in cash compensation in line with the performance of banks provide extrinsic motivation to the directors, align the interests of directors with a wealth of shareholders so as to encourage the director to work hard to use the expertise and skills in improving the performance of the bank. Decrease the amount of cash compensation received by the director will lower extrinsic motivation and make the director lowering its efforts in improving the performance of the bank. From the description of the theory and the results of previous research above, the first hypothesis:

- H_1 : cash compensation positively related to the bank performance

Cash compensation and credit risk: Agency theory explains that compensation can align the interests of shareholders and the interests of directors (Jensen and Murphy, 1990). Through cash compensation (salary, bonus, profits), shareholders encourage directors to increase the credit risk-taking so as to achieve the set targets. Director compensation linked to the achievement of performance originally awarded to align prosperity director with the company's performance but make directors avoiding risk-taking. Director tend to avoid risks because director private investment is not diversified (Jensen and Murphy, 1990). Prosperity director who relies heavily on the performance of the bank makes director cautious in taking risks.

Expectation theory, Vroom (1967) also explains that a person motivated to get involved as far as these activities are expected to produce the desired results (Starke and Behling, 1975). A person would not do anything even if the result is highly desirable (Vroom, 1967). The Director will reduce the effort, although, directors may increase the credit risk-taking in order to maintain the performance of the bank. Individuals tend to perform actions that maximize the reward received and minimize costs (Hahn and Kleiner, 2002). Cash compensation became director of extrinsic motivation that reduces credit risk taking because each risk taking is reducing nonperforming loans owned by the bank and showed improved performance director.

Prospect theory can describe relations director cash compensation by taking credit risk. Director who gained increased cash compensation judge him on the condition profit domain. Directors who are not diversified investments encourage directors to avoid the risk by reducing the lending policies (risk averse). Reduction

policy lending by the director because every loan and deemed successful will provide a little extra prosperity to the director. Every successful loan is a possibility. While each loan and failed to provide additional larger losses for the directors and the bank. Reduction policy lending can reduce the amount of loans problem

Director with a decrease in cash compensation judge him on the condition of domain loss and tend to increase the credit risk taking (risk seeking). Director in the domain of losses, perceiving that every success for doubtful loans provide great additional benefits and any credit uncollected provide little benefit to the reduction in bank prosperity and director who has been at a loss.

The results of the study Houston and James (1995) further supports the hypothesis that the contractual compensation tends to make directors avoiding risk. Research conducted Ayadi and Boujelbene (2012) more closely examine the form of cash compensation. Results of both studies showed that cash compensation is negatively related to the bank's director of risk liquidation. In Indonesia, Riani examined the influence of individual compensation against risk taking. The results showed that the compensation of individual directors of the bank in Indonesia negatively related to bank risk. From the description of the theory and the results of previous research above, the second hypothesis can be described as follows:

- H_2 : cash compensation negatively related to credit risk-taking

Credit risk and bank performance: The view that the high returns generated from high risk-taking is a way to improve company performance. There is a trade-off between risk and return Stulz. On the one hand, excessive risk-taking without seeing the success of an investment will negatively impact the company's performance in the future. On the other hand, reduces the risk of taking actions that may be a cost for shareholders because it lowers the prosperity of shareholders. Therefore, every bank should do a good risk management. From the perspective of shareholders, good risk management is not an effective risk management in reducing risk in general which means not to take valuable projects. Every decision that is made by the director to contain the possibilities for success and have the possibility to improve the bank's performance but the decisions are not made to lower the prosperity of shareholders. Agency theory explains the separation of functions between ownership and control in large companies (Jensen and Meckling, 1976). The separation of these functions result in conflicting interests and the emergence of asymmetric information. In

terms of shareholders, high credit risk taking can generate high returns. Meanwhile, from the director, taking credit risk is not high can degrade performance director because the bank's performance declined due to the increasing number of non-performing loans that are not collected. Credit risk-taking means the director of applying additional policy lending, so banks can obtain a return in the form of installments and interest. However, the director has limited rationality in making investment decisions. Failure in risky investment decisions will increase the agency costs that must be borne by shareholders (residual charge). According to the agency theory of high risk taking will increase agency conflicts and increase agency costs that impact on the bank's performance.

Expectation theory, Vroom (1967) explains that the director will step up efforts motivated by the expected results. The director will reduce the credit risk taking and managing problem loans so as to improve the performance of the bank. Performance of the bank increased the basic elements of cash compensation director in the next year (performance-reward). Cash compensation is extrinsic motivation in giving the director of business so valence director becomes high because the rewards personal objectives aligned with expectations director.

Bank managed to maximize shareholder value so it will choose the level of risk that is consistent with the company's goals. Banks that choose a high credit risk taking (giving more credit) will be difficult to fund itself in the future. Policies take a high credit risk potentially make loans become non-performing loans, thus, increasing the risk of the bank. High credit risk causing a lot of credit that are not collectible in the future and will eventually disturb the capital of banks to provide credit further. Strategy taking higher credit risk may limit the ability of banks in the future in providing a safe and liquid deposits and therefore will affect the bank's performance. Previous research results found that banks with weak conditions and provide high bonus compensation tends to cause excessive risk taking and ultimately suffered financial failure (Benston and Evan, 2006; Tandelilin *et al.*, 2007):

- H_3 : credit risk negatively related to the bank performance

Cash compensation and earning management: Director compensation will encourage earnings management behavior. Agency theory explains that the director tends to act to maximize their own interests, further more if the compensation related to bank performance (Eisenhardt, 1989). Positive accounting theory, Watts and Zimmerman (1978) explains that the differences in the interests is

encouraging directors to take opportunity action through the selection of accounting policies to secure director prosperity. Shareholders gave high director compensation in order to increase shareholder wealth. Shareholders when compensating directors will provide the targets to be achieved by linking the director cash compensation with the performance of the bank. Earnings management is seen as an action to defer the recognition of costs or speed up the recognition of revenue and will have an impact on subsequent performance.

Expectation theory explains that the cash compensation directors serve as extrinsic motivation and determine the level of motivation when working. Vroom (1967) explains that a person will be motivated in accordance with the desired rather than the specified goal. Individuals will perform actions that will maximize the reward received and minimizes the costs incurred. Initially, cash compensation given that the director can achieve the goals set by shareholders (increase the prosperity of the shareholders) but cash compensation related to company profits made director conducted earning management in order to increase the amount of compensation (cash compensation) which became the basis of the contract in coming years. Earnings management actions undertaken can be seen with the director policy in determining the value of Allowance for Impairment Losses (CKPN) which differs from the calculation of the mandatory minimum CKPN formed in Bank Indonesia Regulation no. 14/15/PBI 2012 concerning Asset Quality Rating for Commercial Banks. Director that has an increased in cash compensation compared to the previous year is also likely to set a higher value CKPN (overvalued) compared to the value CKPN mandatory minimum established by regulation of BI. Overvalue of CKPN pushing for the elimination of higher non-performing loans and charge as expenses of losses on Financial Assets Value. Elimination of high non-performing loans can be caused due uncollected high credit losses in the years or an accumulation of delays on uncollected loans in the previous year. Meanwhile, the director cash compensation decreased compared to the previous year tend to have little impact on earning management. Director with a decrease in compensation are not motivated to perform earnings management.

Results of previous studies mostly examine equity compensation and found that equity compensation increase earnings management behavior (Rivard *et al.*, 2003; Cornett *et al.*, 2009; Cheng *et al.*, 2011). There are no studies that tested the cash compensation with earnings management behavior. Uygur (2013) found that the bonus compensation is not related to earnings management.

Based on the description of the theory and the results of previous research above, the fourth hypothesis proposed as follows:

- H₄: cash compensation positively related to earnings management

Credit risk and earning management: Policy of the director by granting credit to customers without the process of identification and risk management will encourage the director to undertake earnings management, because the number of loans granted will become non-performing loans. Unqualified policy lending inhibit cash inflow into the bank. Many loans are uncollected and requires banks to form higher reserves for impairment losses.

Agency theory explains that the separation of functions between the ownership and control will causes conflict of interest and led to asymmetric information (Jensen and Meckling, 1976). Director who tend to take the decision-making of high credit risk would try to cover up failed decision. Positive accounting theory explains that one of the measures of earnings management through the selection of accounting method used to cover the decisions made (Zimmerman, 2013).

Banks with low credit risk-taking policies tend to lower lending policies. Credit easing policies have an impact on the number of non-performing loans owned by banks reduced in these conditions the director has no incentive to eliminate non-performing loans. Banks with high credit risk-taking policies tends to increase lending policies. Policies that increase in lending led to an increase in nonperforming loans owned by banks. In this condition, the director tends to eliminate or delay the elimination of non-performing loans. Director behavior seen from the magnitude of the deviation estimated value of CKPN with CKPN value required by Bank Indonesia. Banks are likely to assess undervalued CKPN has a tendency to delay the elimination of non-performing loans. While banks tend to judge overvalued CKPN have a tendency to remove excessive non-performing loans resulting from delays the elimination of non-performing loans last year. The higher the difference either undervalued or overvalued shows the director has made a high earning management. Most previous studies found a positive association between credit risk taking and earning management. Based on the description of the theory and the results of previous research above, the fifth hypothesis, namely:

- H₅: credit risk positively related to earnings management

Earning management and bank performance: Positive accounting theory explains that earnings management is done by the director 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 or losses. Earnings management is done by the director to manage earnings, so its profit target can be achieved for the coming years. Therefore, the directors of the bank will delay the elimination of CKPN during suffering a loss and accelerate the elimination of CKPN when suffering a profits, thus increasing the bank's performance can be achieved.

Banks with a tendency to assess undervalued of CKPN aim is to delay the loss of non-performing loans. Director that delay the elimination of non-performing loans caused Reserves Expenses Losses Impairment of Financial Assets relatively small so increase bank profits. This condition is often carried out by banks in conditions of high risk taking credit or bank is experiencing performance degradation. While banks tend to judge overvalued of CKPN has goal is to immediately remove the problematic credit losses and remove all non-performing loans pending the previous year. The amount of losses to be abolished requires banks to assess large CKPN, so the high expenses impairment losses reserves are not leave the problem of reduction in the bank's performance. This condition is often carried out by the bank in a state increased performance. Neither director who overestimate or underestimate CKPN equally conducted earning management to improve the performance of the bank.

Research finding by Cornett *et al.* (2009) showed that the high performance of the bank in America during the period 1994-2002 were affected by high-performance sensitivity compensation is given, the high rate of capital adequacy, the earnings management practices and high independence of the board of directors. The test results are supported Duru and Tsitinidis which indicates that the high performance of banks in 36 countries correlates with higher earnings management practices. Based on the description of the theory and the results of previous research, the sixth hypothesis, namely:

- H_6 : earning management positively related to bank performance

Based on the elaboration and explanation of concepts and hypotheses have been formulated above, the empirical research model as Fig. 1.

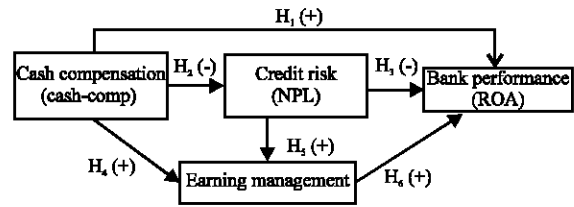


Fig. 1: Empirical research model

MATERIAL AND METHODS

This research is classified research as explanatory research that wants to find an explanation in the form of causality (cause-effect) between some concept or some variables. Data source used are secondary data, information published in the annual report (annual report) banking company listing Indonesia Stock Exchange. The data used is the data pooled (pooling of cross-sectional and time series observations) or panel data. Information used the period from 2009-2014, among others include the amount of IDR director compensation, return on assets, non performing loan ratio, value allowance for impairment losses and bank earning management.

Samples were banks listed on the Indonesia Stock Exchange (BEI). The sampling method used in this research is purposive sampling. Purposive sampling method is a method of sampling where researchers have criteria or specific objectives of the sample to be studied. The criteria for the samples used in this study are as follows:

During the study period, bank did not receive government funding in order to rescue the bank's performance. Publish financial statements, annual report and corporate governance report which presents the complete data such as credit risk, the number of directors, the amount of reserves for impairment losses and return on asset. Publish the amount of compensation received by the directors that includes salary, bonuses, profits and other benefits during the period from 2009 until 2014.

The final sample amounted to 34 banks and the total observation for 4 years was 136 observation. Data were tested by using path analysis software WarpPLS 4.0 that accommodate small sample size and does not require the classical assumption test and high correlations among the variables.

Operational definition of variables

Cash compensation (exogenous variable): Total cash compensation director is the amount of cash received by directors during the year which includes base salary plus bonuses and other compensation components such as the bonus, gratuity, production (Murphy, 1999). This

study uses a variable changes in director cash compensation and is calculated by the average cash compensation received by the director of the previous year minus the average of the previous two years cash compensation (cash compensation (t) = Cash compensation (t-1) - Cash compensation (t-2)). The use of lag in measuring the director cash compensation is used to address causality inverse relationship between the performance of the bank and cash compensation director. Another reason is to allow time for the success of the policy director at the bank's performance is likely to be freshly seen in years to come. The use simultaneity lag to reduce relations and colinearity by giving control over the variables.

The use of cash compensation compared to other forms of compensation is based on research conducted by Benston and Evan (2006) and Ayadi and Boujelbene (2012). According to the data, most banks listing in Indonesian Stock Exchange rarely compensate directors with stock options. Therefore, compensation director who is popular in Indonesia is a performance-based compensation with emphasis on cash bonuses. Cash compensation is selected on the grounds will be obtained regression results are better than just measuring the basic salary of the director alone (Lewellen and Huntsman, 1970).

Credit risk and earning management (mediator variable):

Lending is the main activity of each bank, the risk that arises most is credit risk. Credit risk taking by the director can be seen from the ratio of Non Performing Loan (NPL) current year (NPL (t))... This ratio is used to measure the ability of the bank's management in managing nonperforming loans granted by banks. Loans in this case are loans granted to third parties excluding loans to other banks. The increase in NPL ratios showed that the directors increase risk taking by increasing the number of loans. The decline in NPL ratios showed that directors reduce risk taking by reducing the amount of credit granted. The higher the NPL ratio the higher the credit risk-taking by the director and the lower the NPL ratio the lower the credit risk taking by the director. Net NPL was selected, the use of net NPL refers to Berger as a proxy for excessive risk-taking behavior by bank directors, Gulamhussen *et al.* (2012) to measure the risk of the loan portfolio, Mileris (2014) who use the NPL to see the influence macro-economic and Sari and Harto (2014) uses a bank credit risk. Earnings management is measured from the difference between the value of allowance for impairment losses according to calculations by the bank

with the value allowance for impairment losses minimum required under Bank Indonesia Regulation No. 14/15/PBI/2012 concerning asset quality rating for commercial banks. The difference in value CKPN have an impact on the accounts in the balance sheet and profit and loss account in the report and will ultimately affect bank profits. The difference in value CKPN may be undervalued or overvalued. Both are absolute value to show how much earning management actions was undertaken by director. The greater the difference in numbers CKPN show higher earnings management and the smaller numbers indicate lower earning management earnings CKPN usage refers to research Rivard *et al.* (2003), Cheng *et al.* (2011) and Bushman and Williams (2012).

Bank performance (endogenous variable): Performance presented the bank is indicate how much success is the goal of the interests of shareholders. In accordance with previous studies measured the performance was based accounting and market value. This study uses a bank accounting performance is Return on Assets . The higher the ROA shows the bank's performance is getting better, the lower the ROA figures showing the performance of banks has decreased. ROA is used to measure the ability of bank management in profit (profit before tax) resulting from the average total assets of the bank concerned. The size of the company's performance by using ROA has been used by Rajagopalan and Prescott (1990), Gerhart and Milkovich (1992), Sanders and Hambrick (2007) and Firth *et al.* (2007).

RESULTS AND DISCUSSION

WarpPLS 4.0 chosen for this research model to test the mediating effect of two variables, credit risk (NPL) and earnings management in the relationship between director cash compensation and bank performance (ROA). This study uses a PLS regression Warp3 are trying to identify the relationship between latent variables that follow the curve S. Resampling method used is bootstrapping. Figure 2 presents the research model output.

The test results presented in Fig. 2 and Table 1. Based on the output "model fit indices and p-value" is known that the APC = 0.269, p<0.001; ARS = 0.173, p = 0.006 and AVIF = 1.042, well if <5 (Table 1). Warp PLS states that the value p for APC and ARS should be <0.05 (significant). In addition, an indicator multicollinearity AVIF vertical and lateral should be smaller than 5. Values

Table 1: Model fit indices, path coefficients and p-value

Model fit indices and p-values	Results	Path coefficient	p-values
APC = 0.269, p<0.001	Accepted	Cash-comp _ ROA	0.158, p = 0.026
ARS = 0.173, p = 0.006	Accepted	Cash-comp- _NPL	-0.192, p<0.001
AVIF = 1.042, good if ≤5	Accepted	NPL _ ROA	-0.399, p = 0.020
GoF = 0.430, greater = 0.36	Model fit	Cash-comp _Earn-Manag	0.406, p = 0.001
SPR = 1.000, ideal = 1	Accepted	NPL – Earn_Manag	0.205, p = 0.006
RSCR = 1.000, ideal = 1	Accepted	Earn-Manag _ROA	0.254, p<0.001
SSR = 0.667, good if = 0.7	Not accepted		
NLBCCR = 0.90, good if = 0.7	Accepted		

Table 2: R-squared, Q-squared, and Full Collinearity VIF

R ²	Q ²	Full collinearity VIFs
ROA = 0.297	ROA = 0.298	Cash-Comp. = 1.153
NPL = 0.037	NPL = 0.037	ROA = 1.202
Earn-Manag. = 0.184	Earn-Manag. = 0.191	NPL = 1.104

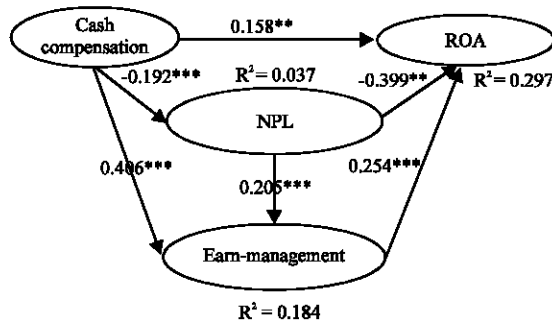


Fig. 2: Output of WarpPLS 4.0

SPR and RSCR worth 1 corresponding ideal value. Values greater NLBCDR 0.7 indicating that the models do not have a problem causality. Referring to these provisions, it can be concluded that this research model fit.

Table 2 presents R², Q² and full collinearity VIF. R² shows how the percentage of variance explained by endogenous construct an exogenous construct. Q² (usually called Stoner Geisse coefficient) is analogous to the R² but can only be obtained through resampling. While full collinearity VIF is full of colinearity test results which include vertical and lateral multikolinearitas. Criteria for full collinearity test is its value should be <3.3 (Kock and Lynn, 2012).

The test results showed that in this study the model there is no multicollinearity, both vertical as well as lateral multicollinearity. It can be seen from the full collinearity VIF (Cash compensation = 1.153; Bank performnace 1.202; NPL = 1.104; Earningh Management = 1.237) which stood at below 3.3 for all variables. R² value is displayed for each of the endogenous variables stood at 29.7% (bank performamance), 3.7% (NPL) and 18.4% (earning management).

Based on the output of WarpPLS 4.0 is known that the director cash compensation (Cash-comp.) positively influence the bank’s performance (ROA) with a coefficient value of 0.158 significant at p-value 0.01, it can be concluded that the hypothesis 1 is accepted. The amount

one unit cash compensation will increas 0.158 unit of bank performance. Results of testing the hypothesis 2 indicates that the director cash compensation (Cash-Comp.) negatively affected credit risk (NPL) with a coefficient of -0.192 significant at p value 0.01, it can be concluded that the second hypothesis is accepted. Test of hypothesis 3 show credit risk (NPL) negatively affect the bank performance (ROA) with a coefficient of -0.399 significant at p-value 0.05, it can be concluded that the third hypothesis is accepted. Test of hypothesis 4 show that the cash compensation (Cash-Comp.) positively influence the earnings management (Earn-Manag.) with coefficient parameter 0.406 and signifinat at p-value 0.01, it can be concluded that the hypothesis 4 is accepted. Results of testing the hypothesis 5 shows that credit risk (NPL) positively effect on earnings management (Earn-Manag.) with coefficient parameter 0.205 and significant at p-value 0.01, it can be concluded that the hypothesis is accepted 5. Test of hypothesis 6 Earning Management (Earn-Manag.) positively effect on bank performance (ROA) with coefficiemnt parameter 0.254 and significant at p-value 0.01, it can be concluded that the hypothesis is accepted 6. Furthermore, to ensure both variables credit risk and earnings management as a mediating variable, VAF used to determine wheter there are mediation or not. Based on calculations of VAF it can be concluded that the variable credit risk (NPL) was not mediator variables, because the VAF value of less than 20%. While variable earning management (Earn-Manag.) mediating the relationship between cash compensation (Cash-Comp.) and bank performance (ROA) because its VAF value is in the range of 20-80% that is equal to 24.11% and can be concluded as partial mediation.

CONCLUSION

Cash compensation of directors has a positive effect on performance. That is, the greater the increase in compensation in cash received by the director of the bank, the higher the performance of banks. The results of this study are consistent with the Agency’s theory that

the main goal of compensation is to align the interests of Directors and shareholders (Jensen and Meckling, 1976). Research results are also consistent and supports the theory of expectations (Vroom, 1967). Cash compensation become monetary incentives and give extrinsic motivation in order to work hard and achieve a better bank performance.

Cash compensation of directors has negative effect on credit risk. That is, the higher the increase in compensation in cash received by director of the bank, then the lower credit risk taking. The data showed that banks in Indonesia during the period of observation tend to take a moderate risk. The test results consistently support agency theory of contractual hypothesis (Smith and Watts, 1992) that the prosperity of director cash compensation linked to company performance will cause directors to avoid the risk and likely to secure its prosperity in line with the interests of bond holders.

Credit risk negatively affect the bank performance. That is, the lower the credit risk, the higher the performance of the bank. The test results show that banks in Indonesia in extending credit to customers pay attention to the level of success that is reflected in NPL ratio below 5%. The test results consistently support the theory of agency that the bank is managing the risks properly will operate its activities at low risk and on low conflicts of interest (Tandelilin *et al.*, 2007). The banks that have been used good risk management (NPL ratio is low) have a great credit availability that provide opportunities to improve the productive assets in order to increase the bank profit.

Cash compensation has positive effect on earnings management. That is the higher the increase in cash compensation given to director, the higher the earnings management practices undertaken by director. The results of this study are consistent and support agency theory that directors tend to take the decision to increase its prosperity (Eisenhardt, 1989).

Credit risk has positive effect on earnings management. That is, the higher the credit risk, the higher the earnings management practices conducted by the director of the bank. The results of this study are consistent with agency theory explains that the director tends to act to maximize their own interests, in addition if the compensation related to bank performance (Eisenhardt, 1989). The results of this study are consistent support positive accounting theory that excessive risk-taking directors who have high incentives to manage earnings in order to cover up the failure of the decision has been made (Watts and Zimmerman, 1978).

Earnings management positively influence bank performance. That is, the higher the earnings management

practices conducted by the director, the higher the performance of the bank. The results support the positive accounting theory that the purpose of earnings management itself is a practice of director in selecting accounting policies to make the company's performance look better (Watts and Zimmerman, 1978).

The results found that earnings management mediate the relationship between cash compensation and the bank performance. That is, an increase in cash compensation improve the bank performance. Although, the higher bank performance is due to earnings management practices conducted by the bank director.

LIMITATIONS

Although, this study contributes theoretically and practicaly, it is not free from limitation. The main limitation is generalizability of the findings. This study focus on 36 banks that listed in Indonesian Stock Exchange and there are 130 banks in Indonesia. This study only using return on asset as accounting performance measurement, there is potential for the bank performance did not reflect the actual performance of the bank. While there are many measures of performance that can be used to view the overall performance of the bank limited disclosure of compensation component in the the bank financial report Most banks use cash compensation, the total compensation reported to be regarded as cash compensation.

REFERENCES

- Ayadi, N. and Y. Boujelbene, 2012. Compensation of the CEO, board of directors and bank risk taking. *J. Adv. Res. Manage.*, 3: 4-16.
- Barkema, H.G. and D.L.R.G. Mejia, 1998. Managerial compensation and firm performance: A general research framework. *Acad. Manage. J.*, 41: 135-145.
- Benston, G.J. and J.D. Evan, 2006. Performance compensation contracts and CEOs incentive to shift risk to debtholders: An empirical analysis. *J. Econ. Finance*, 30: 70-92.
- Bushman, R.M. and C.D. Williams, 2012. Accounting discretion, loan loss provisioning, and discipline of banks risk-taking. *J. Accounting Econ.*, 54: 1-18.
- Cheng, S., G. Lui, C. Shum and S.F.A. Wong, 2011. The influence of corporate governance structure on executive pay. *Res. Bus. Econ. J.*, 3: 1-117.
- Core, J.E., R.W. Holthausen and D.F. Larcker, 1999. Corporate governance, chief executive officer compensation and firm performance. *J. Financial Econ.*, 51: 371-406.

- Cornett, M.M., J.J. McNutt and H. Tehranian, 2009. Corporate governance and earnings management at large U.S. Bank holding companies. *J. Corporate Finance*, 15: 412-430.
- Darmadi, S., 2011. The determinants of board compensations: Evidence from Indonesia. *Ind. J. Account. Res.*, 14: 175-204.
- Deutsch, Y., T. Keil and T. Laamanen, 2011. A dual agency view of board compensation: The joint effects of outside director and CEO stock options on firm risk. *Strategic Manage. J.*, 32: 212-227.
- Eisenhardt, K.M., 1989. Agency theory: An assessment and review. *Acad. Manage. Rev.*, 14: 57-74.
- Ergin, E., 2013. Does excessive executive compensation really pay shareholders?. *Acad. Account. Financ Stud. J.*, 17: 47-55.
- Fama, E.F. and M.C. Jensen, 1983. Agency problems and residual claims. *J. Law Econ.*, 26: 327-349.
- Fama, E.F., 1980. Agency problems and the theory of the firm. *J. Political Economy*, 88: 288-307.
- Fang, Y., I. Hasan and L. Li, 2014. Banking reform, risk-taking, and earnings quality: Evidence from transition countries. *BOFIT Discussion Pap.*, 19: 1-74.
- Firth, M., P.M. Fung and O.M. Rui, 2007. How ownership and corporate governance influence chief executive pay in China's listed firms. *J. Bus. Res.*, 60: 776-785.
- Gerhart, B. and G.T. Milkovich, 1992. Organizational differences in managerial compensation and financial performance. *Acad. Manage. J.*, 33: 663-691.
- Gulamhussen, M.A., C. Pinheiro and R. Sousa, 2012. The influence of managerial ownership on bank market value, performance, and risk: Evidence from banks listed on the stoxx global index. *J. Intl. Financial Manage. Accounting*, 23: 121-153.
- Hahn, R.M. and B.H. Kleiner, 2002. Managing human behaviour in city government. *Manage. Res. News*, 25: 1-10.
- Harker, P.T. and S.A. Zenios, 2000. What drives the performance of financial institutions. *Perform. Financial Institutions Effic. Innovation Regul.*, 2000: 3-31.
- Holmstrom, B., 1979. Moral hazard and observability. *Bell J. Econ.*, 10: 74-91.
- Houston, J.F. and C. James, 1995. CEO compensation and bank risk Is compensation in banking structured to promote risk taking?. *J. Monetary Econ.*, 36: 405-431.
- Jensen, M.C. and K.J. Murphy, 1990. Performance pay and top-management incentives. *J. Politic. Econ.*, 98: 225-264.
- Jensen, M.C. and W.H. Meckling, 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *J. Financial Econ.*, 3: 305-360.
- John, T.A. and K. John, 1993. Top management compensation and capital structure. *J. Finance*, 48: 949-974.
- Kock, N. and G. Lynn, 2012. Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *J. Assoc. Inf. Syst.*, Vol.13,
- Lambert, R.A. and D.F. Larcker, 1987. An analysis of the use of accounting and market measures of performance in executive compensation contracts. *J. Accounting Res.*, 25: 85-125.
- Lewellen, W.G. and B. Huntsman, 1970. Managerial pay and corporate performance. *Am. Econ. Rev.*, 60: 710-720.
- Mileris, R., 2014. Macroeconomic factors of non-performing loans in commercial banks. *Ekonomika*, 93: 22-39.
- Muharam, H., 2004. Compensation chief executive officer (CEO) and corporate performance. *J. Stud. Manage. Organization*, 1: 9-15.
- Murphy, K.J., 1999. Executive compensation. *Handb. Labor Econ.*, 3: 2485-2563.
- Rajagopalan, N. and J.E. Prescott, 1990. Determinants of top management compensation: Explaining the impact of economic, behavioral and strategic constructs and the moderating effects of industry. *J. Manage.*, 16: 515-538.
- Riani, A.L., T. Arifin and P. Abi, 2014. Executive compensation, bank performance and risk taking: Some Indonesian evidence. *Int. Bus. Manage.*, 8: 394-400.
- Rivard, R.J., E. Bland and G.B.H. Morris, 2003. Income smoothing behavior of US banks under revised international capital requirements. *Intl. Adv. Econ. Res.*, 9: 288-294.
- Sanders, W., 2001. Incentive alignment, CEO pay level, and firm performance: A case of heads I win, tails you lose?. *Hum. Resour. Manage.*, 40: 159-170.
- Sanders, W.G. and D.C. Hambrick, 2007. Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Acad. Manage. J.*, 50: 1055-1078.
- Sari, S.P. and D.P. Harto, 2004. Executive compensation and performance of banking operations in Indonesia. *Diponegoro J. Account*, 3: 1-7.
- Smith, C.W. and R.L. Watts, 1992. The investment opportunity set and corporate financing, dividend and compensation policies. *J. Financ. Econ.*, 32: 263-292.
- Starke, F.A. and O. Behling, 1975. A test of two postulates underlying expectancy theory. *Acad. Manage. J.*, 18: 703-714.

- Stroh, L.K., J.M. Brett, J.P. Baumann and A.H. Reilly, 1996. Agency theory and variable pay compensation strategies. *Acad. Manage. J.*, 39: 751-767.
- Swisher, J., 2012. Ceo compensation at us banks: Pay for performance?. *J. Intl. Finance Econ.*, 12: 31-38.
- Tandelilin, E., H. Kaaro and P.A. Mahadwartha, 2007. Corporate governance, risk management and bank performance: Does type of ownership matter. *EADN. Individual Res. Grant Project*, 34: 115-118.
- Taussig, F.W. and W.S. Barker, 1925. American corporations and their executives: A statistical inquiry. *Q. J. Econ.*, 40: 1-51.
- Tehrani, H. and J.F. Waeglein, 1985. Market reaction to short-term executive compensation plan adoption. *J. Accounting Econ.*, 7: 131-144.
- Uygur, O., 2013. Earnings management and executive compensation: Evidence from banking industry. *Banking Finance Rev.*, 5: 33-54.
- Vroom, V.H., 1967. *Work and Motivation*, Review of Educational Research. Vol. 44, Wiley, New York, Pages: 331.
- Watts, R.L. and J.L. Zimmerman, 1978. Towards a positive theory of the determination of accounting standards. *Account. Rev.*, 53: 112-134.
- Wright, P., M. Kroll, A. Lado and V.B. Ness, 2002. The structure of ownership and corporate acquisition strategies. *Strategic Manage. J.*, 23: 41-53.
- Zimmerman, J.L., 2013. Myth: External financial reporting quality has a first-order effect on firm value. *Accounting Horiz.*, 27: 887-894.