Print ISSN: 2288-4637 / Online ISSN 2288-4645 doi:10.13106/jafeb.2021.vol8.no6.0849

The Impact of Executive Compensation, Ownership, and Capital Requirement on Earning Management: Evidence from Indonesia Banking Companies*

Tafdil HUSNI¹, Rida RAHIM², Nadya Ade WIRANDA³, Rizki Fadhel D⁴

Received: March 10, 2021 Revised: May 08, 2021 Accepted: May 15, 2021

Abstract

Earnings management is the use of accounting techniques to produce financial statements that present an overly positive view of a company's business activities and financial position. This study aims to find out the impact of executive cash compensation, ownership, and capital requirement (CR) on earnings management in Indonesian banks. This study uses panel data from banks whose shares are listed on the Indonesia Stock Exchange for 2013–2019 involving 30 banks with a total of 210 observations. Data was analyzed using the least square random impact regression and the Hausman test. The results showed executive cash compensation had a positive impact on discretionary accruals. Then, institutional ownership has a negative impact and CR had a positive impact on discretionary accruals. The findings in this research highlight that institutional ownership can reduce the level of discretionary accruals, but not managerial ownership. As a practical contribution, this finding proves the executive cash compensation can lead to earnings management. Thus, this research is useful in banks' decision-making regarding the treatment of executive cash compensation to CEOs or directors, especially for banks with most institutional ownership. This finding is also useful for regulators in determining the minimum limit of capital requirement ratio to minimize unhealthy or problematic banks.

Keywords: Earnings Management, Executive Cash Compensation, Ownership, Capital Requirement

JEL Classification Code: B26, B27, E44, G15

1. Introduction

Executives have the authority to set their salaries; by using that authority, they can obtain large amounts of profits

*Acknowledgments:

This study was funded by the Andalas University (PTU-KRP-GB 1-UNAND-2019) for facilitating this study.

¹First Author. Lecturer, Department of Management, Faculty of Economics. Universitas Andalas. Indonesia.

Email: tafdilhusni@eb.unand.ac.id

²Corresponding Author. Lecturer, Department of Management, Faculty of Economics, Universitas Andalas, Indonesia [Postal Address: Limau Manis, Pauh, Padang, West Sumatera, 25175, Indonesia] Email: ridarahim@eb.unand.ac.id

³Assistant Lecturer, Department of Management, Faculty of Economics, Universitas Andalas, Indonesia.

Email: nadyaadewirandaa@gmail.com

⁴Student, Magister of Management, Faculty of Economics, Universitas Andalas, Indonesia. Email: rizkifadhel23@gmail.com

© Copyright: The Author(s)

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

through various activities. However, executive authority can cause financial reporting errors, so information on the company's net income could act opportunistically to practice earning management to get high bonuses (Bebchuk & Bar-Gill, 2003). Zhang et al. (2008) stated that most companies resort to using earnings management techniques to meet shareholders' wants, financial analysts' expectations for the company's performance, or management's desire to increase the net income which in turn increases the rewards they receive or to achieve their personal interests that resulted from agency conflict. This evidence illustrates that under certain conditions, the CEO may engage in earnings management practices, so this needs to be investigated further. One of the aspects that trigger CEOs to practice earnings management is cash compensation. Earnings management, with the purpose of increasing performance, has consequences for the increase in the amount related to the bonus of executives, which is reflected in the increase in the remuneration of these professionals in the short term. Thus, this logic prompted studies on the topic, which attested that the incentive through remuneration is related to the increase

in practices linked to earnings management (Conyon, 2006). Healy (1985) found that the motivation of managers to carry out earnings management is because managers have inside information on the firm's net income before earnings management. He hypothesized that managers would find opportunities in which they could manage net income in an attempt to maximize their bonuses under the firm's compensation plans.

The problem of earnings management is caused by agency conflict between principle and agent (Jensen & Meckling, 1976). Therefore, agents do not always act in the interests of the principal alone. Agents have the authority to manage companies so that they do not rule out the possibility that they determine policies that also maximize their individual well-being. This is confirmed by the findings of Alves (2012), who examined the relationship between corporate ownership structure in Portugal and earnings management. The Portuguese governance structure is characterized by the dominance of the largest shareholder who typically exercises significant influences on management decisions directly or indirectly. Using a sample of 34 non-financial listed Portuguese firms for years from 2002 to 2007, we find that discretionary accruals as a proxy for earnings management is negatively related both to managerial ownership and to ownership concentration. The study's results suggest that both managerial ownership and ownership concentration improve the quality of annual earnings by reducing the levels of earnings management. Then, this evidence is reinforced by the findings of Alzoubi (2016), who revealed that such structures can affect earnings management and improve the quality of financial reporting.

Besides, cash compensation can increase the potential for earnings management practices, and can also increase the risk to the company (Aggarwal & Samwick, 2003). Similarly, Lee and Hwang (2019) found evidence that cash compensation impacts not only risk-taking behavior in banks but also earnings management in Korean banking. However, giving cash compensation will also have a positive impact. Husni et al. (2020) found evidence that cash compensation received by executives would have a positive impact on bank performance in Indonesia. Conyon (2006) stated that attractive cash compensation will encourage executives to try to improve the performance of a company. There is also an encouraging relationship between salary payments and performance. Cash compensation provided is part of corporate governance. However, previous research still provides inconsistent conclusions of the role of cash compensation, so the impact of cash compensation to executives or management on earnings management needs to be proven.

One factor that can affect company performance is institutional ownership. The existence of institutional ownership in a company will increase the supervision of management performance because ownership of shares represents a source of power that can be used to support the performance of management. When deciding to stay in the long term with a company, management will focus more on the company's performance and be more careful in its financial reporting. Institutional investors have certain skills and ways that make them different from other shareholders so that institutional investors can be said to be sophisticated or intelligent shareholders. Thus, institutional investors can take effective steps to reduce management actions (Alves, 2012).

Othman and Mersni (2014) revealed a significant positive relationship between capital adequacy ratio (CAR) and discretionary accruals. Similarly, Ayuso et al. (2004) confirmed that large banks can benefit from diversification so that they can operate with lower CAR. However, as a company that manages third-party funds, in general, the percentage of bank capital requirements (CAR) is determined by the regulator (Harr & Ronde, 2006). In Indonesia, the Financial Services Authority has set the bank's capital requirement rule on rule No. 11/POJK.03/2016. When this ratio is high, it indicates that a bank has an adequate amount of capital to deal with unexpected losses. When the ratio is low, a bank is at a higher risk of failure, and so may be required by the regulatory authorities to add more capital. This is consistent with the findings by Gropp and Heider (2009), who revealed that the most profitable banks tend to have relatively stronger regulatory capital. Based on the documentation of the research findings, the researchers assume there will be a dilemma between reducing or increasing the percentage of CAR (Agnemas et al., 2019).

A large amount of research has been documented in various cross-countries related to earnings management in developed countries. They reveal a relationship between cash compensation, ownership, the capital requirement (CR), and earnings management. However, research inconsistencies still occur in Indonesia. Besides, most studies examining earnings management in Indonesia do not individually examine banking companies. Even, the regulations concerning earning management plays an important role in bank restructuring and post-crisis performance, especially in Southeast Asia. Based on the industry perspective, Macey (2003) explained that there are differences in characteristics between the banking industry and other industries where banks are business sectors that are not transparent to enable agency problems. Under certain conditions, managers sometimes have ways to create company value to make it looks profitable. Existing earnings management in the banking industry can arise because of regulatory constraints, such as those related to CAR or high incentives in bonus schemes. Therefore, it should be noted that earnings management in banks is more problematic than in other companies. This is due to the important role of banks in economic growth,

stability, and prosperity of national, regional, and global countries (Hamdi & Zarai, 2012). Earnings manipulation has harmful implications for the entire economy, as we know from the financial depression that hit the banking sector in 1998 and 2008 (Othman & Mersni, 2014). During the crisis, the collapse of the bank led to the problem of information asymmetry between managers and shareholders, which was very severe (Palia & Porter, 2007). Earnings management is considered an obstacle for investors to accurately predict the future performance of banks using current information.

Furthermore, as a practical contribution, the researchers found that the cash compensation system applied by Indonesian banks has not been able to resolve agency conflicts. This research analysis indicates that more cash compensation will lead to earnings management and with higher cash compensation, earnings management will increase. However, this cash compensation strategy can still be used for banking companies that have implemented good governance, especially for companies with the most institutional ownership. The ownership of shares owned by many parties (external or internal) is different from banking companies with managerial ownership. Based on the research of Wetmore and Brick (1994), CR can be utilized as a media of earnings management practices by banks. When the proportion of CR variables increases, it is predicted that earnings management can also decrease.

Therefore, an analysis of the impact of cash compensation on earnings management can contribute to the study of banking decision-making with institutional ownership or non-owner-managers. Furthermore, this research is expected to provide a potential picture for regulators in delivering insights to strengthen financial regulations in banks to improve accounting quality. Besides, this study also using control variables such as audit quality, independent commissioner, loan loss provision, size, and growth.

2. Literature Review

Agency theory generally deals with the relationship between agency and principle (Jensen & Meckling, 1976). This theory defines the problem of separation between ownership and control of the company. Agency theory is a principle that is used to explain and resolve issues in the relationship between business principals and their agents. Most commonly, that relationship is the one between shareholders, as principals, and company executives, as agents. The agent represents the principal in a particular business transaction and is expected to represent the best interests of the principal without regard for self-interest. The different interests of principals and agents may become a source of conflict, as some agents may not perfectly act in the principal's best interests. Conflicts of interest that occur between principals and agents encourage agents to

present invalid information to the principal, especially if the information is related to the measurement of agent performance. This conflict of interest is caused by agent motives that are highly motivated by short-term profits and opportunities (Khan et al., 2013). Therefore, this conflict creates agency problems and agency costs.

The relationship between earnings management and corporate governance remains a matter of heated debate among researchers. Earning management is known as an umbrella for activities that affect reported earnings (Paricheh et al., 2013). Some of them argue that good corporate governance (GCG) has helped in reducing earnings management. However, some researchers also argue that corporate governance does not help reduce levels or increase the potential for earnings management. In Indonesia, regulations regarding good corporate governance (GCG) in the banking industry began with the development of the Indonesian Banking Architecture in 2004. Then, the central bank issued regulation No.4/8/ PBI/2006 regarding the implementation of GCG practices in the banking industry. Besides, the regulation also requires the establishment of a committee on an audit, risk monitoring, and remuneration, and nomination under the supervision of the board of directors. The role of the GCG system is to reduce or overcome the conflict of interest in a particular company that exists and reduce the agency costs, the corporate governance policies still have no impact or just a little on the potential for earnings management for Indonesian companies. However, not all researchers agree with this finding (Skare & Hasic, 2016). Rahim et al. (2020), who stated that good corporate governance can affect earnings management. One form of corporate governance is cash compensation. Cash compensation is related to performance, where cash compensation exists to ensure managers can make efforts to maximize the value of the company. Following agency theory, the higher the conflict of interest between principal and agency, the higher the agent's costs and the alignment of interests with cash compensation can be a measure for handling agency costs (Balsam, 2011). If variable cash compensation acts as a factor to increase the value of the company, then this can suppress earnings management (Lee & Hwang, 2019).

Therefore, if performance cannot reach the minimum threshold, managers will report less incentive income in the current period, but this is also to maximize bonuses for the next period; then, earnings management will occur in the next period (Lee & Hwang, 2019). In line with previous findings, Healy (1985) stated that manager compensation is based on earnings and provided within a certain performance range. Therefore, there is a positive relationship between cash compensation and earnings management. The research that has been done documented that cash compensation is linked to performance, giving

a push towards maximizing revenue and increasing cash compensation for the current period. When the proportion of cash compensation variables increases, it is predicted that earnings management can also increase. However, on the other hand, cash compensation can also lead to excessive risk-taking or short-term earnings management rather than maximizing long-term corporate value, depending on how cash compensation is given (Lee & Hwang, 2019).

One form of cash compensation given to bank executives in Indonesia is salaries, benefits, and bonuses (Rahim et al., 2020). Cornett et al. (2009) reported that sensitivity to CEO performance payments is positively related to earnings management. Besides, managers tend to freely report earnings, which will increase earnings volatility to obtain optimal cash compensation. Lee and Hwang (2019) stated that cash compensation might have an impact not only on earnings management but also on the bank's risk-taking behavior. This is because earnings management has an impact on financial performance, while the cash compensation only reflects performance; earnings management has an impact on the company's financial sustainability.

Institutional ownership has an active role in monitoring management decisions and increasing information competence in the capital market because it is quite useful in processing and obtaining information (Ferreira & Matos, 2008). In this case, previous research shows that the role of institutional investors in companies can be estimated through the level of participation. For example, institutional ownership can function as a governance mechanism that impacts earnings management by relying on the level of involvement (Hadani et al., 2011). Furthermore, Ferreira and Matos (2008) investigated that institutional investors often provide corporate governance mechanisms that hinder earnings management. The success of pension reforms in Colombia, Chile, Argentina, Peru, and Mexico could be traced to the role of corporate governance that significantly helps institutional investors in forming corporate behavior, protecting small or minority shareholders, and deterring managers from practicing earnings management practices. The results emphasize that there is a negative relationship between the proportion of shares held by institutional investors and the absolute value of discretional accruals.

In addition to institutional ownership, agency theory also proposes that if managers do not have ownership in the company they manage or have little share ownership in the company, then their behavior will be impacted by personal interests (Jensen & Meckling, 1976). However, this also indicates that if managers own share ownership, it will encourage managers to increase the value of the company, because managers will bear a portion of the wealth impact as a shareholder. As a result, CEO stock ownership can lead to a convergence of interests between managers and shareholders (aligning interests) (Alves, 2012). Consequently, the CEO's share ownership help

aligns managerial interests with those of shareholders. In this case, it is expected that as management's ownership increases, the potential for manipulating earnings will decrease. If managers have a precise portion of their wealth in the form of shares of the company they manage, then they will tend to align their interests more closely with shareholders that will make discretionary accrual rates lower (Jung & Kwon, 2002). Thus, insider ownership can be considered as a mechanism to restrict managerial opportunism behavior. Therefore, the level of earnings management can be anticipated with insider ownership in a negative relationship (Teshima & Shuto, 2008). On the other hand, managerial ownership can also simultaneously have an inverse impact on a company, because higher executive power can lead them to choose accounting decisions that lead to personal motives, hence, influencing the purpose of maximizing company value (Cheng & Warfield, 2005). At the same time, the interests of managers and shareholders cannot be fully aligned; higher share ownership gives managers more power to pursue their own goals without fear of punishment (Fama & Jensen 1983). As such, there is still much debate about the direction of managerial ownership.

The bank capital structure represents the bank's choice of how to finance its balance sheet, that is, what mix of equity, subordinated debt, and deposits to use. It is an issue of central importance in any discussion of bank stability, and thus of great interest to regulators. The CR represents the capital of the bank. In the United States, the CR regulation came into force in 1990. In the European environment capital, adequacy regulations were enacted in the late 1980s and early 1990s regulations. Then, Indonesia adopted this regulation in 2008, regulated by Bank Indonesia in regulation No: 10/15/ PBI/2008 based on Basel II and International Accounting Standard (IAS). Currently, the Indonesian banking regulations are regulated by the Financial Services Authority, which recently released regulation No: 11/POJK.03/2016, which governs the minimum capital requirement for banks, which revises the previous rules with adjustments referring to Basel III. Banks must meet equity capital of at least 4.5% of riskweighted assets at any time, and total Tier 1 capital (core capital plus additional capital) must be 6% of risk-weighted assets at any time. Banks with low capital ratios will use their policies and report lower discretionary loan loss provisions for reporting capital and higher earnings (Kim & Kross, 1998). This study also investigates some control variables such as audit quality, independent commissioner, loan loss provision (LLP), company size, and company growth, which have been used in previous studies.

Based on these descriptions, the hypotheses formulated in this study are:

H1: Cash Compensation has a positive impact on earnings management.

H2: Institutional ownership has a negative impact on earnings management.

H3: Managerial ownership negatively affects earnings management.

H4: Capital Requirements negatively affect earnings management.

3. Research Methods and Materials

3.1. Research Methods, Population, and Sample

The unit of analysis of this research is the bank. In this study, the type of sampling method is non-probability; what will be used is purposive sampling. A purposive sample is a non-probability sample that is selected based on the characteristics of a population and the objective of the study (Sekaran & Bougie, 2016). Samples are listed bank companies on the Indonesia Stock Exchange (IDX). The research period is for seven years (2013–2019) involving 30 banks with 210 observations. The population and samples are presented in Table 1.

3.2. Data Formula

This study applies a combination Jones model (Dechow et al., 1996) and incorporates company performance by Kothari et al. (2005). It is estimated for all company years. Then, following previous research (Waweru & Prot,

Table 1: Sampling

Banking Population on the IDX (2013–2019)		
Bank	Total	Source
BUMN	4	www.idx.ac.id
BAUBUMN	1	
BUSN	27	
BUSND	5	

Banking samples are listed on the IDX (2013-2019)

Bank	Banking Samples are Listed on the Indonesia Stock Exchange	
BUMN	4	4
BAUBUMN	1	1
BUSN	27	25
Total Sample		30
Observation		210

Note: BUMN is state-owned enterprises; BAUBUMN is BUMN owned business bank, BUSN is a Foreign exchange national private commercial bank; BUSND is a National non-foreign exchange private commercial bank.

2018), this study first calculated the total accruals $(TACC_{jt})$ of the company in year t which were calculated as the difference between earnings before extraordinary items and discontinued operations $(EARN_{jt})$ and streamed the operations (CFO_{jt}) as follows:

$$TACC_{it} = EARN_{it} - CFO_{it}$$

Then, this study estimates the following regression for each combination of firms and company years:

$$\frac{\text{TACC}_{jt}}{\text{TA}_{jt-1}} = \beta_0 + \beta_1 \left(\frac{1}{\text{TA}_{jt-1}}\right) + \beta_2 \left(\frac{(\Delta \text{Rev})}{\text{TA}_{jt-1}}\right) + \beta_3 \left(\frac{\text{GPPE}}{\text{TA}_{jt-1}}\right) + \beta_4 \text{ROA}_{jt-1}$$

To obtain company-specific estimates of the coefficients, the researchers follow previous research (Mostafa, 2017) with panel data, which will be included in the non-discretionary accrual equation as follows:

$$NDA_{jt} = \beta_1 \left(\frac{1}{TA_{jt-1}} \right) + \beta_2 \left(\frac{\Delta Rev - \Delta Art}{TA_{jt-1}} \right) + \beta_3 \left(\frac{GPPE}{TA_{jt-1}} \right) + \beta_4 ROA_{jt-1}$$

Where,

 β = Constanta/Intercept TA_{it-1} = Total asset in period t-1

 ΔArt = Accounts receivable change at period t

 $\Delta \text{Rev} = \text{Income change at period } t$

GPPE = Gross property plant and equipment year t

ROA = Rate of return on lagged assets for firm j in

year t; and

 \acute{e} = Error term for firm j in year t.

Following previous research (Mostafa, 2017), earnings management is the result obtained from the equation (residual value), i.e., the value obtained from equation (2) before total accrual $(TACC_{ji})$ minus non-discretionary accruals (NDA_{ji}) ; the predictive value of discretionary accruals (DA) is obtained as follows:

$$DA = TACC_{it} - NDA_{it}$$

To test the impact of variables in this study, researchers used an analysis with the least square random impact regression. The study will test the Hausman test to see errors in correlation with independent variables. The test evaluates the consistency of an estimator when compared to an alternative, less efficient estimator which is already known to be consistent. It helps one evaluate if a statistical

model corresponds to the data. The results demonstrate that the random impact model is the most appropriate for this research data:

$$Y = \beta_0 + \beta_1 \beta_{CC} + \beta_2 \beta_{IO} + \beta_3 \beta_{MO} + \beta_4 \beta_{CR} + \beta_5 \beta_{Controls} + \varepsilon$$

4. Results and Discussion

The panel data regression analysis model used is the random impact model because, based on the results of the Chow test, it shows that prob = 0.0000 for Cross-section F, which is smaller than 0.05 and results in rejection of H0. Thus, the panel model is better than the common impact (CEM) model. Then the Haussman test was carried out, which showed that prob = 0.1206 for random cross-section, which means that it is greater than 0.05, which means that H0 is accepted, so the REM model is better than FEM. Then we continued with the Lagrange multiplier test, and the statistical results show that prob = 0.0109 is smaller than 0.05, which means that H0 is rejected and H1 is accepted. Hence, the model used is the Random Impact Model. Table 2 shows the results of the regression assumption test. The data is normally distributed because there is no indication of multicollinearity from the correlation between the independent variables. It can be seen that the correlation value is smaller than 0.8, so, the regression model above can be used in this study.

Table 3 presents the results of multiple linear regression tests that explain the impact of independent variables on discretionary accruals. The influence of the independent variable in this study for Indonesian banking earnings management based on the R^2 value is 38.92%. This explains that there are 38.92% of the variations in earnings management.

Hypothesis 1 predicts that cash compensation has a positive impact on earnings management. Table 3 shows the significant probability values at the 0.05 level (**) for cash compensation. It means that cash compensation has a significant positive impact on earnings management. This supports the view of agency theory by Jensen and Mackling (1976), who saw a conflict of interest between the principal and agent, in which the manager is concerned with his

interests to maximize wealth. In this context, the manager (agent) performs earnings management to show good performance or in line with the principal's expectations and expects higher cash compensation from the performance of the earnings management (Conyon, 2006). The results of this study are in line with Lee and Hwang (2019), who stated that cash compensation given to bank executives will have an impact on earnings management behavior. Based on the results, indicate that cash compensation cannot resolve agency issues. The researcher believes that corporate governance strategies such as giving cash compensation to CEOs or directors at Indonesian banking institutions can create improved company performance (Husni et al. 2020).

Hypothesis 2 predicts that institutional ownership has a negative impact on earnings management. Table 3 shows the significant probability values at the 0.05 level (**) for institutional ownership. Therefore, institutional ownership has a negative impact on earnings management. This supports the agency theory by Jensen and Mackling (1976) who

Table 3: Regression Result of Executive Compensation, Owner, and Capital Requirement to Earning Management

	Coefficient
Constant	0.0636** (0.0418)
C_C	0.2016** (0.0166)
I_O	-0.0256** (0.0122)
M_O	0.0156 (0.1232)
C_R	-0.0017** (0.0032)
Q_A	-0.2354** (0.0128)
I_C	-0.0568** (0.0406)
LLP	0.2148* (0.0512)
Sz	-0.0238 (0.1626)
Grth	0.1257** (0.0425)
Adjusted R ²	0.3892
No. of Obs Firm-Year	210

Note: *Significant at 10%; **significant at 5%; ***significant at 1%.

Table 2: Testing Assumption Regression

Regression Assumption	Test	Test Result
Normality JB-test: $0.280203 > \alpha = 5\%$ Data		Data is normally distributed
Multicollinearity	Iticollinearity Correlation between independent variables <0.8	
Heteroskedasticity	Obs* <i>R</i> Squared 0.1279 > <i>α</i> –5%	No heteroskedasticity

Note: JB-test probability value $0.280203 > \alpha = 5\%$ (0.05), while for probability value Obs * *R*-squared is equal to $0.1279 > \alpha = 5\%$, so this research does not occur heterokedasticity.

proposed monitoring by institutional investors, and dominant percentage ownership of the institution in the company can be an efficient governance mechanism (Alzoubi, 2016). The results support the findings of Hadani et al. (2011) who stated that the role of institutional ownership in companies can reduce the level of earnings management. The results of this study indicate the percentage of bank share ownership in Indonesia is majorly owned by institutional/external investors, as such, the potential for earnings management will be reduced. The researcher believes that the role of institutional investors in banks in Indonesia has provided or ensured that corporate governance mechanisms are running well so that it inhibits earnings management (Erkens & Matos, 2008).

On the other hand, the study did not find the impact of managerial ownership on earnings management. However, Hypothesis 3 predicts that managerial ownership has a negative impact on earnings management. This finding rejected agency theory which implies the involvement of managerial ownership will affect specific interests in the companies they manage (Fama & Jensen, 1983), both to increase the value of the company, and personally. This result not in line with Algirem et al. (2020) who revealed that the board of director ownership, ownership concentration, foreign ownership, and CEO compensation affect earnings manipulation. However, the results of this study support the view that if managers own majority shareholders, then they lack the motive for earnings management because they do not get great pressure to meet or exceed earnings expectations (Jiraporn & DaDalt, 2009).

Hypothesis 4 predicts that CR has a negative impact on earnings management. Table 3 shows the significant probability values at the 0.05 level (**) for CR. Thus, it can be concluded that this study accepts hypothesis 4, which means CR has a negative impact on earnings management. The findings of this study support the research findings of Kim and Kross (1998) who stated that banks with low capital ratios will use their policies and report lower loan loss provisions for reporting higher capital and earnings.

The results in Table 3 show the control variables. Audit quality has a negative impact on earnings management with values at the 0.05 level (**) for audit quality. It means that external auditors (Big-4) are able to mitigate unethical managerial activities and perform higher-quality audits because they are highly independent with greater expertise (Salem et al., 2020). The findings of this study support the findings of Agrawal and Chadha (2005), who stated that audit quality can avoid fraud and restatement of earnings, which affect earnings management. Furthermore, the results of this study are consistent with the findings of Waweru and Prot (2019) who stated that companies audited by Non-Big Four have significantly higher discretionary accrual rates than those audited by the Big Four. This result is also in line

with Kong (2020) who stated that the big five auditors have a negative and significant impact on private-owned firms. Thus, it can be concluded that independent commissioners have a negative impact on earnings management.

The findings of this study support the findings of Xie et al. (2003) and Chen et al. (2007), who stated that in addition to the role of supervision, the existence of an independent commissioner can reduce the possibility of fraud in financial reporting. Then, Loan Loss Provision (LLP) has a positive impact on earnings management. This finding in line with Anandarajan et al. (2005) who stated the involvement of banks with earnings management using LLP. The results of this study illustrate that banks can use LLP as a tool for performing discretionary accruals. The researcher believes that because managers are free to determine LLP levels as explained by Ozili and Outa (2017), then if the LLP level of the bank is too high, it is assumed that discretionary accruals occur at the bank. Discretionary accruals in LLP also include accrual loan loss provisions (ALLP). Size has no significant impact as a control variable. This result is not in line with the findings of Alam et al. (2020) who stated that firm size negatively affected earning management in conventional banks while in Islamic banks, the size influenced discretionary level negatively. This finding provides the view that no matter how large the size of the company, it is not related to earnings management. Therefore, the researcher believes that regardless of the size category, all bank sizes can potentially be involved in discretionary accruals. The growth control variable shows that it impacts earnings management. This finding supports the findings of Alnajjar and Riahi-Belkoui (2001) who stated that discretionary accruals are related to growth, and discretionary accruals will be higher in companies with high growth.

This study distinguished bank size by its relation between industries and indicators of the competition between them. This is simply called market power and competition among companies. Chang et al., (2019) conducted a study of the Chinese and Taiwanese tourism industries to detect discretionary accruals using market power and competition. They found a significant negative relationship between market power and competition for discretionary accruals. The Herfindahl-Hirschman Index (HHI) is a measure widely used for market concentration as a proxy for product market competition. This study uses HHI to differentiate the level of interbank market competition. Table 4 shows that HHI has a significant positive impact on discretionary accruals.

Last, the generalized least square (GLS) regression model after entering the HHI factor, the results are not much different from the results shown in Table 3. This shows that the findings of this study are vigorous, with the test using different statistical models.

Table 4: Regression Result of Executive Compensation,	
Owner, and Capital Requirement to Earning Managemen	t

	Coefficient
Constant	0.0718* (0.0537)
C_C	0.3117* (0.0548)
I_0	-0.0114** (0.0452)
M_O	0.0039 (0.1675)
Q_A	-0.1532* (0.0613)
I_C	-0.0612** (0.0319)
LLPs	0.1624** (0.04528)
CR	-0.0046* (0.0513)
Sz	-0.0113 (0.1714)
Grth	0.0852** (0.0489)
ННІ	0.0746** (0.0445)
Adjusted R ²	0.3892
No. of Obs Firm-Year	210

Note. *Significant at 10%; **significant at 5%; ***significant at 1%.

5. Conclusion

This study aims to examine the impact of cash compensation, ownership, and CR on earning management in Indonesian banking companies. This study also investigates the control variable such as audit quality, independent commissioner, LLP, size, and growth in earnings management. This research found that Institutional ownership, audit quality, and independent commissioners play a role in reducing the level of discretionary accruals. However, managerial ownership does not impact the level of discretionary accruals. This finding implies that if managers have majority ownership owned by bank managers, they lack the motive for earnings management. On the other hand, cash compensation shows a positive impact on earnings management. Then, this study found LLR has a positive impact on earnings management, and CR has a negative impact on earnings management. This finding implies that banks can utilize LLR and CR instruments as discretionary accrual tools. This finding provides a practical contribution to financial institutions. The application of cash compensation strategies has not been fully impactive because it can cause discretionary accruals. However, this strategy does not fully lead to earnings management. The result also proves that cash compensation can improve company performance. Therefore, the researchers suggest that the cash compensation strategy can still be applied if the bank has institutional majority ownership, and the BIG-4 company audits the bank. It has an independent

commissioner, according to the evidence of this study, where the three components of governance can suppress earnings management. Then, the findings of this study can also contribute to the auditor by considering LLP and CR policies set by banks as evaluation material to detect specific manipulations that are applied in financial companies. This study has limitations; there are data restrictions published on bank companies registered in Indonesia where there is no separation of cash compensation between the directors. The directors of this limitation can result in the results obtained that are less able to be generalized because of the possibility of differences in characteristics and a tendency between the CEO and directors.

References

- Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *The Journal of Law and Economics*, 48(2), 371–406. http://doi.org/10.1086/430808
- Aggarwal, R. K., & Samwick, A. A. (2003). Why do managers diversify their firms? Agency reconsidered. *The Journal of Finance*, 58(1), 71–118. https://doi.org/10.1111/1540-6261.00519
- Agnemas, Y. I., Jacquline, T. S. M., Ferdous, A., Eddy, Y., Albattat, A. (2019). The analysis of factors influencing earning management of conventional private banking in Indonesia. *The Journal of Social Sciences Research*, *5*(4), 912–917. https://doi.org/10.32861/jssr.54.1247.1252
- Alam, N., Ramachandran, J., & Nahomy, A. H. (2020). The impact of corporate governance and agency effect on earnings management: A test of the dual banking system. *Research in International Business and Finance*, 5(6), 222–236. https://doi. org/10.1016/j.ribaf.2020.101242
- Alnajjar, F., & Riahi-Belkaoui, A. (2001). Growth opportunities and earnings management. *Managerial Finance*, 27(12), 71–81. http://doi.org/10.1108/03074350110767457
- Anandarajan, A., Hasan, I., & Lozano-Vivas, A. (2005). Loan loss provision decisions: An empirical analysis of the Spanish depository institutions. *Journal of International Accounting, Auditing, and Taxation, 14*(1), 55–77. http://doi.org/10.1016/j.intaccaudtax.2005.01.004
- Alqirem, R., Afifa, M., A., Shaleh, I., & Haniah, F. (2020). The amount of earnings per share's adjustment and earnings management. *The Journal of Asian Finance, Economics, and Business*, 7(12), 293–308. https://doi.org/10.13106/jafeb.2020. vol7.no12.293
- Alves, S. (2012). Ownership structure and earnings management: Evidence from Portugal. Australasian Accounting, Business and Finance Journal, 6(1), 57–74. https://ro.uow.edu.au/aabfj/ vol6/iss1/12/
- Alzoubi, E. S. S. (2016). Ownership structure and earnings management: Evidence from Jordan. *International Journal of Accounting & Information Management*, 24(2), 135–161. https://doi.org/10.1108/IJAIM-06-2015-0031

- Ayuso, J., Pérez, D., & Saurina, J. (2004). Are capital buffers pro-cyclical?: Evidence from Spanish panel data. *Journal of Financial Intermediation*, 13(2), 249–264. https://doi.org/ 10.1016/S1042-9573(03)00044-5
- Balsam, S., Fernando, G. D., & Tripathy, A. (2011). The impact of firm strategy on performance measures used in executive compensation. *Journal of Business Research*, 64(2), 187–193. https://doi.org/10.1016/j.jbusres.2010.01.006
- Bebchuk, L. A., & Bar-Gill, O. (2003). Misreporting corporate performance (Harvard Law and Economics Discussion Paper No. 400). Harvard Law School. http://www.law.harvard. edu/programs/corp_gov/papers/2003.Bebchuk-Bargill. misreporting.pdf
- Chang, H. Y., Liang, L. H., & Yu, H. F. (2019). Market power, competition and earnings management: accrual-based activities. *Journal of Financial Economic Policy*, 11(3), 368–384. http://doi.org/10.1108/JFEP-08-2018-0108
- Chen, K. Y., Elder, R. J., & Hsieh, Y. M. (2007). Corporate governance and earnings management: The implications of corporate governance best-practice principles for Taiwanese listed companies. *Journal of Contemporary Accounting & Economics*, 3(2), 73–105. https://doi.org/10.1016/S1815-5669(10)70024-2
- Cheng, Q., & Warfield, T. D. (2005). Equity incentives and earnings management. *The Accounting Review*, 80(2), 441–476. https:// www.jstor.org/stable/4093065
- Conyon, M. J. (2006). Executive balance and incentives. *Academy of Management Perspectives*, 20(1), 25–44. https://doi.org/10.5465/amp.2006.19873408
- Cornett, M. M., McNutt, J. J., & Tehranian, H. (2009). Corporate governance and earnings management at large US bank holding companies. *Journal of Corporate Finance*, 15(4), 412–430. https://doi.org/10.1016/j.jcorpfin.2009.04.003
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, *13*(1), 1–36. https://doi.org/10.1111/j.1911-3846.1996.tb00489.x
- Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide. *Journal of Corporate Finance*, *18*(2), 389–411. https://doi.org/10.1016/j.jcorpfin.2012.01.005
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301–325. https://www.istor.org/stable/725104
- Ferreira, M. A., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, 88(3), 499–533. https://doi.org/10.1016/j.jfineco.2007.07.003
- Gropp, R., & Heider, F. (2010). The determinants of bank capital structure. Review of Finance, 14(4), 587–622. https://doi. org/10.1093/rof/rfp030
- Hamdi, F. M., & Zarai, M. A. (2012). Earnings management to avoid earnings decreases and losses: empirical evidence from

- the Islamic banking industry. *Research Journal of Finance and Accounting, 3*(3), 88–107. https://www.iiste.org/Journals/index.php/RJFA/article/view/1642
- Harr, T., & Ronde, T. (2006). Regulation of banking groups (FRU Working Paper No. 2006/01). The University of Copenhagen, Department of Economics. Finance Research Unit. https://www.econ.ku.dk/fru/wp/archive/2006_01.pdf
- Hadani, M., Goranova, M., & Khan, R. (2011). Institutional investors, shareholder activism, and earnings management. *Journal of Business Research*, 64(12), 1352–1360. https://doi. org/10.1016/j.jbusres.2010.12.004
- Healy, P. (1985). The impact of bonus schemes on the selection of accounting principles. *Journal of Accounting and Economics*, 7(1–3), 85–107. https://doi.org/10.1016/0165-4101(85)90029-1
- Husni, T., Rahim, R., & Aprayuda, R. (2020) Cash balance, corporate governance, ownership, and dividend policy on banking performance. Advances in Economics, Business and Management Research, 132, 212–218. https://doi.org/10.2991/ aebmr.k.200331.046
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. https://doi. org/10.1016/0304-405X(76)90026-X
- Jiraporn, P., & DaDalt, P. J. (2009). Does founding family control affect earnings management? *Applied Economics Letters*, 16(2), 113–119. https://doi.org/10.1080/17446540701720592
- Jung, K., & Kwon, S. Y. (2002). Ownership structure and earnings informativeness: Evidence from Korea. *The International Journal of Accounting*, 37(3), 301–325. https://doi.org/10.1016/S0020-7063(02)00173-5
- Kim, M. S., & Kross, W. (1998). The impact of the 1989 change in bank capital standards on loan loss provisions and loan write-offs. *Journal of Accounting and Economics*, 25(1), 69–99. https://doi.org/10.1016/S0165-4101(98)00015-9
- Khan, A., Muttakin, M. B., & Siddiqui, J. (2013). Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *Journal of Business Ethics*, 114(2), 207–223. https://doi.org/10.2139/ssrn.2050630
- Kong, D. (2020). Does corporate social responsibility affect the participation of minority shareholders in corporate governance? *Journal of Business Economics and Management*, 14(1), S168–S187. https://doi.org/10.3846/16111699.2012.711365
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting* and *Economics*, 39(1), 163–197.
- Lee, M., & Hwang, I. T. (2019). The impact of the balance system on earnings management and sustainability: Evidence from Korea banks. Sustainability, 11(11), 3165. https://doi.org/10.3390/ su11113165
- Macey, J. R., & O'hara, M. (2003). The corporate governance of banks. *Economic Policy Review*, 9(1), 96–121. https://ssrn.com/abstract=795548

- Mostafa, W. (2017). The impact of earnings management on the value relevance of earnings. *Managerial Auditing Journal*, 31(1), 50–74. https://doi.org/10.1108/MAJ-01-2016-1304
- Othman, H. B., & Mersni, H. (2014). The use of discretionary loan loss provisions by Islamic banks and conventional banks in the Middle East region. *Studies in Economics and Finance*, 31(1), 106–128. https://doi.org/10.1108/SEF-02-2013-0017
- Ozili, P. K., & Outa, E. (2017). Bank loan loss provisions research: A review. *Borsa Istanbul Review, 17*(3), 144–163. https://doi.org/10.1016/j.bir.2017.05.001
- Palia, D., & Porter, R. (2007). Agency theory in banking: an empirical analysis of moral hazard and the agency costs of equity. *Banks & Bank Systems*, 2(3), 142–156. https:// businessperspectives.org/images/pdf/applications/publishing/ templates/article/assets/1917/BBS en 2007 03 Palia.pdf
- Paricheh, M., Mehrazeen, A., & Shiri, M.M. (2013). The amount of earnings per share's adjustment and earnings management. *The Journal of Industrial Distribution & Business, 4*(1), 15–21. http://doi.org/10.13106/jidb.2013.vol4.no1.15
- Rahim, H., Yurniwati, K., & Desyetti, M. (2020). The relation between cash compensation of banking executives, charter value, capital requirements, and risk-taking. *International Journal of Business*, 25(4), 2020. https://ijb.cyut.edu.tw/var/file/10/1010/img/866/V25N4-5.pdf
- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill-building approach. Hoboken, NJ: John Wiley & Sons.
- Salem, R., Usman, M., & Ezeani, E. (2020). Loan loss provisions and audit quality: Evidence from MENA Islamic and conventional

- banks. *The Quarterly Review of Economics and Finance*, 6(11), 57–93. https://doi.org/10.1016/J.Qref.2020.07.002
- Skare, M., & Hasić, T. (2016). Corporate governance, firm performance, and economic growth: A theoretical analysis. *Journal of Business Economics and Management*, 17(1), 35–51. http://doi.org/10.3846/16111699.2015.1071278
- Teshima, N., & Shuto, A. (2008). Managerial ownership and earnings management: Theory and empirical evidence from Japan. *Journal of International Financial Management & Accounting*, 19(2), 107–132. https://doi.org/10.1111/j.1467-646X.2008.01018.x
- Waweru, N. M., & Prot, N. P. (2018). Corporate governance compliance and accrual earnings management in eastern Africa. *Managerial Auditing Journal*, 33(2), 171–191. https://doi.org/10.1108/MAJ-09-2016-1438
- Wetmore, J. L., & Brick, J. R. (1994). Loan-loss provisions of commercial banks and adequate disclosure: A note. *Journal of Economics and Business*, 46(4), 299–305. https://doi.org/10.1016/0148-6195(94)90040-X
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: The role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295–316. https://doi.org/10.1016/S0929-1199(02)00006-8
- Zhang, X., Bartol, K. M., Smith, K. G., Pfarrer, M. D., & Khanin, D. M. (2008). CEOs on the edge: Earnings manipulation and stock-based incentive misalignment. *Academy of Management Journal*, 51(2), 241–258. https://doi.org/10.5465/amj.2008.31767230