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### Earnings Management, Bank's Managers Compensation, and Factors That Influence The Compensation: An Indonesian Case

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**Abstract:** This study is motivated by the enactment of Indonesian Financial Service Authority (FSA) regulation that requires bank to have a plan to holdback or clawback the variable remuneration, to protect bank from imprudent risk taking. Our research has two objectives. First, to detect post-implementation earnings management. Second, to determine factors that influence banks to choose clawback. Samples are all banks listed at the IDX. We test relationship between earnings management and bank's intention to choose clawback. Bank's earnings management is measured by abnormal loan loss provision. Tests are divided into two periods: pre- and post-regulation enactment. The results indicate that banks manage their earnings post-regulation. Earnings before tax, equity, and non-performing loans relate to the banks intention to choose clawback. The implications are bank must understand when its executive to take risky actions, prepare mechanism to recollect the payment from the moved or retired employee, and choose a suitable scheme.

**Keywords:** Clawback; Compensation; Holdback; Remuneration; Earnings Management

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### Introduction

The Indonesian Financial Service Authority/FSA (2015) regulates banks awarding their employees through regulation No. 45. This regulation mandates banks to have a remuneration policy in place before January 1, 2017. The objective is to create effective risk management in the bank. In article 21, the bank is forbidden to guarantee unconditionally any variable payment to management, directors, or other employees. Article 22 provides

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the reason behind the prohibition mentioned in article 21. It is said that the managers, who are called the material risk-taker (MRT), action may negatively impact the bank's risk profile.

Bank risk management is regulated in the FSA's regulation number 18/2016. This regulation specifies eight risks that a bank must manage. One of them is credit risk. The credit risk is a risk caused, among all, is by credit default. The source of this default may come from the miscalculation made by the credit officer in the approval of credit.

As a factor to the bank's risk profile, the distributed credit is also a factor in MRT compensation. We can take Bank Mandiri for an example in this case. Bank Mandiri does not mention how it distributes its credit in its annual report, however, every MRT is paid based on its performance. Nevertheless, the 2018 annual report of Bank Mandiri says that the bank can hold back or withdraw compensation that has been paid to their MRT. This policy applies to MRT, whose decision has caused a financial loss or negatively impacted the bank's capital. It can be said Bank Mandiri's regulation relates to the default of loans provided to its customers. Bank Mandiri implies that it applies both models of variable remuneration payment, i.e., holding back and clawing back the compensation paid to its MRT. The policy Bank Mandiri has is following article 23 of FSA regulation number 45/2015. Article 23 regulates that banks must withhold variable remuneration payments to employees. Moreover, article 26 directs banks on how to withhold the current or recover prior compensation.

It can be concluded that FSA regulation number 45/2015 was enacted to govern bank managers' behavior from risky decisions. Credit risk itself is a material risk for some reasons. First, distributed loans can be default. Second, if the amount of loans approved to customers determines an MRT's compensation, it is expected that the employee may behave opportunistically in dealing with the loans (Liu et al., 2018). The manager urges the bank to approve more loans for his/her personal gains but at the bank's expense. This research investigates whether the application of FSA regulation number 45/2015 can control the opportunistic behaviour of MRT. The regulation requires Indonesian banks to implement a remuneration policy no later than January 1, 2017. However, the study on this issue related to the remuneration policy is limited in Indonesia.

Sari & Sholihin (2019) investigate the impact of religiosity and clawback<sup>†</sup> on corporate disclosure behavior. Their study is specifically to test the effectiveness of a clawback compensation scheme on managers who allegedly manipulated their earnings numbers. Subjects are postgraduate students whose works are related to finance or accounting. Their results indicate that clawback scheme policy influences the opportunistic behavior on one of three models, i.e., accrual manipulation. They imply that accrual manipulation is easier to be detected by the authority, so the change from conventional bonus scheme to clawback causes the change in subjects' behavior. The study by Sari & Sholihin (2019) cannot be

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<sup>†</sup> Clawback is the agreement made between the bank with its managers, member of board of commissioner or other senior officials to return back to the bank variable compensation received if the agreed condition is met. For example when the credit granted by a certain bank executive is in default, while the executive has already received some compensation from the related credit given, then, according to the clawback agreement bank may take back the compensation paid to its executive. See related Indonesian Financial Service Authority Regulation mentioned in this paper for more.

generalized to a broader environment. This limitation is due to their experimental design. However, the interesting finding is that punishment threats will deter managers from choosing an opportunistic behavior. Our study take the opposite approach from that of Sari & Sholihin (2019) because we focus on the generalization of findings, i.e. instead of using experimental design that is lack of external validity, we use archival setting by investigating the effect of such policy in Indonesian banks.

This study has two objectives. First, it tries to find empirical evidence on FSA regulation number 45/2015 on earnings management in the banking industry. Earnings management generally relates to the existence or absence of regulation. Starting from Jones's (1991) study on the import relief investigation to clawback in SOX (Natarajan & Zheng, 2019), the evidence shows that earnings management relates to the existence of regulation. Since the FSA's code is just recently enacted, the effectiveness of this directive on controlling opportunistic behavior is an empirical question to answer. Levine & Smith's (2019) study implies that the strength of clawback has a different effect on earnings management. Second, this study is to determine factors that underlie the remuneration method a bank chooses. The FSA direct banks to choose either clawback or holdback or a combination of clawback and holdback. Therefore, it is essential to investigate factors affecting the likelihood of a bank choosing a remuneration scheme.

## **Literature Review**

### *Agency Theory*

The agency theory assumes that the manager (agent) has opportunistic behavior and tends to pursue self-interest over others. The opportunistic behavior assumption will lead the manager to choose a lower return project with a higher and long-term return but higher risk. The manager is assumed to select a lower return project since they do not want to risk their compensation if the higher return project fails. This behavior will cause the shareholders to lose their long-term return.

Scientists have tried to understand this manager behavior. Theoretically, shareholders are in a more favorable position in diversifying their risk. They can move their portfolios quickly than a manager to move from a company to another company. It means that managers cannot quickly diversify their risks. If the managers cannot diversify their risks, they will avoid a riskier project to lessen their risks. Projects that have higher NPVs will be neglected since higher return is associated with a higher risk. In the long-term, their behavior will ignore the shareholders' interests (Jensen, 1986).

A classic resolution to this conflict between managers and shareholders is aligning managers' interests with shareholders' (Jensen & Meckling, 1976). The alignment may be achieved when the managers' compensation is linked to the firm's performance. Latter studies provide evidence to support this proposition. Conyon et al. (2011), for example, find that from 1997 to 2003, the importance of the U.K.'s CEO salary on total compensation decreases. In contrast, the importance of bonuses and equity-based compensations become increases. These findings corroborate Murphy's (1999) study. He observes that stock options became the main component of executive compensation since the mid-1980s and became the highest portion of CEO compensation in the U.S. (Hall & Murphy, 2002).

We can conclude that the managers have a tendency to choose an option that meets their interest. Their actions can be explained as a strategy to protect their self-interest and circumvent their inability to diversify risks quickly. Some mechanisms are needed to combat this situation so that the managers' behaviors will not jeopardize shareholders' interest.

### ***Clawback and Holdback and Hypotheses Development***

Chan et al. (2012) define clawback as the authority of BOD to withdraw compensation that has been paid to managers if there is a failure in the financial reporting. Indonesian FSA defines clawback as an agreement among executives, directors, or other employees to return the variable remuneration received if a particular condition is met. These definitions urge the bank to set conditions to protect itself from the losses caused by its managers' actions.

The Indonesian FSA regulation number 45/2015 defines the holdback as a policy that permits banks to withhold payments of all or a portion of the variable compensation. It means that, even though the bank has a pay-for-performance compensation policy, the bank can defer its payment until some conditions in the future are met. For example, if the holdback policy correlates with credit default, the bank will retain until the probability of default is low. This Indonesian regulation aims to keep banks' managers from making imprudent risky business decisions even though Chan et al. (2012) imply that clawback can not guarantee the incidents of restatement of financial reports to decrease.

Chan et al. (2012) test whether or not clawback policy relates to decreasing accrual earnings management. They propose that the company substitutes it with real earnings management. They predict that a clawback policy can deter managers from using accrual earnings management since it may attract stock exchange authority or auditors. On the other hand, real earnings management is deemed to have a lower risk than accrual one. Their research finding indicates that the total earnings management increases marginally compared to the decrease following the application of clawback policy. It implies that accrual earnings management is replaced by real earnings management. This conclusion is corroborated by Gillan & Nguyen (2016).

The second finding of Chan et al. (2012) is that the substitution from accrual to real earnings management by companies that implement clawback policy is driven by their higher prospect to growth. On the contrary, the substitution to real earnings management is found lower in the companies that do not implement clawback policy. The third finding is that companies adopting clawback policy increase their probability of adopting real earnings management strategy at the adoption year. On the other hand, the companies that adopt the same approach but do not increase real earnings management show an increase in short-term profitability. This trend lowers after the third year.

The choice to implement clawback can also be linked to corporate governance. Chen & Vann (2017) test the effect of corporate governance on the likelihood of clawback provision adoption. Besides that, they also investigate the relationship between clawback adoption and investment practice and decision-making behavior. The first test provides evidence that a company with more robust corporate governance has a positive relationship with clawback adoption. In contrast, a negative relationship is found in a

company that has weaker corporate governance. The second test reveals that after the adoption of clawback, abnormal corporate investment becomes lower and corporate investment becomes less risky.

Chen & Vann's (2017) findings have several important implications. Good corporate governance drives the company to choose a less risky compensation provision. If the company decides to select clawback (and may also holdback), the company can deter managers from selecting a project that injures the company's future interest. This proposition is valid, mainly if managers' compensation is anchored to a particular activity.

In the banking industry, the compensation can be linked to the distributed loan. If, for example, a manager can reach his targeted loan this year, he will receive some bonuses next year. If there is no agreement to return paid compensation or retain some portion of it, the shareholder will suffer when the credit default. On the other side, the managers who make the wrong decision is untouchable. However, if they agree to return the remuneration paid should the credit default, the managers will carefully decide. Since total loans relate to bank revenue, the presence of clawback or holdback or a combination of both will reduce managers' likelihood to manipulate earnings. So, we propose the first hypothesis as follows.

H1: Earnings management is lower after the adoption of the clawback provision than before its adoption.

The second objective is to determine factors affecting compensation choice. The Indonesian regulation permits banks to choose clawback, holdback, or a combination of both. Chan et al. (2012) dan Gillan & Nguyen (2016) provide evidence that clawback provision relates to lower earnings management incidents. They find evidence that after the adoption of clawback provision, the earnings management lowers. Gillan & Nguyen (2016) state that threats from clawback reduce the propensity to manipulate firm performance. Earlier, Dehaan et al. (2013) documented that voluntary adoption of clawback policy associates with the incidence of the accounting restatement.

Chan et al. (2013) provide another evidence. They investigate the impact of application clawback provision on debt covenant. They took the point of view of banks and studied the borrowers' behavior who implement clawback provision. The results show that banks use financial covenant and assign more performance provisions into the debt covenant. Moreover, banks are likely to lower interest rates following the adoption of clawback by the borrowers. Evidence also shows that debt maturity becomes longer dan collateral decreases. They interpret these results as evidence of higher reporting quality following the adoption of clawback.

Other evidence on the effectiveness of clawback and holdback provisions to prevent opportunistic behavior provided by other researchers. Moreno et al. (2006) show a model where clawback provisions can lessen fraud in insurance industry. Hodge & Winn (2012) use experimental method to compare the effectiveness of holdback and clawback. They find that executive decrease risky accounting choices when their company implement clawback or holdback. However, the result is different for executives that has made conservative accounting choice prior to the accounting restatement. The executives that have clawback provision in their contract tend to select risky accounting policy after a restatement compared to the executives who have holdback provision.

Hodge & Winn's (2012) findings indicate that holdback and clawback have different impact on managers' behavior. Even though both compensations are for the same purpose, the impacts are dissimilar. If the effects are dissimilar and the companies anticipate them, then it is important to investigate the determinant of their compensation scheme.

H2: Bank financial performances relate to the bank's preference on compensation scheme.

## Methods

### *Population and Samples*

Our samples are all public banks in Indonesia listed in the Indonesian Stock Exchange. To be chosen as our sample, a bank must disclose their remuneration scheme, either in their annual reports or other media. Therefore, the data on the provision chosen are collected from the annual reports. Accounting and other financial numbers are collected from Data stream. Since banks must implement this remuneration requirement no later than 2017, we collect data from 2017 to 2020.

### *Variables and Operational Definitions*

The variable of interest is earnings management and the intention to choose clawback. The earnings management in the banking industry is measured by the measurement used by Zainuldin & Lui (2020). They measure earnings management as the abnormal loan loss provision (ALLP). The ALLP is measured by equation 1 below.

Equation 1:

$$ALLP = \alpha_0 + \alpha_1 LLA\_beg + \alpha_2 NPL\_beg + \alpha_3 \Delta NPL + \alpha_4 LCO + \alpha_5 LOANS + \alpha_6 \Delta LOANS + \epsilon$$

where:

ALLP : The abnormal loan loss provision;  
LLA\_beg : The beginning of period loan loss allowance;  
NPL\_beg : The beginning of period of non-performing loan (NPL);  
 $\Delta NPL$  : The change in non-performing loan (NPL);  
LCO : The net loan charge off (LCO),  
LOANS : The total credit, and  
 $\Delta LOANS$ : The change total loan.

The discretionary components of ALLP is called AALLPA (absolute abnormal loan loss provision). The AALLP is measured as the residual of the equation 1. Earnings management is defined both by the increase and the decrease of earnings. Therefore, we use the absolute value of AALLP as a proxy to earnings management.

### *Data Analysis*

To achieve the first research objective, we run the test using the equation 2 below.

Equation 2:

$$AALP = \beta_1 + \beta_2 Period + \epsilon$$

Where:

- ALLP : The abnormal loan loss provision;
- Period : 1 for observation period is 2017 and beyond, 0 if otherwise.

To accomplish the second objective, the equation is as follows.

$$Remuneration = \varphi_0 + \varphi_1EBT + \varphi_2Growth + \varphi_3Equity + \varphi_4NPL + \varepsilon$$

Where:

- Remuneration : 1 if bank adopts clawback; 0 otherwise;
- EBT : Bank’s earnings before tax;
- Growth : Growth of bank’s assets;
- Equity : Bank’s equity;
- NPL : Bank’s non-performing loan.

The independent variables chosen are based on Chan et al. (2015). They asserted that clawback adopters have larger firm size (measured by market value and sales revenue), lower sales growth, and better profitability. Since their samples are manufacturing companies while we investigate banks, we choose EBT as a proxy for profitability, asset growth and equity to measure bank size. The NPL measures the credit default risk (Moyer, 1990) and is believed as a factor that may contribute to the choice of remuneration scheme (The Indonesian Financial Service Authority/FSA, 2015).<sup>‡</sup>

## Findings

### *Descriptive Statistics*

Table 1 below shows the descriptive statistics of all variables. We present both the unstandardized residuals and the absolute value of those residuals. The negative residuals indicates that the company manages earnings downward and, on the other hand, the positive residuals indicate earnings are managed upward. There are 40.1% of samples have negative earnings management.

Table 1. **Descriptive Statistics**

Variable	N	Minimum	Maximum	Mean/Mode	Std. Deviation
Unstandardized Residuals	304	-6,713,398.23	10,893,515.85	0.000	1,578,820.68
Absolute Unstandardized Residual	304	2,144.81	10,893,515.85	793,705.35	1,364,048.18
Remuneration	160	0.00	1.00	1	0.49490
EBT	160	-3,922,869.00	43,364,053.00	3,599,978.09	9,129,562.35
Equity	160	115,559.45	209,034,525.00	24,603,619.48	49,103,461.07
NPL	160	3,160.67	66,827,551.00	4,278,352.36	10,459,289.35
Asset growth	160	-0.34	0.99	0.1047	0.17859

As required by the regulation, the banks in Indonesia must have a remuneration scheme. Ninety three samples (58.1%) implement clawback provision and the rest of samples

<sup>‡</sup> See for example the interpretation of Paragraph 24 of the previously mentioned FSA regulation.

implement either holdback or combination of clawback and holdback. Our samples are consisted of banks that report positive and negative earnings. The most negative earnings is on 2020, when the COVID-19 triggered crisis hits the world. Other banks that experience negative earnings before COVID-19 hits the world. However, the mean shows that most of the banks report positive earnings. An interesting statistics is the standard deviation that indicates the diversity of our samples in terms of earnings and size. The same conclusion can be drawn from equity and NPL statistics. Higher number of NPL relates to banks with higher loans. The effect of COVID-19 triggered crisis can also be seen on the asset growth. The lowest growth is reported by a bank in its 2020 report. Overall, the banks reports positive growth.

***Hypotesis Testing***

Below are findings for the first hypothesis.

**Table 2. Result of The Hypothesis Testing**

<b>Model</b>	<b>Coefficient</b>	<b>t- and F-value</b>	<b>Significance</b>
Constant	390,466.332	3.689	0.000
Period	806,478.028	5.387	0.000
Adjusted-R <sup>2</sup>			0.085
F		29.024	0.000

The dependent variable is the abnormal absolute value of loan loss provision. This provision is produced from the equation 1 and becomes the proxy of earnings management. The regression result indicates that after 2017 the earnings management is higher than that of prior to 2017. The 2017 is chosen as the cut off year because since January 1, 2017 all of Indonesian banks must implement the remuneration system.

The t-value is 5.387 and is statistically significant (alpha equals to 1%). Since the variable period is a categorical variable, i.e. 1 for year 2017 to 2020 and 0 if otherwise, the statistical result indicates that earnings management from 2017 is significant than in the previous years. This result only tells us that banks may manage their earnings and since we divide our samples in to two periods, we may conclude that banks do manage their earnings after the implementation of remuneration provision. The motive of managing the earnings may not be clearly answered, but at least it may be either function as a signal or as an opportunistic behaviour.

The Indonesian FSA requires banks to choose clawback or holdback or combination of both methods. We then test what are the variables that relate to the choice whether to implement clawback or the others methods. Below is the result of the second hypothesis.



**Table 3. Statistical Test Results**

<b>Model</b>	<b>Coefficient</b>	<b>Wald</b>	<b>Significance</b>	<b>Exp(B)</b>
Constant	0.021	0.008	0.927	1.021
EBT	0.000	3.044	0.081	1.000
Equity	0.000	4.498	0.034	1.000
NPL	0.000	5.113	0.024	1.000
Growth	0.992	1.061	0.303	2.696
Model coefficient of Chi-square				6.944
Significance				0.139
-2LL				210.619
Cox and Snell R <sup>2</sup>				0.042
Nagelkerke R <sup>2</sup>				0.057
Hosmer and Lemeshow test $\chi^2$				15.298
Hosmer and Lemeshow test significance				0.054

Table 3 shows the results of logistic regression to test the second hypothesis. First, the  $\chi^2$  has value of 6.944. The significance is higher than 5%. Even though the significance is higher than 5%, since we do not test the model itself, we may proceed with the test. The Nagelkerke R<sup>2</sup> is 5.7% and Cox and Snell R<sup>2</sup> shows lower value. The Hosmer and Lemeshow test  $\chi^2$  is 15.298 and has significance value higher than 5%.

The three independent variables indicate that they relate to the likelihood of decision of banks to choose clawback provision. The equity and NPL show statistically significant relationship with the intention of banks to choose clawback other than other provisions. However, earnings before tax is only marginally and statistically significant relates to the choice of clawback. The significance is higher than 5% but lower than alpha of 10%. The last variable, growth, does not relate to the choice of clawback.

The positive relationships of EBT and equity indicate that bank with a positive performance choose remuneration system that permits bank to recollect paid compensation. This policy is reasonable as long as the performance increases. When the company is confident that next year’s income will be higher and risks are controllable, then there is no reason not to pay all this year’s compensation to anyone that contributes to bank’s current revenue. Bank will only need to reconsider its compensation scheme if the income decreases, at least for several periods or if they believe that their executives tend to take risky decisions.

On the contrary, the positive association between NPL and clawback means the choice of remuneration system relates to risk. Tölö & Virén (2021) posit that during weak growth of lending, a higher NPL will erode bank profit and capital. This statement suits our last observation period. During the year 2020, banks around the world experience high pressure triggered by COVID-19. Therefore we may argue that banks choose clawback over other scheme because they also try to protect themselves from risky decision made by their employees.

### **Conclusion, Limitation, and Future Research**

This study concludes that banks may have managed their earnings after the implementation of the FSA’s regulation. The test result indicates that banks that opt to adopt clawback provision manage their earnings. By adopting clawback provision, while reporting an

increase in earnings, banks may pay their employees by their current year's performance. An increase of earnings may justify their full payment of the compensation. As long as banks can manage their loans, then no clawback will be needed. To take back the compensation paid is actually not easy, especially if the employee has retired. Unlike clawback provision, if the banks adopt holdback scheme they have to postpone some portion of payment to later years. The latter scheme may urge the managers to take some precautions before making risky decision like a loan, unless they will not receive their whole bonuses.

Our second test result indicates that the decision to choose clawback associate with bank's increase in profitability and equity. The interesting finding is the positive relationship between NPL and clawback provision. This finding indicates that banks also anticipate the possibility that bad loans to increase.

This finding brings some implications to bank before adopting a compensation scheme. First, bank must identify factors that may induce its employees to take risky action. Our study only identify some of the variables that influence the action. Other banks in other environment may have different factors that may be unique to them. Second, since not all of the employee will stay at the bank after a decision made, then bank must prepare methods to recollect the payment from the moved or retired employees. Third, bank may tend to choose a system that is more lenient to its employees, either clawback or holdback, otherwise it will cause resistance from the employees and, in return, can lower bank income.

This study suffer from some limitations. First, we only differentiate compensation provision into two categories: clawback and holdback. Bank may choose combination of both provisions but we do not put this probability into our design. Second, bank may pay not only by cash, but also by financial instruments. Since our samples only provide the information on cash compensation, we must assume that both provisions only in the form of cash compensation. Future study may differentiate between cash and non-cash variable compensation and look at how bank implement either clawback or holdback to cash and non-cash compensation. For example, bank may only hold back cash compensation while let the non-cash portion kept by the employee. The characteristics of employees of banks that choose only clawback or holdback may be an interesting question to answer in the future.

## References

- Chan, L. H., Chen, K. C. W., & Chen, T. Y. (2013). The effects of firm-initiated clawback provisions on bank loan contracting. *Journal of Financial Economics*, 110(3), 659–679. <https://doi.org/10.1016/j.jfineco.2013.08.010>
- Chan, L. H., Chen, K. C. W., Chen, T. Y., & Yu, Y. (2012). The effects of firm-initiated clawback provisions on earnings quality and auditor behavior. *Journal of Accounting and Economics*, 54(2–3), 180–196. <https://doi.org/10.1016/j.jacceco.2012.05.001>
- Chan, L. H., Chen, K. C. W., Chen, T. Y., & Yu, Y. (2015). Substitution between real and accruals-based earnings management after voluntary adoption of compensation clawback provisions. *Accounting Review*, 90(1), 147–174. <https://doi.org/10.2308/accr-50862>
- Chen, Y., & Vann, C. E. (2017). Clawback provision adoption, corporate governance, and

- investment decisions. *Journal of Business Finance and Accounting*, 44(9–10), 1370–1397. <https://doi.org/10.1111/jbfa.12259>
- Conyon, M. J., Core, J. E., & Guay, W. R. (2011). Are U.S. CEOs paid more than U.K. CEOs? Inferences from risk-adjusted pay. *Review of Financial Studies*, 24(2), 402–438. <https://doi.org/10.1093/rfs/hhq112>
- Dehaan, E., Hodge, F., & Shevlin, T. (2013). Does Voluntary Adoption of a Clawback Provision Improve Financial Reporting Quality? *Contemporary Accounting Research*, 30(3), 1027–1062. <https://econpapers.repec.org/RePEc:wly:coacre:v:30:y:2013:i:3:p:1027-1062>
- Gillan, S. L., & Nguyen, N. Q. (2016). Incentives, termination payments, and CEO contracting. *Journal of Corporate Finance*, 41, 445–465. <https://doi.org/10.1016/j.jcorpfin.2016.09.001>
- Hall, B. J., & Murphy, K. J. (2002). Stock options for undiversified executives. *Journal of Accounting and Economics*, 33(1), 3–42. [https://doi.org/https://doi.org/10.1016/S0165-4101\(01\)00050-7](https://doi.org/https://doi.org/10.1016/S0165-4101(01)00050-7)
- Hodge, F. D., & Winn, A. (2012). Do Compensation Clawback and Holdback Provisions Change Executive Reporting Choices? *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2104205>
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323–329. <http://www.jstor.org/stable/1818789>
- 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](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jones, J. J. (1991). Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29(2), 193–228. <https://doi.org/10.2307/2491047>
- Levine, C. B., & Smith, M. J. (2019). Clawbacks and earnings management. *Journal of Management Accounting Research*, 31(3), 129–151. <https://doi.org/10.2308/jmar-52256>
- Liu, Y., Gan, H., & Karim, K. (2018). The effectiveness of clawback adoptions in mitigating over-investments – Does board governance play a role? *Advances in Accounting*, 40(April 2017), 61–75. <https://doi.org/10.1016/j.adiac.2018.01.001>
- Moreno, I., Vázquez, F. J., & Watt, R. (2006). Can Bonus-Malus Allieviate Insurance Fraud? *The Journal of Risk and Insurance*, 73(1), 123–151. <http://www.jstor.org/stable/3519972>
- Moyer, S. E. (1990). Capital adequacy ratio regulations and accounting choices in commercial banks. *Journal of Accounting and Economics*, 13(2), 123–154. [https://doi.org/10.1016/0165-4101\(90\)90027-2](https://doi.org/10.1016/0165-4101(90)90027-2)
- Murphy, K. J. B. T.-H. of L. E. (1999). *Chapter 38 Executive compensation* (Vol. 3, pp. 2485–2563). Elsevier. [https://doi.org/https://doi.org/10.1016/S1573-4463\(99\)30024-9](https://doi.org/https://doi.org/10.1016/S1573-4463(99)30024-9)
- Natarajan, R., & Zheng, K. (2019). Clawback Provision of SOX, Financial Misstatements, and CEO Compensation Contracts. *Journal of Accounting, Auditing and Finance*, 34(1), 74–98. <https://doi.org/10.1177/0148558X16686740>
- Peraturan Otoritas Jasa Keuangan No. 45/POJK.03/2015 tentang Penerapan Tata Kelola dalam Pemberian Remunerasi bagi Bank Umum, (2015).
- Sari, R. C., & Sholihin, M. (2019). Religiosity and clawback provision to curb earnings management. *Journal of Management, Spirituality and Religion*, 16(4), 372–390. <https://doi.org/10.1080/14766086.2019.1608462>
- Tölö, E., & Virén, M. (2021). How much do non-performing loans hinder loan growth in Europe? *European Economic Review*, 136, 103773. <https://doi.org/10.1016/J.EUROCOREV.2021.103773>

Zainuldin, M. H., & Lui, T. K. (2020). Earnings management in financial institutions: A comparative study of Islamic banks and conventional banks in emerging markets. *Pacific Basin Finance Journal*, 62, #pagerange#. <https://doi.org/10.1016/j.pacfin.2018.07.005>