

Mitigating Budgetary Slack with Moral Imagination and Clawback Provisions: An Experimental Study

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ABSTRACT

This study examines the incentive schemes containing penalties (clawback) to mitigate budgetary slack. This research also examines internal factors, moral imagination, to reduce budgetary slack. This controlled experiment 2x2 between-subjects. Besides that, as a control, this study also uses bonus incentives to determine the significance of slack reduction by subordinates in providing clawback incentives. The results show that subjects in clawback provisions group are made less slack compared to bonus group. Participants consider bonuses in clawback provisions, so they will tend to recalculate to make the slack because they were afraid to get bonus deduction. These results support the endowment effect theory which states subordinates satisfied so they will not be lost their bonus incentive. Besides, subordinates with higher moral imagination make less slack than subordinates with low moral imagination. The practical implication for this research is that organizations require clawback incentives to mitigate unethical behavior such as budgetary slack. Also, it is also necessary to increase the moral imagination of subordinates to create an ethical environment in the organization. The contribution of this study is a clawback study of budgetary slack with research methods that did not exist in previous studies. The study also added a comparative test of moral imagination against budgetary slack.

Keywords— clawback provisions; budgetary slack; moral imagination; endowment effect

1. INTRODUCTION

Most topic of research in management accounting examine budget participation (Brown, Evans, and Moser, 2009). This happens because participation-based budgeting is implemented in organizations. Although many applied this system, but implementing a budgeting system that involves making budgetary slack made by subordinates is needed if it requires incentives that are determined based on budget targets (Kramer and Hartmann, 2014). Agency theory holds that subordinates are selfish by maximizing their welfare (Evans III et al., 2001), this also shows that all parties in the organization will behave according to their interests (Maiga and Jacobs, 2008). Incentive schemes that contain bonuses are the incentives most widely used by organizations, this is related to subordinates who will work hard to get large incentives. However, asking subordinates who want to work hard but want to get big profits, provides a way to get bonuses easily. Achieving this bonus is easily done by making budget targets that are not in accordance with the actual abilities of the subordinates. Budget is made for planning, coordinating, and controlling. The reduced budgetary slack is very detrimental to the organization because it can reduce the long-term performance of the company (Libby and Lindsay, 2010).

Clawback as a substitute for alternative incentives to mitigate budgetary slack. Clawback incentive schemes have a positive impact in minimizing earnings management (Chan et al., 2015), improving financial quality (reducing fraud made by internal parties) (Dehaan et al., 2013), and improving the quality of corporate earnings (Chan et al., 2012). Clawback is defined as a form of bonuses that have been received by managers or executives regarding the failure to achieve company goals or mistakes made by internal organizations requesting financial approval from companies Iskandar-Datta and Jia (2013). Reduction of bonuses in removing the clawback incentive essence is to cover organizational losses due to incorrect reporting or fraud committed by subordinates in the organization (Fried and Shilon, 2011). Clawback is expected to be able to mitigate policies not as ethical as budgetary slack.

Providing incentives such as the clawback incentive scheme is a form of mitigating budgetary slack. In accordance with contingency theory that subordinates have different characteristics, so it is necessary to identify internal factors. Internal factor in this research is moral imagination. This variable was chosen because moral imagination is the highest moral level in cognitive moral development theory (CMD). Moral imagination is defined as the ability to identify ethical dilemmas in a situation and determine who will be affected by an ethical problem. Subordinates are also asked to identify alternative solutions from their respective moral perspectives (Whitaker & Godwin, 2013).

Moral imagination is considered effective to find out the character and sensitivity of subordinates to a problem or social conflict. Subordinates with high moral imagination are judged to be more ethical in their welfare. Subordinates in this condition tend to avoid budgetary slack behavior. This study combines external factors namely incentive schemes and internal factors namely moral imagination to get a more comprehensive explanation of the factors that can mitigate budgetary slack.

2. HYPOTHESIS DEVELOPMENT

2.1. Reward System and Budgetary Slack

This paper focuses on reward systems because reward systems are the most influential factor in subordinates behavior both for ethical and unethical behavior (Tenbrunsel, 1988). One unethical behavior is making slacks on a budget. Slack generated in incentive schemes that contain bonuses if work targets are achieved slack-inducing pay is seen as unethical behavior (Hobson et al. 2011). This is related to the desire of subordinates to prosper themselves in this case is getting a bonus (Evans III et al., 2001).

Subordinates interpret the bonus as something positive because it is considered very profitable (Luft 1994). Also in accordance with agency theory where there is information asymmetry between superiors and subordinates exacerbating this condition (Carreras et al, 2014). One effort that can be done to mitigate budgetary slack for organizations that have implemented bonus incentive schemes for performance targets is to add an element of punishment in them. So the researchers propose a clawback incentive scheme to mitigate budgetary slack. Clawback incentive schemes can mitigate unethical behavior such as earnings management (Chan et al., 2015). In the clawback incentive scheme, subordinates tend to get penalties in the form of returning bonuses that have been received in the previous period (Fried and Shilon, 2011).

In line with the theory of endowment effects that subordinates will tend to overestimate something they already have even in the eyes of others it is already worthless (Kahneman, 1991). Based on this theory, subordinates will tend to maintain the bonuses they already have and are reluctant to risk them. In the experimental instruments that have been compiled by researchers, the more slacks made, the greater the bonus cut. Bonuses received by participants come from quizzes conducted by experimenters at the beginning of class. This is done so that participants have a strong bond with the money they have because of the results of their work (answering quizzes) from researchers.

H1: Subordinates in the clawback incentive scheme will make less budgetary slack than subordinates in the bonus incentive scheme.

2.2. Moral Imagination and Budgetary Slack

Moral imagination is defined as the ability of individuals to identify moral dilemmas and determine the impact on stakeholders who are affected by the situation, in addition individuals are also measured their ability to develop alternative solutions to the moral dilemma experienced in the case (Whitaker & Godwin, 2013). Individuals tend to make ethical decisions not based on applicable law but they use moral imagination as a reflection of the dilemma in every situation (Johnson, 1993). Individuals with high moral imagination have passed the stage of moral reasoning, namely the post conventional stage so that they have high moral awareness (Werhane, 2002). Budgetary slack is an unethical action because the individual lying reports his best ability. Moral imagination in previous research was able to explain the existence of unethical behavior such as fraud and cheating (Gold, 2010; Seabright and Schminke, 2002) Individuals with high moral imagination tend to avoid unethical acts such as budgetary slack because there is already moral awareness in themselves.

H2: Individuals with high moral imagination make less budgetary slack compared to low moral imagination.

2.3. Moral Imagination, Reward System and Budgetary Slack

Previous research has provided an explanation of the existence of bonuses given based on the achievement of budget targets for a strong foundation of individuals making budgetary slack (Hobson et al, 2011). Budgetary slack is closely related to agency theory, which assumes that individuals will rationally prioritize their personal interests, agents tend to have more information than the principal. This is known as information asymmetry. This information asymmetry results in agents having the opportunity to set budget targets below their capacity (Maiga and Jacobs, 2008). If left unchecked this will result in damaging the long-term performance of the company (Libby and Lindsay, 2010).

To minimize the damage to long-term performance, an incentive scheme is needed to mitigate the behavior of budgetary slack. Clawback incentive schemes contain penalties in the form of deductions from bonuses that have been received (Fried and Shilon, 2011). Clawback is also defined as the return of incentives that have been received by managers or executives due to unfulfilled corporate goals or intentional mistakes made that result in a reduction in company income (Iskandar-Datta and Jia (2013).

Although they have considered incentive schemes as a way to mitigate budgetary slack, previous studies have provided an explanation that individuals in behavior are also determined by internal factors such as honesty (Douthit and Stevens, 2015) and social norms (Rankin et al, 2008). However, this research has not yet examined the stage of individual moral development. Moral imagination is the highest stage of moral development in cognitive moral

development. Individuals in a high level of moral imagination have high ethical awareness and tend to behave to avoid budgetary slack.

H3: Individuals in the clawback incentive scheme and having high moral imagination make less budgetary slack compared to low moral imagination.

3. RESEARCH METHODS

The research design used was an experiment. There are 1 dependent variable, namely budgetary slack, 1 independent variable, incentive scheme, and 1 moderating variable, namely moral imagination. This study uses a 2 x 2 experimental design between subjects factorial. The subjects of this study were 78 students who had work experience. Experiments carried out by following the experimental procedures that have been prepared. The use of students as subjects of research and acting as managers is considered appropriate for behavioral research. Students are considered to have the same decision making process as managers (Ashton & Kramer, 1980). Other studies also use undergraduate students as research subjects in experimental studies (Chong & Ferdiansah, 2011; Chong and Loy, 2015)

3.1. Experimental Procedures

Experimenter divides the class into 2 parts namely the bonus group and the clawback group. There are 3 stages in the experiment namely pre-assignment, experimental assignment, and moral imagination measurement. In the pre-assignment stage, participants in all groups get 10 math total problems. Each correct answer will be multiplied by 5,000. These results will be used as initial bonuses received by participants.

After the experimenter pays the bonus according to the number of correct answers, then the next step is to enter the assignment of the experiment. At this stage participants will receive a budgetary slack experimental assignment package that researchers modified from the Chong and Loy study (2015) and a clawback incentive scheme created by modified researchers from Hirsch et al. (2017). Budgetary slack measurement is done in a way

Participants will get information about their assignments. Participants are asked to translate symbols within a certain period to find out their own performance.

After that, participants were given information about the form of calculation of incentives and bonuses that would be received if the budget target was reached or even exceeded the target set by themselves. Next they are asked to determine the target they are budgeting if given the assignment with the same pattern at the same time.

The next instrument is the incentive scheme. Individuals in bonus incentive schemes get information about the absence of penalties if they set targets below their best ability (this reflects information asymmetry). Individuals in the clawback incentive scheme are given information about the existence of penalties in the form of initial bonus

deductions that have been received (results from pre-assignment). Bonus deductions are made according to the number of slacks made.

After getting information about the incentive scheme, participants are asked to provide the final target. This result is used to find out how much slack reduction in budgetary slack in the clawback incentive scheme. Or even increase slack on budgetary slack in bonus incentive schemes. Next, the researcher gave 2 manipulation check questions to ensure participants understood the treatment given by the experimenter. At the end of the experiment, participants fill in demographic data.

Furthermore, the experimenter gave an instrument of moral imagination that contained ethical dilemma cases and participants were asked to describe moral issues in the dilemma case. After all experiments and surveys of moral imagination are carried out, the researcher then debriefs.

4. RESULTS AND DISCUSSION

Before the researcher tests the hypothesis with two ways ANOVA, the researcher first tests the ANOVA assumption, namely the normality test, the homogeneity test, and the random sampling test. The test results show that all assumptions have been fulfilled. Participants in this study were divided into three groups, the following are the results of descriptive statistics:

TABLE I. DESCRIPTIVE STATISTICS

	Incentive Schemes	
	Bonus	Clawback
N	37	41
Minimum	0	0
Maximum	130	110
Mean	52,4324	29,2683
Std. Deviation	36,39333	27,87384

The results of hypothesis testing using two ways ANOVA show the significant main effect of incentives for budgetary slack $F = 8,619$; p value of 0.004 ***. Further data were tested by independent t-test by comparing the average of gaps made by the bonus group and the clawback group, the test results showed that individuals in the mean bonus incentive scheme made slack by 52.4324, while individuals in the mean slack clawback incentive scheme made were 29.2683. The results show that H1 is accepted

Results of further data testing indicate that there are significant differences between groups of individuals in high moral imagination and low moral imagination in making budgetary slack with $F = 4.334$; $p = 0.041$ **. The researcher also tested with an independent t-test to find out the mean of each group. Individuals in high moral imagination make slacks at 31,2821 while individuals with low moral imagination make slacks at 49.2308. These results indicate that H2 is accepted

The next test is the interaction between independent variables namely the incentive scheme and moral imagination. The results of testing with two ways ANOVA

showed that the interaction between the two was not significant at 0.672. Next to test hypothesis 3, researchers compared the mean slack made by individuals with high and low moral imagination in the clawback incentive scheme, H3 is rejected.

The results of this study are in line with previous studies of clawback incentive schemes that significantly mitigate unethical behavior (Chan et al, 2015; Dehaan et al, 2013; Chan et al. 2012). The behavior of budgetary slack which is detrimental to the company's long-term performance can be mitigated by implementing a clawback incentive scheme. The endowment effect theory states that individuals will overestimate something that already belongs to them (Kahneman and Tversky, 1991) so that individuals are reluctant to risk even though there is a possibility of getting a bigger bonus if they make budgetary slack.

Referring to previous research, moral imagination is one of the important factors in predicting a person's behavior under conditions of ethical dilemma. Individuals with high moral imagination have ethical awareness and ethical values buried within themselves (Whitaker & Godwin, 2013). The test results show that individuals with high moral imagination make fewer slacks compared to individuals with low moral imagination. Budgetary slack behavior can be mitigated by increasing the moral imagination of individuals in the organization.

Furthermore, researchers also examine the interaction of incentive schemes and moral imagination on budgetary slack. The results show that there is no significant interaction between the two of them at 0.672. Based on descriptive statistics, the mean of individuals in the clawback incentive scheme with high moral imagination makes a slack of 21.3043 while individuals with low moral imagination make a slack of 39.44444. These results indicate that individuals in the clawback incentive scheme with high moral imagination make fewer slacks than individuals with low moral imagination, but these differences are not significantly different.

TABLE II. HYPOTHESIS TESTING (ANOVA)

Dependent Variable: Budgetary Slack				
Independent Variables	df	Mean Squares	F	Sign
Incentive Schemes	1	8634.1	8.619	0.004***
Moral Imagination	1	4341.641	4.334	0.041**
Incentive Schemes* Moral Imagination	1	180.604	0.180	0.672

5. CONCLUSION

This paper examines the effects of incentive scheme clawback and moral imagination in mitigating budgetary slack. The motivation of this study stems from the lack of research on the effect of incentive schemes contains

punishment such as clawback to mitigate budgetary slack. This research also examines moral imagination as predictor factor mitigating budgetary slack. This study provides evidence to suggest that incentive schemes can potentially mitigate budgetary slack. Much important, this study provides evidence that moral imagination is an important internal factor to mitigate budgetary slack.

Previous research has stated that incentive schemes that contain bonuses encourage someone to make budgetary slack. This is based on the assumption that individuals tend to maximize their own welfare. Budgetary slack is unethical behavior because it sacrifices long-term performance so it needs to be mitigated. Clawback incentive schemes provide evidence that the form of penalties in the form of returning bonuses that have been received can reduce budgetary slack making. In line with the theory of endowment effect that the bonuses that are owned are considered too high so that participants are reluctant to risk the bonus they already have.

In addition, this study also provides evidence that high moral imagination can mitigate unethical behavior such as budgetary slack. Slack produced by individuals who have high moral imagination is less than individuals with low moral imagination. These results are in line with cognitive moral development theory that individuals at a high level of moral imagination already have a good level of moral awareness and act in accordance with the values embedded in themselves.

This study also examined the interaction between incentive schemes and moral imagination, the results showed that there was no significant effect. This result can be explained by Cognitive Moral Development Theory which states that individuals in the high moral imagination stage no longer act based on the presence or absence of punishment and reward. Individuals with high moral imagination have internalized ethical values.

In conclusion, the findings suggest that organizations should implement a clawback incentive scheme to mitigate budgetary disparities. In addition, a program that can improve moral imagination subordinates is needed as a support for mitigating budgetary slack.

There are limitations in this study. First, this study uses an experimental study, the case given does not comprehensively describe the real-world so that further research is expected to improve the experimental cases in this study. Second, further research can consider other internal variables such as locus of control (see Brownell, 1981)

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REFERENCES

- [1] Ashton, R. H., & Kramer, S. S. (1980). Students as Surrogates in Behavioral Accounting Research:

- Some Evidence. *Journal of Accounting Research*, 1-15.
- [2] Brown, A. B., Davis-Friday, P. Y., Guler, L., & Marquardt, C. (2015). M&A Decisions and US Firms' Voluntary Adoption of Clawback Provisions in Executive Compensation Contracts. *Journal of Business Finance & Accounting*, 237-271.
- [3] Brownell, P. (1981). Participation in budgeting, locus of control and organizational effectiveness. *The Accounting Review*, 844-860.
- [4] Chan, L. H., Chen, K. C., Chen, T. Y., & Yu, Y. (2015). Substitution between Real and Accruals-Based Earnings Management after Voluntary Adoption of Compensation Clawback Provisions. *The Accounting Review*, 147-174.
- [5] Chan, L. H., Chen, K. C., Chen, T.-Y., & Yu, Y. (2012). The effects of firm-initiated clawback provisions on earnings quality and auditor behavior. *Journal of Accounting and Economics*, 180-196.
- [6] Chong, V. K., & Ferdiansah, I. (2011). ChonThe effect of trust-in-superior and truthfulness on budgetary slack: An experimental investigation. *Advances in Management Accounting*, 55-73.
- [7] Chong, V. K., & Loy, C. Y. (2015). The Effect of a Leader's Reputation on Budgetary Slack. 49-102.
- [8] 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.
- [9] Douthit, J. D., & Stevens, D. E. (2015). The Robustness of Honesty Effects on Budget Proposals when the Superior has Rejection Authority. *The Accounting Review*, 467-493.
- [10] Evans III, J., Hannan, L., Krishnan, R., & Moser, D. (2001). Honesty in Managerial Reporting. *The Accounting Review*, 537-559.
- [11] Fried, J., & Shilon, N. (2011). Excess-Pay Clawbacks. *Harvard, John M. Olin Center for Law, Economics, and Business Discussion Paper*, 103-130.
- [12] Hirsch, B., Reichert, B. E., & Sohn, M. (2017). The Impact of Clawback Provisions on Information Processing and Investment Behaviour. *Management Accounting Research*.
- [13] Hobson, J. L., Mellon, M. J., & Stevens, D. E. (2011). Determinants of Moral Judgment Regarding Budgetary Slack: An Experimental Examination of Pay Scheme and Personal Values. *Behavioral Research in Accounting*, 87-101.
- [14] Iskandar-Datta, M., & Jia, Y. (2013). Valuation Consequences of Clawback Provisions. *The Accounting Review*, 171-198.
- [15] Kahneman, D. K. (1991). Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *The Journal of Economic Perspectives*, 193-206.
- [16] Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*, 263-288.
- [17] Kramer, S., & Hartmann, F. (2014). How Top-down and Bottom-up Budgeting Affect Budget Slack and Performance Through Social and Economic Exchange. *ABACUS*, 314-340.
- [18] Libby, T., & Lindsay, R. M. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research*, 56-75.
- [19] Maiga, A. S., & Jacobs, F. A. (2008). The moderating effects of manager's ethical judgment on the relationship between budget participation and budget slack. *Advances in Accounting*, 113-145.
- [20] Rankin, F. W., Schwartz, S. T., & Young, R. A. (2008). The Effect of Honesty and Superior Authority on Budget Proposal. *The Accounting Review*, 1083-1099.
- [21] Whitaker, B. G., & Godwin, L. N. (2013). The Antecedents of Moral Imagination in the Workplace: A Social Cognitive Theory Perspective. *J Bus Ethics*, 61-73.