

The Determinant of 'Earnings Management': 'Size Aspect' And 'Non Performing Loans'

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Abstract. The quality of financial statements must meet the qualitative characteristics as required by Financial Accounting Standards. However, the quality of financial reports that have not matched the expectations is still prevalent in Indonesia, both in public and private sector, including in Bank Perkreditan Rakyat or BPR (Rural Bank). One of the financial statements manipulations that distorts the quality of BPR financial statements is earnings management. This study aims to determine the effect of size aspect and non-performing loans (NPL) on earnings management. Size is measured by total assets, NPL is calculated by dividing non-performing loans (substandard, doubtful, and loss) on total credit, while earnings management by using Kothari's discretionary accrual model (2005). Data were obtained from BPR's financial statements in the ex Banyumas Residency during the period of 2015-2018 in the form of quarterly financial statements. There were 182 observations being analyzed by using multiple linear regression with SPSS tool. The results of this study show that: 1) Size aspect doesn't affect earnings management, 2). Non-performing loans ratio affects earnings management.

Keywords: Size, Non-Performing Loans, Earnings Management

Introduction

The qualitative characteristics stated in Financial Accounting Standards are rules to make a quality financial statements. However, the quality of financial statements that have not matched the standard rules is still prevalent in Indonesia, both in public and private sector, including in Bank Perkreditan Rakyat or BPR (rural bank). One financial statement manipulation which distorts the quality of BPR financial statements is earnings management. Earnings management is an active manipulation of earnings for the targets set by management, estimates made by analysts, or amounts consistent with smoother and more sustainable flows (Mulford, 2002). Earnings management occurs when managers use valuations in financial reporting and in arranging transactions to change financial statements to mislead stakeholders regarding the company's economic performance, or to influence contractual outcomes based on the accounting figures reported (Ronen, Joshua & Yaari, 2008). Meanwhile, (Scott, 2003) divided the

way of understanding earnings management into two. First, earnings management seen from the contracting perspective. Based on this point of view, earnings management is considered a relatively inexpensive way to protect managers and companies in anticipating unexpected events for the benefit of the parties involved in the contract. Second, earnings management seen from the perspective of financial reporting. In this perspective, managers are able to influence the market value of the company's shares by conducting earnings management.

Earnings management is one of the financial number games (Mulford, 2002). Financial number games have several different names and forms as presented in Table 1.

Furthermore, (Mulford, 2002) identified the motives of financial number games, namely: (1) Share price effects; (2) Borrowing cost effects; (3) Bonus plan effects, (4) political cost effects.

Investors will look for and are willing to

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pay high stock prices for companies that have good corporate earnings power, continue to increase, and be sustainable. Good earnings power will impact on the company's cash flow; the better, both cash flow in the present and future. For company, higher stock prices will increase market valuations and reduce capital costs. For managers, rising stock prices will improve their level of prosperity.

High profits, increased company assets, small liabilities, and high equity balances because increased retained earnings can give creditors the impression that credit quality is increasing and debt ratings are higher. In the end, the application of earnings management can reduce borrowing costs.

Giving compensation or incentives to employees or key employees is a plan that usually appears in the company. This compensation may consists of a share ownership option or bonus that is associated with the company's income. The increase of company's income will increase the employees's bonuses. It then encourages the managers to apply earnings management to achieve that goal.

Sometimes big companies are motivated to reduce profits in order to influence the regulators, as occurred in the United States. When oil prices soared in the 1970s due to an embargo, the United States Congress planned to implement a high tax policy to control the pace of oil prices. Preventing to be implemented, oil corporation in the US "tend" to postpone their income and accelerate the cost of charging so that profits will shrink.

The term creative accounting including earnings management is known in many countries with a number of different names as shown in the Table 2.

Earnings management is based on theory of the firm (R.H. Coase, 2011). Theory of the firm is the basic concept used in most managerial economic studies. Some important things relating to theory of the firm are: 1) business companies are a combination of: people, physical and financial assets, and systems and information; 2) people who are directly involved: shareholders, management, employees, suppliers, and their customers who are directly affected by the company's operations; and 3) society (stakeholders). Furthermore (Armen & Harold, 1972) stated that corporate activity is driven by authority and correctly emphasizes contracts as a means of making voluntary exchanges. They emphasize the role of monitoring in situations where there is joint input in a production team. Contractual relationships are the essence of a company, not only with employees but also with suppliers, customers, creditors, and so on. This condition will eventually raise the issue of agency cost of all existing contracts.

Agency costs that arise from the agency relationship trigger earnings management. Agency relations as a contract where one or more principals hire other people (agents) to conduct some services for their benefit by delegating some authority to make decisions to agents (Jensen & Meckling, 1976). The separation of ownership and control of the company leads management to act fulfilling

Tabel 1
Financial Number Game

Term	Definition
Aggressive accounting	A strong and intentional choice and application of accounting principles carried out in an effort to achieve the desired results, such as higher current earnings, unconsidered whether the practices accordance to GAAP (Generally Accepted Accounting Principles) or not.
Earnings management	Active manipulation of earnings for the targets set by management, analyst estimates made, or amounts consistent with smoother and more sustainable flows.
Income smoothing	Type of earnings management designed to eliminate peaks and valleys from the normal earnings series, including steps to reduce and save profits during the good years to be used in a slack year.
Fraudulent financial reporting	Intentional misstatement or negligence in amount or disclosure in financial statements carried out to deceive users of financial statements.
Creative accounting practice	Includes all action used in financial number games, including aggressive choice and application of accounting principles, fraudulent financial reporting, and other actions taken in earnings management and income smoothing.

Table 2
Various Terms of Creative Accounting-Earnings Management

Country	Term
Switzerland	Bilanzmanipulation, Bilanzkosmetik, Heisse Luft
Germany	Tricksereien, Bilanzartistik, Geschönte Jahresrechnung, Seifenblasen
Holland	Winstegalisation (profit equalization), Creatief Boekhouden, Creative, Jaarverslaggeving, Winststuring (Earnings management), Winstflattering, Verliesmaximalisatie
France	Bricolage (DIY/ Do it Yourself), Fabricated Accounts, Unlimited Creativity
United States	Cooking the books, Fabricated Numbers, Fiddle the Numbers, More Debits Than Credits, Earnings Management
Italy	Politiche di Bilancio
Japan	Furyo Kessan (Improper Accounting); Funshoku (Window-Dressing), Kara- uri (Dummy or 'empty sales'); Mae-da- oshi (Bringing Sales Forward)
Australia	Fudging, Manipulative Accounting, Feral Accounting
Great Britain	Window-dressing, Accounting For profits, Bubbles, Enronitis

Source: Audit Committee Newsletter, KPMG, June, 2003, quoted (Balaciu, Bogdan, & Vladu, 2009)

the principal's interest, thus causing an agency conflict. This conflict occurs due to the agent that does not act to maximize the welfare of the principal, but has a tendency to get their own individual benefits. The occurrence of a conflict of interest between the owner and agent due to the possibility of an agent that does not always act in accordance with the principals' interests. As an agent, the manager is morally responsible for optimizing the profits of the owners (principals) and in turn, will receive compensation in accordance with the contract.

The agency theory states that agents are usually opportunistic and do not like risk (risk averse). Therefore, companies, especially company managers who approach or have violated the debt agreement will try to prioritize their own interests and avoid the existing risks. The Debt-equity hypothesis states that if all the other things constant, the closer the company to accounting-based debt agreements violation, the company managers tend to choose accounting procedures that shift reported earnings from the future period to the current (Watts & Zimmerman, 1990). That way, it is possible for managers to change accounting numbers on financial statements, especially on company profit figures.

Although included in the financial number game, there is a difference between earnings management and fraudulent financial accounting (FFR). FFR is an intentional

misstatement or negligence of the amount, or discussion in financial statements carried out to deceive users of financial statements (Mulford, 2002). According to (Midwives, 2013), fraud is a generic term that includes a variety of meanings in which human ingenuity can be used to gain more benefits than others through misstatements. Fraud is deception, which includes elements of: (1) Presentation; (2) With material quantities; (3) Wrong thing; (4) intentional. (5) who is trusted, (6) the victim acts on this basis; (7) to harm the victim.

(Marilena & Corina, 2012) state that at a certain point, it is possible that accounting practices exceed the limits of accounting regulations so that financial statements do not present financial results and positions honestly. (Mulford, 2002) and (Marilena & Corina, 2012) also state that the application of aggressive accounting policy can lead to fraudulent financial reports if it carried out over a long period of time and involved a material amount.

Many factors influence the occurrence of earnings management. Result research shows mixed results. Firm size which is generally measured by total assets/ln assets/asset logarithms affects earnings management (Wuryani, 2015), (Kordlouie & Sheikhbeglo, 2012), (Rezaei, 2012), (Swastika, 2013). Firm size is also proven to have an effect on real earnings management (Khanh & Khuong, 2018), but the study shows different results

(Llukani, 2013), (Bassiouny, Soliman, & Ragab, 2016). (Trisnawati, 2015) stating that company size does not affect earnings management. Furthermore, (Iatridis & Kadorinis, 2009) concluded that companies involved in earnings management generally tend to display larger size, higher leverage, lower growth, and lower profitability and liquidity.

As one of the financial institutions, BPR face the risk of Non- Performing Loans (NPL). NPL is a problematic credit, including credit that is substandard, doubtful, and loss (Bank Indonesia, 2015). The results of the study indicate that the NPL is significantly associated with the allowance for credit losses. The findings indicate that managers use credit allowance to conduct earnings management at high NPLs (Chang, Shen, & Fang, 2016), (Anandarajan, McCarthy, & Hasan, 2013). Allowance for credit losses also has a positive relationship with earnings management (Chang et al., 2016), (Ahmed, Mohammed, & Adisa, 2014). However, research by (Ismail, Shaharudin, Roselee, Samudhram, & Ananda, 2006) shows that the allowance for credit losses is not used to make income smoothing.

(Ronen, Joshua & Yaari, 2008) divided classify earnings management into white, gray, and black areas. Earnings management as a white area (white) consider s beneficial in increasing report transparency; earnings management as a bad thing (parnicious/black) involves both misrepresentation and fraud. Earnings management as gray area it manipulates reports within the limits of compliance with applicable standards but may be more opportunistic.

Meanwhile, according to the positive accounting theory proposed by (Watts & Zimmerman, 1990), the motive of earnings management is categorized into three types of hypotheses: bonus plan hypothesis; debt/equity hypothesis; and size hypothesis. (Healy & Wahlen, 1999) also divided motives into the following three categories: 1. capital market motive; 2. contract motive; and 3. law and regulation motive. As for the methods adopted by companies for earnings management, the majority of research divided them into three types: a) discretionary accrual management; b). accounting method selection; and c). control of the time of transaction occurrence.

Management actions to conduct earnings management are generally based on a variety of good reasons: to satisfy the interests of the owner of the company,

increase the company's stock price (Michael & D., 2002), related to contractual debt cost and effective tax rate (Othman & Zeghal, 2006), and to satisfy their own interests (opportunistic), such as maintaining their position (Fudenberg & Tirole, 2002), bonuses, promotions and incentives (Mulford, 2002).

There are various approaches developed by researchers to detect earnings management. Some of them are: (1) Jones Model; (2) Modified Jones Model; (3) Kothari Model; (4) Rahman and Shahrur Model. (Jones, 1991) classified accruals into discretionary accruals and non-discretionary accruals. Non-discretionary accruals can be influenced by external economic factors. By using a number of changes in income and total assets of factory equipment as variables, this model is formulated as follows:

$$TA_{it}/A_{it-1} = \alpha_1[1/A_{it-1}] + \beta_{1i}[\Delta Rev_{it}/A_{it-1}] + \beta_{2i}[PPE_{it-1}] + \varepsilon_{it}$$

Modified Jones model was developed by (Dechow, Sloan, Sweeney, Sloan, & Sweeney, 1995) which was designed to eliminate the tendency to suspect the Jones model for measuring erroneous discretionary accruals when discretion was carried out on revenue recognition. In this model, non-discretionary accruals are estimated over a period of years. The modified Jones model is as follows:

$$NDA = \alpha(1/A_{t-1}) + \alpha_2(\Delta Rev_t - \Delta Rec_t) + \alpha_3(PPE_t)$$

There is criticism for the modified Jones model because it does not include performance indicators. Therefore, (Kothari, Leone, & Wasley, 2005) developed the model that connects accruals in the past with current performance measured by using return on assets (ROA). The Kothari model is formulated as follows:

$$TA_{it} = \alpha_0 + \alpha_1(1/Assets_{it-1}) + \alpha_2\Delta Sales_{it} + \alpha_3PPE_{it} + \alpha_4ROA_{it(or\ it-1)} + \varepsilon_{it}$$

The models described above are considered to ignore the company's growth opportunities. Therefore, Rahman and Shahrur developed a model to determine accrual discretion by adding ROA in the Kothari model to the 'book to market' ratio to measure growth opportunities. The model

(Raman & Shahrur, 2008) is formulated as follows:

$$TA_t = \alpha_1(1/A_{t-1}) + \alpha_2(\Delta Rev_t/A_{t-1} - \Delta Rec_t/A_{t-1}) + \alpha_3(PPE_t/A_{t-1}) + \alpha_4(ROA_t) + \alpha_5(BM_t) + \varepsilon_t$$

Information:

$TA_{i,t}$:	total company accrual <i>i</i> in year <i>t</i>
NDA	:	<i>Non discretionary accrual</i>
Ai_{t-1}	:	total assets of company <i>i</i> in year t_{-1}
$\Delta REV_{i,t}$:	change in revenue of company <i>i</i> in year <i>t</i> .
$\Delta Sales_{it}$:	Changes to sales
$\Delta Rec_{i,t}$:	Change in accounts receivable (<i>i</i>) of the company <i>i</i> in the <i>t</i> -year
$PPEi_{t}$:	total fixed assets of company <i>i</i> in year <i>t</i> (gross property, plant, and equipment)
ROA	:	<i>Return On Assets</i> ratio
BTM	:	<i>Book To Market</i> ratio.
$\varepsilon_{i,t}$:	residual

Companies can be distinguished on the basis of different financial and non-financial characteristics including size, value, profitability, structure, and others. These characteristics are unique and enhance the perception in the minds of users of information regarding the company's performance and future (Tahir, Sabir, Alam, & Ismail, 2013) the Central Bank of Nigeria (CBN). Company characteristics are indicators that can show the quality of the company. Every company has their own characteristic and different from others.

The firm's characteristics are measured in different ways, such as size, profitability, tangibility, market-to-book ratio, and leverage (Halil, 2013). (Wallace James, 1997) divided firms's characteristics into three categories: structure-related variables, performance-related variables and market-related variables. Whereas, (Haniffa & Cooke, 2002) stated that firm's characteristics are divided into three categories, namely: (1) structure which includes: company size, leverage, diversification, complexity, and ownership structure; (2) performance (profitability), and (3) market which includes industry type, listing status, auditor type, duration of listing, and foreign trade activities.

One of the firm's characteristics is

size which shows the size of the company. Basically, the size of the company is divided into 3 categories, namely large companies, medium companies, and small companies. Company size is a scale where companies are classified according to various ways, including: total assets, log size, stock market value, and others.

Large companies have larger operating activities, so that they have a greater influence on the community, including the company's shareholders. To get legitimacy from stakeholders, large companies will do more activities in order to have an influence on internal and external parties who have more interests in the company (Gray, Kouhy, & Lavers, 1995).

According to Law No. 10 of 1998, (Republik Indonesia, 1998) based on the types, banks consist of commercial and Rural Credit Banks (BPR). Rural banks carry out business activities conventionally or based on sharia principles which do not provide services in payment traffic in their activities. BPR activities include raising funds from the public, such as deposits, savings, other forms, and providing credit.

Credit is the provision of money or bills that can be equated with it, based on an agreement or loan agreement between the bank and the other party that requires the borrower to repay the debt after a certain period of time with interest, compensation or profit sharing. One of the risks faced by the bank is the unpaid credit that has been given to the debtor or called credit risk. Included in non-performing loans are substandard loans, doubtful loans, and bad/loss credit (Bank Indonesia, 2015).

Each company has unique characteristics that give rise to its own impression for users of information relating to the performance and future of the company concerned. Size and financial risk effectively influence the type of earnings smoothing (Kordlouie & Sheikhsbeglo, 2012). Furthermore, company size, ownership structure, audit quality, and the proportion of independent board members can influence the type of earnings management (Rezaei, 2012).

Regarding information disclosure, agency theory provides a reference that large-scale companies tend to be more open than small-scale companies. Large companies are more valuable for society, so that their operations often lead to political costs. Therefore, large companies usually

apply more specific strategies to minimize political costs (Watts & Zimmerman, 1990). In addition, large-scale companies have a reduced risk of competitive advantage by disclosing information more broadly than small-scale companies (Meek, Roberts, & Gray, 1995).

One of the credit risks faced by BPR is NPL. NPL is a problematic credit, including credit that is substandard, doubtful, and loss (Bank Indonesia, 2015). The research results show that NPLs relate significantly to the allowance for credit losses. The findings indicate that managers use credit allowance to conduct earnings management (Chang et al., 2016) ownership status and asset size. Besides, we investigate whether bank managers intend to use discretionary loan loss provisions as a means for earnings management. Based on the empirical results from the Taiwan Economic Journal (TEJ, (Anandarajan et al., 2013). Allowance for credit losses also has a positive relationship to earnings management (Ahmed et al., 2014).

Based on the description above, the conceptual framework of this research is described in figure 1.

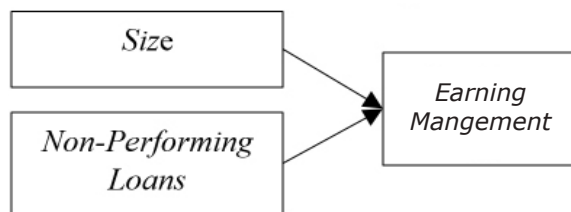


Figure 1. Chart of Conceptual Frameworks

Research Methodology

This research aims to test the truth of the theory or the results of pre-existing research, which is formulated in the research hypothesis.

Data are from BPR financial statements in the exBanyumas Residency in the period of 2015-2018 in the form of quarterly financial reports. There were 182 quarterly data observations in 2015-2018 period which were analyzed using multiple linear regression with SPSS tools.

The variables involved are Size (X1) and Non-Performing Loan (NPL) (X2) as independent variables. Size is proxied by Ln Total Assets (Ln TA), and NPL is measured by dividing non-performing loans with total credit (SE BI No; 3/30 / DPNP / 2001) (Bank

Indonesia, 2001).

The dependent variable studied is earnings management to measure the model (Kothari et al., 2005) which is the development of a modified Jones model. The earnings management equation is as follows:

$$TA_{it} = NI_{it} - CFO_{it} \dots \dots \dots (1)$$

$$TA_{it} = NDA_{it} + DA_{it} \dots \dots \dots (2)$$

$$TA_{it} = \alpha_0 + \alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1}) + \beta_3ROA + \epsilon_{it} \dots (3)$$

$$DA_{it} = TA_{it} - NDA_{it} \dots \dots \dots (4)$$

$$DA_{it} = (TA_{it}/A_{it-1}) - [\alpha_1(1/A_{it-1}) + \beta_1(\Delta REV_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1})] + \beta_3ROA + \epsilon_{it} \dots (5)$$

Information:

- TA_{it} = Total accrual of company i in year t
- NI_{it} = Company net income i in year t
- CFO_{it} = Cash from operations (cash flow from operation) of company i in year t
- NDA_{it} = Non discretionary accrual company i in year t
- DA_{it} = Discretionary accrual company i in year t
- ΔREV_{it} = Company income i in year t minus year t-1 income
- PPE_{it} = Company fixed assets i in year t
- α₁ = Constants
- β₁, β₂ = Coefficient
- A_{it-1} = Total assets of company i in year t-1
- ε_{it} = Error term of company i in year t

Analysis Method

The data obtained were analyzed using multiple linear regression with the equation of:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + e$$

Where:

- Y = Earnings Management
- X₁ = Size (Ln Total Asset)
- X₂ = Non-performing loans (NPL)
- β₀- β₂ = coefficients
- e = error

Results And Discussion

Effect Of Size On Earnings Management

This study aims to examine the effect of company size and non-performing loans

on earnings management. This research was conducted on Rural Credit Banks (BPR) in the ex Banyumas Residency which included four districts, namely Banyumas, Purbalingga, Banjarnegara, and Cilacap Regency. BPRs in Banyumas Residency which provides financial report that can be accessed are 14 BPRs with the details of: 2 BPRs in Banjarnegara, 9 BPRs in Banyumas, 7 BPRs in Cilacap, and 3 BPRs in Purbalingga Regency. One BPR has incompleted data, so the data obtained and subsequently processed are collected from 13 BPRs. The data of financial statements were obtained by downloading them from each website. The available financial statements are quarterly financial statements. With the

observation period from 2015-2018, the number of observation units is 182. The complete information is presented in Table 3.

Descriptive statistics consisting of minimum, maximum, and average values of each research variable are presented in Table 4. The value of Ln Total Assets is a minimum of 14,465, a maximum of 21,375, and an average of 18,277. NPL value, minimum of 0,000, maximum of 0,250, and average of 0,062. For earnings management variables, the minimum value is -0.128, the maximum value is 0.023, and the average is 0.001. This value indicates that earnings management shows a relatively small positive value.

Table 3
Sample Selection

Description	Amount
BPR population in the ex Banyumas residency	21
BPR with available data	14
Incomplete data	1
Sample size	13
Observation period	2015-2018
Quarterly financial statements (quarter I-quarter IV) of 2015-2017 period (3x4x13)	169
Report for 2018 first quarter period	13
Amount of observed data	182

Source: processed secondary data (2018)

Table 4
Descriptive Statistics

No	Description	Average	Maximum	Minimum
1	Ln TA	18,277	21,375	14,465
2	NPL	0,062	0,250	0,000
3	EM	0,001	0,023	-0,128

Source: Processed secondary data (2018)

Table 5
Results of Regression Output

Description	Coefficients	Standard Error	t stat	p-value
Intercept	-0,013	0,004	-3,822	0,000
Ln TA	0,000	0,000	-0,615	0,539
NPL	0,038	0,008	4,781	0,000
	R		0,995	
	R Square		0,989	
	Adjusted R Square		0,989	

Source: Processed secondary data (2018)

Data were analyzed using multiple linear regression with SPSS tool. The results of data processing are shown in table 5.

The processing results show that the Ln Total Asset ratios do not affect earnings management because the p-value of 0.539 is greater than 0.05. Ln total assets is one of the ratios for assessing company size. Company size is not a determinant for rural banks to conduct earnings management. Earnings management can be conducted by BPR with large and small assets to obtain the desired performance figure with certain motivations and goals, which can be explained using the agency theory.

Agency theory uses three assumptions of human nature, namely: (1) humans, in general, selfishness, (2) humans have limited thinking about future perceptions (bounded rationality), and (3) humans always avoid risk (risk averse) (Eisenhardt & Eisenhardt, 2018).

According to (Jensen & Meckling, 1976), agency relations as a contract where one or more principals hire other people (agents) to conduct some services for their interests by delegating some authority to make decisions to agents. The separation of ownership and control of the company causes management to act not in accordance with the principal's interest, thus causing an agency conflict. As an agent, the manager is morally responsible for optimizing the profits of the owners (principals) and in turn will receive compensation in accordance with the contract. Trying to show a good performance and then satisfying the stakeholders, management tends to report its performance over actual performance. This trend will be even greater if management compensation is based on accounting figures (accounting-based compensation). Reporting the better performance will generate greater compensation/ bonus.

The results of this study explain the phenomenon of fraud cases or banking crime in Indonesia which is still quite high. Until the end of the third quarter of 2016, the Financial Services Authority (Otoritas Jasa Keuangan/ OJK) recorded 26 banking crime, most of which occurred of 55% of credit cases, 21% of improper records, 15% of embezzlement, 5% of fund transfers, and 4% of asset procurement (detik.com, 2016).

Furthermore, the Head of the Southeast Sulawesi Financial Services Authority, Widodo, stated that OJK found indications that BPR managers arranged reports that were not

in accordance with the actual conditions. BPR managers manipulate these financial statements to get praise or appreciation from shareholders or bank owners (wartakepri, 2016). Meanwhile, the Chief Executive of the OJK Banking Supervisor, Nelson Tampubolon, said that banking crimes were the most common in Rural Banks (BPR). As many as 80% of criminal actions in BPR lead to the closure of many of them every year (detik.com, 2016).

These results support previous research which shows that size affects earnings management (Kordlouie & Sheikhbeglo, 2012), (Rezaei, 2012), (Wuryani, 2015), (Swastika, 2013), but differs from research of (Lukani, 2013), (Bassiouny et al., 2016) for having different disclosure requirements and different corporate governance code, the final count for the firms included in the paper is 60 firms in five years so this leave us with a total of 300 observations. The tests for this research are done using the random effect generalized least square regression model using the Stata program. Findings found that there is a significant positive relationship between firms' financial leverage and earnings management while other variables of the firm characteristics which are firm size, firm age and firms' audit quality have an insignificant relationship with earnings management (Trisnawati, 2015).

Non Performing Loan Effect on Earnings Management

A non-performing loan is a ratio used to measure the level of a problematic loan. Problematic loans are loans categorized into substandard, doubtful, and loss. NPL is calculated by dividing non-performing loans to total credit. Credit is a credit given to third parties (not including loans given to other banks). Meanwhile, non-performing loans are calculated on a gross basis (not deducted by Allowance for Earning Assets Losses/ Penyisihan Penghapusan Aktiva Produktif/ PPAP) (Bank Indonesia, 2001).

NPL shows the ability of bank management in managing non-performing loans provided by banks. NPLs are generally loans whose payment of principal installments and or interest has passed ninety days or more after maturity or credit with timely payment is very doubtful. The current NPL allowed by Bank Indonesia is a maximum of 5%; exceeding 5% will drive the bank in

unhealthy condition (Bank Indonesia, 2015).

In this study, NPL has a positive effect on earnings management with p value of 0,000, less than 0.05. That is, the higher the NPL, the company will tend to conduct earnings management. The larger NPL indicates that credit performance is unsatisfactory. This is related to lending policies, implementation of prudential banking, and fulfillment of the requirements, and feasibility of prospective borrowers. The larger NPL will erode the main income of banks and will affect the profitability of the company. The research results show that NPL is significantly associated with the allowance for credit losses

These results explain the phenomenon NPLs increase in BPRs which also contribute to the increase of non-performing loans for the whole banking sector, namely conventional commercial banks, BPRs, and sharia commercial banks (Neraca, 2018). NPL is considered as a practice of earnings management in the research of Zahara and Sylvia (2009), as cited by (Fricilia & Lukman, 2017) Capital Adequacy Ratio (CAR), stating that empirically proves that banks tend to practice earnings management by increasing profits if the profits are lower than desired.

These results support the results of previous studies of (Chang et al., 2016) ownership status and asset size. Besides, we investigate whether bank managers intend to use discretionary loan loss provisions as a means for earnings management. Based on the empirical results from the Taiwan Economic Journal (TEJ), (Anandarajan et al., 2013), but differ from the research of (Ismail et al., 2006), and (Fricilia & Lukman, 2017) found that financial performance factors and non-financial factors influence earnings management in the banking industry.

Conclusions

The results of the study show that company size does not affect earnings management. Company size is not a determinant for BPR to conduct earnings management. Earnings management can be conducted by BPR with large and small assets to obtain a figure of desired performance with certain motivations and goals. Meanwhile, non-performing loans have an effect on earnings management. The larger NPL indicates that credit performance is unsatisfactory. This is related to lending policies, implementation of prudential banking, and fulfillment of the

requirements, and feasibility of prospective credit borrowers.

Earnings management can distort financial statements, and also become an early warning of possibility of fraud for parties related. For this reason, the increased supervision by related parties needs to be continuously improved to encourage BPRs to provide reliable financial reports which are free from material errors and reflect actual performance.

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