

THE EFFECT OF PREPAYMENT CONTRACT FRAMES AND FEEDBACK ON BUDGETARY SLACK: AN EXPERIMENTAL INVESTIGATION

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ABSTRACT

Introduction/Main Objectives: This research investigates the effect of prepayment contract frames and feedback incentives in mitigating budgetary slack. **Background Problems:** Clawback is an incentive scheme based on the endowment concept that has recently drawn researchers' concerns. The literature suggests emphasizing the endowment and loss aversion concepts. This research examines these two concepts with one test model. **Novelty:** This research presents the preliminary manipulation role of hybrid clawback as one of the prepayment contract frames that are smoother and without penalty provisions. This study also examines the interaction between the concept of endowment and loss aversion in one test model. **Research Methods:** This research applied a field experiment with a 3×2 between-subject design. **Finding/Results:** This research found that prepayment contract frames require motivation from an adequate formal control system through frequent feedback to mitigate the slack. The findings prove that the capability of prepayment contract frames to minimize slack would be more effective after the frequency of the feedback has been moderated. **Conclusion:** The hybrid clawback could be a smoother alternative compensation scheme that is just as effective as a simple clawback, but without any penalty provisions. The effectiveness of a low feedback frequency could be increased to equal the efficacy of a high feedback frequency when assisted by prepayment contract frames.

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INTRODUCTION

Budgetary slack is a dysfunctional behavior that is considered to be detrimental to an organization (Hobson et al., 2011; Kramer & Hartmann, 2014; Islami & Nahartyo, 2019). From an accounting perspective, budgetary slack potentially explains the cause of losses in organizations (Maiga & Jacobs, 2008; Libby & Lindsay, 2010; Hobson et al., 2011; Rohma, 2022; Mirza & Khoirunisa, 2021). Budgetary slack can occur due to the use of less than optimal resources, causing an increase in costs and a decrease in long-term profits (Huang & Chen, 2010; Kung et al., 2013; Hobson et al., 2011; Gago-Rodríguez & Naranjo-Gil, 2016). The management control system literature explains that an incentive scheme is one of the control mechanisms to promote goal congruence and mitigate dysfunctional behavior such as slack (Anthony & Gavindarajan, 2007; Ilyana & Sholihin, 2021; Rohma, 2022). The incentive scheme is required to describe what is considered to be dysfunctional behavior by the managers (Hobson et al., 2011; Jie, 2018). Sari & Sholihin (2018), Khasanah et al. (2020), and Chan et al. (2015) found that the clawback compensation scheme is the most effective penalty compensation scheme to reduce the occurrence of dysfunctional behavior.

Clawback is the most recent incentive plan specified by the Securities and Exchange Commission (SEC) as one of the initiatives to reduce the opportunistic behavior that has recently raised researchers' concerns. It takes the form of clawback (Kyung et al., 2019; Erkens et al., 2018; Mburu & Tang, 2018). According to Fried & Shilon (2011), clawback guarantees the money that investors have given the business. The previously paid bonuses must be returned if the management's false reporting of investor losses is established (Fried & Shilon, 2011). The clause known as "clawback" allows the board of

directors to reclaim the pay given to managers if those managers submit false financial reports (Chan et al. 2015). Clawback has a penalty or punishment component (Sari & Sholihin, 2019).

Some research has confirmed that prepayment contract frames in the form of clawback positively affect the company, either by decreasing the earning management, the investment risk, or fraud risk, and increasing managerial efficiency (see Erkens et al., 2018; Chan et al., 2013; Chan et al., 2015; Hirsch et al., 2017; Fung et al., 2015; Brown et al., 2015; El Mahdy, 2019). The existence of individual efforts to maintain incentives and avoid taking risks through the clawback system can be explained by the prospect theory. This theory explains that individuals in a larger loss domain tend to be more willing to take risks than those in a smaller loss domain (Kahneman & Tversky, 1979). In the context of budgeting, the failure to achieve budget targets places individuals in a loss domain, which can make them take more significant risks, in the form of creating slack, to avoid the withdrawals that occur with clawback incentives. Clawback in prepayment contract frames triggers endowment effects, encouraging employees to maintain the incentive obtained, based on the stipulated contract frames.

The stream of researchers studying clawback generally only consider clawback manipulation based on the endowment aspect (see. Hirsch et al., 2017; Fung et al., 2015; Brown et al., 2015; El Mahdy, 2019; Chan et al., 2015). Meanwhile, Jie (2018) and Brink & Rankin (2013) explain that it is crucial to consider loss aversion. However, limited studies still consider the effect of endowment and loss aversion in one observational model. Based on the myopic loss aversion theory, Benartzi & Thaler (1995) suggest that individuals tend to act rationally to avoid risks and neglect the highest profit in uncertain conditions. In the clawback condition,

myopic behavior can encourage individuals to use risk aversion to avoid budget failures by doing slack and ignoring potential long-term benefits. Therefore, further investigation is necessary to see if a more significant amount of compensation, given at the end, helps those with a prepayment contract without penalty. This research develops hybrid clawback in prepayment contract frames with this basic premise.

With regards to loss aversion, based on the myopic loss aversion theory, Benartzi & Thaler (1995) suggest that during uncertain conditions, individuals tend to act rationally when facing a high evaluation frequency, causing them to avoid risks and neglect the highest profit. Because it is always related to uncertainty, budgeting frequently motivates slack, which may cause the company to suffer from a loss. Malmi & Brown (2008) explain that cybernetic control can detect variants that are potentially harmful during budgeting through the feedback process. Chong & Ferdiansah (2012) examined how feedback minimizes the manager's opportunity to produce slack. Nonetheless, based on the myopic loss aversion theory (Benartzi & Thaler, 1995), different risk preferences during uncertain conditions should be investigated, in terms of budgeting (see Chong & Ferdiansah, 2012). Therefore, the level of feedback frequency should not be abandoned and also needs further investigation. Furthermore, the interaction between the frequency of the feedback and the prepayment contact requires more attention; according to Mburu and Tang (2018), a robust internal control system must accompany the prepayment capability and effectiveness. Therefore, this research also discusses feedback frequency as it is manifested in internal cybernetic control. This research investigates the effects of prepayment contract frames and feedback frequency to minimize slack.

This research uses an experimental method with a 3×2 factorial design. Prepayment contract frames are to be manipulated into three types: clawback frames; simple clawback; and hybrid clawback. Feedback frequency is manipulated into two types, i.e., high feedback frequency and low feedback frequency. The experimental assignment is adapted from Chow (1983). The findings prove that the capability of prepayment contract frames to minimize slack is more efficient after being moderated by the frequency of the feedback. This research shows that high frequency feedback is more effective in mitigating slack than low frequency feedback. However, the high frequency feedback is faced with the issue of high supervision costs (Anderson et al., 2009). Therefore, efforts are needed to encourage the effectiveness of low feedback frequencies, so that they can be equivalent to high feedback frequencies in mitigating slack. Furthermore, the analysis shows that the prepayment contract frames can encourage low feedback to eliminate slack, to a greater extent than high feedback frequency can.

This research has made several contributions. Firstly, by implementing myopic loss aversion, it has comprehensively completed the endowment concept (i.e., prepayment contract frames in the form of clawback) and the loss aversion concept (i.e., feedback frequency) in one test model to mitigate slack. The existence of an endowment effect makes individuals, in conditions with prepayment contract frames, seek to maintain their compensation so that it is not withdrawn. This is carried out by avoiding budgetary slack, because it has the potential to be discovered by superiors during the feedback process. In addition, the research also provides answers to the issue proposed by Mburu & Tang (2018), explaining that clawback capability is related to a company's robust formal control. Therefore, the research uses the feedback

frequency as a manifested cybernetic control. Secondly, this research has empirically complemented the previous studies, generally suggesting that simple clawback is more effective than bonus only in dysfunctional behavior mitigation. We propose novel evidence to mitigate dysfunctional behavior through an alternative incentive scheme that is more effective than bonus only, and equal to a simple clawback but smoother, without the obligation of a penalty provision. The alternative incentive scheme is hybrid clawback, namely the awarding of a compensation contract with an incentive value higher than the agreed initial contract value when it is proven to be able to reach the set target without creating slack. Thirdly, this research is broad, compared to the previous research that only considers feedback control. This research uses the myopic loss aversion concept to examine the myopic effects on decreasing slack by emphasizing low and high feedback frequency mechanisms.

This paper is structured as follows: The first part is the introduction. The second part is the literature review and hypothesis development, and then the next part is the research method. The fourth part elaborates on the findings and the discussion. The last part is the conclusion.

LITERATURE REVIEW

1. Prepayment Contract Frames: Clawback

Fung et al. (2015) and Chan et al. (2013) indicate that the most of all company has begun to mitigate the dysfunctional behavior, caused by the incompatible compensation schemes offered in recent years, by adopting new ones, i.e., prepayment or clawback contract frames. Iskandar-Datta & Jia (2013) and Mburu & Tang (2018) mention that clawback constitutes the return of incentives received, due to the failure to achieve company targets because of deliberate mistakes that decreased the company's revenue.

Some research proposes that clawback positively affects the organization (Chan et al., 2013; Chan et al., 2015; Brown et al., 2015; Erkens et al., 2018; Liu et al., 2018).

Researchers have attempted to investigate the effect of clawback on the company. According to Chan et al. (2013), firm-initiated clawback provisions improve the quality of the financial reporting, and lower the information uncertainty that financing providers must deal with. Sari & Sholihin (2018) found that clawback's adoption makes subordinates work harder to avoid any action that causes the return of compensation that they have already received. El Mahdy (2019) discovered that clawback provisions motivate managers to exert more effort following clawback's implementation, and that these efforts are manifest as increased managerial efficiency. Furthermore, Hirsch et al. (2017) found that clawback can encourage managers to choose risky investments. Several successful studies have shown that clawback can reduce dysfunctional behavior (Khasanah & Sholihin, 2020; Sari & Sholihin, 2018), improve the quality of financial reporting (Dehaan et al., 2013), and reduce the risk of fraud (Fung et al., 2015).

However, based on the perspective of the prospect theory (Schaubroeck & Davis, 1994; Edwards, 1996; Best & Grauer, 2016), individuals in a loss domain tend to take more significant risks. In the realm of budgeting, the failure to achieve budget targets places individuals in an extensive risk domain that can make them take more significant risks by carrying out budgetary slack. Clawback is a form of guarantee for the funds provided, as they must be returned if there are indications of activities being carried out that can potentially harm the company (Fried & Shilon, 2011). Brink & Rankin (2013) explain that clawback is a compensation scheme based on the concept of an

endowment. Jie (2018) explains that endowment and loss aversion are related, when influencing individual behavior.

In addition, the perspective from myopic loss aversion, in the realm of budgeting, places individuals in a condition of uncertainty regarding the achievement of the budget's targets. Conditions of uncertainty make individuals avoid the risk of not achieving their targets by creating slack. The existence of a penalty-based clawback triggers the manifestation of myopic loss aversion behavior, risking profits rather than losses. Individuals have no attraction to increase the achievements they receive, but they tend to be more afraid of the risks they will face.

This research develops hybrid clawback as a new form of manipulation, by considering the element of loss aversion in the clawback compensation contract. Meanwhile, hybrid clawback is a compensation contract offering compensation payments that are greater than the compensation value agreed on in the contract, with the requirement that the company meets its target without any slack. Moreover, while most previous research only compared the clawback and bonus, we did not. The findings of most previous studies have consistently proven that both are significantly different. The bonus comes with a concept that is different from the hybrid clawback. It only emphasizes the additional bonus when a company achieves the target without any preliminary compensation contract. On the other hand, the hybrid clawback emphasizes the initial compensation delivered by the contract and that additional compensation will be given under the contract, without penalty.

2. Dysfunctional Behaviour and Budgetary Slack

Budgetary slack is one dysfunctional behavior that can undermine a company's long-term

performance (Baso et al., 2017; Libby & Lindsay, 2010; Rohma, 2022; Rohma & Chamalinda, 2023). Budgetary slack has dangerous consequences for future profits because of the loss of the superiors' trust in their subordinates (Huang and Chen, 2010; Kung et al., 2013; Hobson et al., 2011; Gago-Rodríguez & Naranjo-Gil, 2016). Therefore, research into budgetary slack is necessary because it is a destructive act for a company and needs to be mitigated. Budgetary slack refers to the condition when there is a difference in the amount of the budget and the best estimate, due to the refraction of performance targets from the capabilities possessed (Hartmann & Mass, 2010; Anthony & Govindarajan, 2007).

The existing literature shows that the emergence of slack can be caused by the misalignment of desires between subordinates and their superiors, primarily if a subordinate's performance is assessed based on achieving the budget (Rohma, 2022). Subordinates will propose to their superiors lower budget targets than the actual targets they can achieve (Merchant, 1985; Fisher et al., 2006b).

3. Feedback Frequency and Cybernetic Control in Budgeting

Malmi & Brown (2008) clarify that cybernetic control is a feedback process indicated by applying performance standards, performance measurement systems, comparing the actual performance and the applied standards, and feedback information about any undesired variants. Malmi & Brown (2008) confirm that regarding the cybernetic control concept, in the form of feedback, the variants found in the research into management control systems were the budget, a measure of financial performance, a non-financial performance measure, and financial and non-financial performance measure (hybrids). Anthony & Govindarajan (2007)

conclude that further action regarding the current year's budget through feedback is one of the most critical controls in budgeting. In the form of feedback, precise control is crucial for the company, as Luft (2016) and Adi & Sukmawati (2020) conveyed that a formal control system should accompany informal control. Besides, Chong & Ferdiansah (2012) also define structuralized formal control, such as feedback control, as being necessary to mitigate budgetary slack.

4. Myopic Loss Aversion

The theory of myopic loss aversion was developed by Benartzi & Thaler (1995). The theory states that during uncertain conditions caused by a high evaluation level, individuals avoid risks and ignore the best opportunity that should have been achieved. Based on the myopic loss aversion theory, some research has succeeded in describing the fact that when stock trading is uncertain, individuals prefer to avoid risk when faced with high trading levels (Gneezy & Potters, 1997; Haigh & List, 2005; Eriksen & Kvaløy, 2010; Lee & Veld-Merkoulova, 2016). Individuals are also uncertain about the budget's scope because the uncertainty about achieving the budget target encourages them to create budgetary slack (Chong & Ferdiansah, 2012). Budget evaluation can be conducted through feedback from the analysis of a variant, by comparing the actual performance to the budgeted one (Anthony & Govindarajan, 2007). Evaluation and feedback about practical performance assessments and the budgeted estimation enable us to detect any potentially harmful variant that also has the potential for fraud, such as slack, which may cause the loss of resources and decrease the company's profit. Further, Anthony & Govindarajan (2007) and Malmi & Brown (2008) explain that further action concerning the budget results in feedback

becoming one of the most critical controls in budgeting. Feedback is necessary to cut budgetary slack as a formal control (Chong & Ferdiansah, 2012). Therefore, referring to the myopic loss aversion theory, individuals cannot merely ignore both high and low feedback frequencies when faced with uncertain conditions during budgeting.

5. Hypothesis Development

An incentive closely relates to being a management control function to motivate employees (Anthony & Govindarajan, 2007; Kurniawan et al., 2021; Patra et al., 2019; Febrianti & Rohma, 2023). They are not expected to use budgetary slack because it potentially harms the company (Gago-Rodriguez & Narajo-Gil, 2016). Some research reveals that clawback positively impacts the company (Dehaan et al., 2013; Fung et al., 2015; Chan et al., 2015; Brown et al., 2015). Brink & Rankin (2013) and Liu et al. (2018) state that clawback frames give individuals more pressure than simple clawback. The more substantial effects of excellence provided by clawback frames trigger higher endowment (Erkens et al., 2018). Moreover, the compensation offered is higher than the amount stated in the contract and given without penalty with hybrid clawback. Therefore, hybrid clawbacks create smoother effects, resulting in a lower endowment than the clawback frames do. A more significant endowment effect given by the clawback frames may cause employees to reluctantly return the received bonus and encourage them to avoid activities that potentially harm the company's revenue, such as slack. Therefore, the proposed hypothesis is as follows:

H1: Budgetary slack will be lower under clawback conditions than under simple and hybrid clawback conditions.

Brink & Rankin (2013) suggest that clawback frames create higher pressure than simple clawback and bonus only do. Returning all incentives will be more complicated than paying a fine of some percentage of the incentive received. Kahneman (1991) argues that much more significant pressure triggers more endowment effects with clawback frames than with simple clawback. The stronger the endowment effect due to the pressure generated by the clawback frames, which is certainly bigger than that generated by simple clawback, the greater the opportunity to retain the prepayment through performance optimization and activity avoidance, potentially reducing the company's revenue (Erkens et al., 2018; Fung et al., 2015). Therefore, slack may be higher in simple clawback, since that only gives a penalty to the prepayment, rather than in clawback frames that demand the total return of the prepayment. Therefore, the proposed hypothesis is as follows:

H1a: Budgetary slack will be lower under clawback frame conditions than it will be under simple clawback conditions.

Individuals are usually reluctant to relinquish their possessions or emphasize the information they have in hand (Kahneman 1991). Therefore, a clawback scheme demanding a total return on investment will force individuals to hold onto the compensation they already have. Meanwhile, the hybrid clawback compensates individuals more than the prepayment contract does, and it does not provide any penalty. Although compensation is still given regarding the prepayment contract, the employers' endowment is always challenging to realize without a penalty. Moreover, Erkens et al. (2018) believe that a high endowment encourages employers to improve performance and minimize dysfunction, potentially reducing revenue. Therefore, a hybrid clawback will probably trigger more slack than

the clawback frames. Gill et al. (2013) clarify that bonuses and piece-rate incentive schemes motivate individuals to do opportunistic acts to earn more rewards. Therefore, the tendency to create slack in the hybrid clawback is higher than in the clawback frames, due to the minimum effort required to show the endowment. Thus, the proposed hypothesis is:

H1b: Budgetary slack will be lower under clawback frame conditions than under hybrid clawback conditions.

Brink & Rankin (2013) confirm that a simple clawback includes a penalty depending on the amount of incentive received, triggering the endowment. In the hybrid clawback scheme, there is no penalty. However, the higher incentive it offers, compared to the prepayment contract could be a distinguishing motivation, as Kahneman (1991) conveyed that loss aversion occurs to avoid the risks of other compensation outside the prepayment. As a result, an endowment effect can be used to maintain incentives and create loss aversion, preventing a higher compensation loss outside of the prepayment. Due to the compensation offered being higher than in the prepayment contract, the hybrid clawback may trigger myopic loss aversion, motivating individuals to avoid slack. The motivation to prevent dysfunctional behavior is that the risk of added compensation loss outside the prepayment contract increases. Therefore, the capability of simple clawback and hybrid clawback to minimize slack may be equal. Thus, the proposed hypothesis is:

H1c: Budgetary slack will be similar under simple and hybrid clawback conditions.

Malmi & Brown (2008) conclude that feedback is manifested in cybernetic control, and is one of the controls in budgeting. Anthony & Govindarajan (2007) add that feedback helps managers detect undesired variants that may

appear in the budget. Chong & Ferdiansah (2012) define feedback as minimizing slack. The myopic loss aversion framework describes how individuals avoid risk during uncertain conditions, and neglect profit when faced with very frequent evaluations (Benartzi & Thaler, 1995). Based on myopic loss aversion, individuals' efforts to minimize risk are probably more significant than those to cut slack, as less risk may reduce the possibility of detecting unprofitable variance. Furthermore, when faced with a high feedback frequency, people tend to exert more effort than when faced with a low one. Therefore, it shows that efforts to propose the best estimation will be more tremendous during a high feedback frequency condition than during a low one. Thus, the proposed hypothesis is as follows:

H2: Budgetary slack will be lower under conditions of high feedback frequency than low feedback frequency.

An incentive is one of the control schemes applied to a company (Patra et al., 2019). Based on the previous argument and the endowment framework, an incentive encourages individuals to maintain the incentive and avoid the risk of a detected harmful variant by cutting slack. Chong & Ferdiansah (2012) and Malmi & Brown (2008) explain an effective control that can be implemented in budgeting: feedback. According to the myopic loss aversion theory by Benartzi & Thaler (1995), a high evaluation frequency will cause individuals to avoid risk. One of the efforts to reduce risk is cutting slack to minimize the detection of potentially harmful variants due to the best estimation bias when feedback is given. Therefore, based on the myopic loss aversion theory, during the uncertain conditions of budgeting, the capability of prepayment contract frames that cause endowment behavior to minimize slack will be more robust after

being induced by the frequency of the feedback. The possibility of the detected harmful variant reducing prepayment prompts efforts to avoid slack. Therefore, the hypothesis proposed is:

H3: The feedback frequency moderates the effect of prepayment contract frames on the creation of budgetary slack.

Kahneman (1991) indicates that the endowment effect motivates individuals to emphasize what they have had. It encourages them to provide more effort to maintain their compensation. Brink & Rankin (2013) imply that a higher endowment makes clawback frames more of a deterrent than simple clawback and bonus only. It makes prepayment contract frames one method of minimizing individual myopic loss aversion by reducing the feedback frequency. Contrastively, a significant difference can be avoided during a high feedback frequency when prepayment contract frames accompany the rate. This is due to the substantial myopic loss aversion effect that can be caused by a high feedback frequency that can encourage individuals to avoid risk by minimizing slack. With this, the possibility of detecting harmful variants will be increased. Therefore, the proposed hypotheses are as follows:

H3a: Budgetary slack under a low feedback frequency is lower in clawback frames than in simple and hybrid clawback conditions.

H3b: Budgetary slack under a high feedback frequency is equal in clawback frames, simple clawback, and hybrid clawback conditions.

METHOD, DATA, AND ANALYSIS

1. Research Design

An experimental laboratory approach was used in this study, employing a 3×2 factorial design

within-subject. Jie (2018) explained the importance of combining the concepts of endowment and loss aversion in one analytical context. This combination can be captured from the perspective of myopic loss aversion (Benartzi & Thaler, 1995), which does not only consider loss aversion in the form of clawback frames or simple clawback. However, it also finds the myopic impact of loss aversion in the hybrid structure. Three prepayment contract frames, clawback frames, simple clawback, and hybrid clawback were adjusted. A high feedback frequency and low feedback frequency were created by manipulating the frequency of the feedback. This study involved 115 participants. However, three participants did not provide complete demographic information, and four failed to answer the manipulation check. Thus, the data from 108 participants was used for further testing. The state of each treatment is shown in Table 1.

2. Experimental Participant

Students who had completed the management accounting and management control systems courses comprised the participants in this study. After completing the courses, the students had a better understanding of the theory and practical descriptions of the working world, which helped them to understand typical working conditions and the general management control system used in the working world. This research essentially included the management control system's

behavior regarding incentives and knowledge-sharing. Khera and Benson (1970) stated that pupils should act like business people when internalizing successful experimental assignments. Therefore, having sufficient knowledge could reduce experimental bias (Rohma et al., 2023). Additionally, Nahartyo et al. (2020) demonstrated the benefits of student employment. The participants could avoid any unwanted effects, i.e., natural acts, and try to pleasure themselves when infrequently involved in an experimental study, minimizing bias.

3. Operational Definitions and Variables Measurement

The dependent variable in this research was budget slack, measured through the difference between the best estimation and the budget target. The independent variable was the prepayment contract frame. This is a compensation scheme in the form of a prepayment contract, as a guarantee of the funds that must be returned if the budget target is not achieved or it is proven that slack has been created. The prepayment contract frame was manipulated into three conditions: clawback frame, simple clawback, and hybrid clawback. The first independent variable manipulated the prepayment contract frames into three conditions. In the clawback frame condition, participants would be required to return all the incentives they received if they could not achieve the target and created slack that was potentially harmful to

Table 1: Experimental Design

		Prepayment Contract Frames		
		Clawback frames	Simple clawback	Hybrid clawback
Feedback Frequency	High	Cell 1 (18 participants)	Cell 2 (17 participants)	Cell 3 (18 participants)
	Low	Cell 4 (17 participants)	Cell 5 (20 participants)	Cell 6 (18 participants)

Source: Data Processed, 2022

the company. In the simple clawback condition, the participants would pay a fine at the end of the period if they failed to achieve the target and created slack that was potentially harmful to the company. Meanwhile, in the hybrid clawback condition, the participants would initially be given a compensation contract with an incentive value that was higher than the agreed initial contract value, which they would receive when it was proven that they would be able to reach the target without slack.

The moderating variable was feedback frequency, which was the intensity of the control, in the form of feedback, during the budgeting process. The feedback frequency was manipulated into two, i.e., high and low. During a high feedback frequency condition, the participants faced a specific situation. The company provided information stating that it would hire a consultant to give feedback concerning the budget's implementation at the end of each quarter, enabling them to detect and minimize variants that might harm the company. However, during a low feedback frequency condition, the participants faced a situation in which the company would hire a consultant to provide feedback concerning the budget's implementation once a year.

4. Experimental Procedure and Assignment

The experiment was divided into five stages, i.e., the pilot test, primary experiment implementation, manipulation check, demographic test, and debriefing. The pilot test was a preliminary analysis that was conducted before the experiment started. Cooper & Schindler (2014) revealed that an initial test was necessary to detect the research's design and the instrument's weaknesses. The pilot test was conducted on several fourth-semester students who were currently taking the management control system course. A separation of one semester was made

to minimize the possibility of repeat participants. The pilot test results revealed that most of the participants passed the manipulation check, suggesting the instrument was understandable.

The experimental assignment used in this study referred to Chow (1983) and Fisher (2002a, 2006b), which involved translating letters into numbers and adding them. During the implementation of the main experiment, the participants would act as production employees. They were instructed to provide key answers, which would be regarded as fundamental accounting guidance and be included in the accounts, to introduce beginners to accounting methods. Production staff, who could correct these key answers, were given performance points to manage the production of the targets proposed in the budget. Before the assignment started, the participants were given three minutes of training to get them accustomed to the task. After that, they were given cash as per the preliminary compensation contract. During the clawback frames, the participants were informed that they would have to return all the compensation they received if they were unable to achieve the target, and were detected creating slack in the form of the best estimation bias.

Meanwhile, during the simple clawback condition, the participants were informed that they would be fined and had to return 70% of the total compensation they received, in the form of reduced compensation, when they could not achieve the target, and were detected creating slack, due to harmful variants based on the best estimation bias. Moreover, during the hybrid clawback condition, the participants were informed that when they achieved the intended target and did not create any slack, they would have their compensation increased by 30% of the inadequate compensation they had accepted.

During the high feedback frequency condition, the participants were informed that as

part of the control effort to detect any slack, and to assess their performance achievement, the company would hire an external consultant to give feedback about the budget's implementation each quarter. The participants were also informed about detecting slack and assessing their performance achievement under a low feedback frequency condition. The company would employ an external consultant to give feedback on the budget's implementation once a year. After the primary experiment assignment was given to them, the participants were instructed to answer the manipulation check and fill in their demographical information. Full demographical information was required to determine the success of the randomization process. Debriefing the participants completed the experiment's implementation.

5. Manipulation Check and Debriefing

A manipulation check was performed to determine if the manipulation was understandable and well internalized (Nahartyo et al., 2020). It was conducted by offering three questions. The first question was how the company gave incentives. The second question was whether the participants would face any consequences if caught creating slack, namely providing information about the target that was different from that based on the actual performance. The third question was how many times the participants had used the service offered by the external consultant hired by the company to provide feedback. While answering the manipulation check, mistakes were found, which meant that the participants had not understood what was given to them. Therefore, they should be excluded from the hypotheses testing. Debriefing was conducted to neutralize the participants, and was carried out by providing information to them about the

experimental study that had been completed. They would also be given a brief explanation of the research's objectives and manipulations during the experiment.

RESULT AND DISCUSSION

1. Research Result

A laboratory experiment was conducted on 114 participants. Unfortunately, the result of our manipulation check suggested that six students failed the manipulation check, so we only had 108 participants to provide our data. This research explicitly examined the effect of differences in the clawback treatment and evaluation frequency on budgetary slack. The data analysis processes were carried out in stages, partially on each variable and the interactions between the variables. Specifically for the clawback, an additional Bonferroni analysis was carried out because there were more than two treatments. The ANOVA test was required to fulfill the homogeneity and normality assumptions. We were testing by applying Levene's argument that if $p > 0.159$, it clarified that all the data's variances were homogenous. A Kolmogorov-Smirnov analysis confirmed the p -value > 0.308 , conveying that the residual was normally distributed. The successful randomization process could be analyzed by the result, concluding that all the individual characteristics, namely the demographical factors' potential to be an experiment error, could be minimized. All the participants showed equal potential to obtain a manipulation scenario, with the chi-square values of gender, age, and GPA being $p > 0.463$, $p > 2.75$, and $p > 0.369$, respectively. Therefore, there was no randomization issue that would potentially damage the internal validity of the research. The results of the hypothesis test are presented in Table 2.

Table 2: Hypothesis Test

	F-Statistic	p-value
Prepayment contract frames	3.899	0.009*
Clawback frames and simple clawback on slack.		0.035**
Clawback frames and ends up with a contract on slack.		0.018*
Simple clawback hybrid clawback on slack		0.945
The feedback frequency on slack	7.524	0.027**
The prepayment contract frames *feedback frequency on slack	6.719	0.003*
The prepayment contract frames: *low feedback frequency on slack	6.219	0.004*
The prepayment contract frames *feedback frequency on slack	2.766	0.073

Notes: dependent variable budgetary slack, *sig at level 1%, **sig at level 5%,
Source: Data Processed, 2022

The results in Table 2 show that the mean for budgetary slack was lower in the incentive scheme of the clawback frame than in the simple clawback and hybrid clawback, with mean values of 0.322, 0.861, and 0.962, respectively, with $p > 0.009$. It described that individuals tended to create slack under simple clawback and hybrid clawback conditions more than under clawback frame conditions. Therefore, H1 was supported. Keller (2014) and Hair et al. (2014) explained that when the result of the ANOVA test indicated a significant difference among groups of more than three variables, a post hoc analysis should be performed. The Tukey post hoc analysis was applied, as it had the highest robustness of other post hoc analyses. The analysis result indicated that the mean of the slack in the clawback frames differed from that in simple clawback, with a p -value > 0.035 , so H1a was supported. Furthermore, we also figured out that the slack tendency in clawback frames differed from that in hybrid clawback,

with a p -value > 0.018 , so H1b was supported. In addition, the analysis result also proved that the slack tendencies in simple clawback and in hybrid clawback, were equal. With a p -value > 0.945 , H1c could be rejected. Keller (2014) revealed that Bonferroni was the best instrument for post hoc analysis when homogeneous data is used. Therefore, as a part of the supplementary analysis, to realize the robustness of the research findings, the result of the post hoc test using Bonferroni is indicated in Table 3.

The result of the analysis using Bonferroni was similar to that using Tukey HSD analysis regarding the significance level. It revealed that the mean for the slack in clawback frames differed from that in simple clawback, with $p > 0.040$, so H1a was supported. It showed that slack was higher in simple clawback, which only provided a penalty for prepayment, than in clawback frames, which provided a total return of any prepayment; thus, budgetary slack would be lower in clawback frames than in simple

Table 3: Bonferroni supplementary analysis

Prepayment contract frames	Mean difference	p-value
Clawback frames-Simple clawback	-0.5624	0.040**
Clawback frames-End up a contract	-0.6178	0.020**
Simple clawback- Hybrid clawback	-0.0554	1.000

**sig at level 5%

Source: Data Processed, 2022

clawback conditions. Furthermore, we found that the mean of slack in clawback frames differed from that in hybrid clawback, with $p > 0.020$, so H1b was supported. The results were consistent with the predictions and showed that the tendency to create slack in the hybrid clawback would be higher in the clawback frames, due to the minimal effort to show endowment. Then, in line with the result of the analysis using Tukey HSD, the slack tendency in simple clawback and that in hybrid clawback was similar, with $p > 1.000$, so H1c could be rejected. These findings indicated the equality of the capabilities of simple and hybrid clawback to explain budgetary slack. Thus, this finding could be an early indication that hybrid clawback might be a smoother alternative compensation scheme without any penalty provisions, as its effectiveness was equal to simple clawback. The analysis in Table 3 shows that budget slack tended to be lower during a high feedback frequency condition than during a low one, with means of 0.475 and 0.055, respectively, and $p > 0.009$, so H2 was supported. The results showed that budgetary slack would be lower under high feedback frequency conditions than under low feedback frequency conditions; this suggested that individuals tended to create more budget slack when the feedback frequency was low, as the possibility of detecting potentially harmful variants was lower.

The analysis found that there was an interaction between prepayment contract frames and the frequency of the feedback, and budget slack, with $p > 0.003$. It also confirmed that prepayment contract frames affected budget slack more, while being well induced by the feedback's frequency. Therefore, H3 was supported. Further tests on the simple effect were conducted by applying the syntax ANOVA. The result clarified that during a low feedback frequency condition, the tendency to

create slack would be lower under clawback frames than under simple clawback and hybrid clawback conditions, with $p > 0.004$, so H3a was supported. In contrast, there was no difference in prepayment contract frames during a high feedback frequency condition because the cybernetic control was significant, with $p > 0.073$, so H3b was supported. It conveyed that although the previous test (H2) result concluded that a high feedback frequency was more useful to mitigate slack than a low one, the latter's effectiveness in reducing slack could be optimized and was equal to the first one, while prepayment contract frames accompanied it.

DISCUSSION

According to Kahneman (1991), the endowment effect may cause people to give up what they have. Individuals emphasize what they already have in hand; this encourages them to save it (Kahneman, 1991). In clawback frames, individuals are obliged to return all the incentives they have already received when failing to achieve the expected target. They are observed doing such a thing, thus potentially lowering the company's revenue. This makes individuals determined to achieve the set target without taking any actions that are potentially harmful to the company, such as slack, since the endowment effect makes them unwilling to return all the incentives that have been delivered initially. Clawback frames tend to be stronger in eliminating slack than simple clawback is, due to the higher penalty that obliges individuals to return all the incentives received. The value of the penalty is greater than the punishment of returning a percentage of the amount received. The finding of this research follows the prospect theory (Kahneman & Tversky, 1979), in that individuals will reject risks by minimizing slack, due to their presumption that they may earn some profit by saving the incentives they already

have. Besides, they also emphasize the stimuli individuals possess (Brink & Rankin, 2013). More attention is given to individuals who are eager to save incentives that have been delivered. Efforts to save the incentives received will motivate individuals to achieve the target and provide the best estimation to avoid slack, thus protecting the incentives already obtained. In line with the findings of research made by Erkans et al. (2018), most CEOs regard the return on the received compensation as expenditure (cost).

The return of all the received compensation will be more of a burden than returning half of what has been received. The finding supports the research findings by Erkans et al. (2018). Diaz et al. (2018), Liu et al. (2018), Mburu et al. (2018), and Hansen & Trego (2015) by explaining that the clawback frames condition with more substantial pressure has a greater deterrent effect than simple clawback, motivating individuals to create actions that follow the company's requirements and keep the compensation they have already received. It is in line with the principle of the endowment effect that individuals will take irrational actions to maintain their possessions that may be unworthy of others (Kahneman, 1991). Clawback frames emphasizing fines can have greater deterrent effects than higher bonuses by prepayment (hybrid clawback), decreasing the tendency to create slack.

Brink & Rankin (2013) indicate that simple clawback is more effective than a bonus. The bonus only system emphasizes giving another bonus regarding performance achievement without providing prepayment and giving some other form of compensation outside of what has been agreed on in the contract. Interestingly, our analysis also indicates no difference between simple and hybrid clawback in minimizing slack. The simple clawback emphasizes penalties,

whereas the hybrid clawback does not. Instead, it offers compensation outside of the prepayment. A hybrid clawback applies smoother regulation than a simple clawback for giving a penalty. Following Langevin & Mendoza (2013), a control system that can firmly pressure the manager to achieve the company's target may encourage individuals to make a violation. It proposes that through the application of a penalty, simple clawback may cause employees to make violations due to the pressure caused by receiving a penalty. Our analysis of our findings proved there was no difference between simple clawback and hybrid clawback, which might make hybrid clawback an effective alternative control mechanism, equal to simple clawback. Hybrid clawback can boost employees' confidence levels without putting them under high pressure, and it provides more looseness, contributing a lot to the company. Greenwood & Buren III (2010) reveal that confidence helps the fundamental element of moral behavior regarding the organization, positively affecting the organization itself. In addition, Mayer et al. (1995) add that employees will voluntarily take risks while trusting and being trusted by their organization's leader. Low pressure is one of the indicators and trust-boosters that influence individuals' loyalty. Individuals' trust, bonus compensation provisions outside the prepayment, and the absence of a penalty can trigger loyalty. Therefore, the equal capability of simple clawback and hybrid clawback states the company's critical role as the smooth control mechanism, rather than penalties, but it has similar effectiveness in mitigating dysfunctional behavior, such as slack.

The hypothesis t-test suggests that individuals have less of a tendency to create slack during a high feedback frequency condition than during a low one. The budgeting arrangement process puts individuals into uncertainty about

the best estimation that can be made. According to the principle of myopic loss aversion, while uncertain, individuals tend to avoid any risk. A high feedback frequency, rather than a low one, may create the possibility of a variant (slack) being detected. When people recognize variants that may harm the company, it will adversely affect the manager because the evaluator can seize them, creating slack. Therefore, the tendency to develop slack will be lower during a high feedback frequency. During a low one, they can avoid the risk of detecting potentially harmful variants due to slack programming. The research's finding follows Lee & Veld-Merkoulova's (2016) research, in that during uncertain conditions with a high evaluation frequency, individuals will engage in myopic behavior by avoiding risk and ignoring other profits that may be earned. Individuals attempt to avoid slack during a high feedback frequency condition to prevent the risk of variants being detected. The feedback can direct them to abandon the profits earned by creating slack, such as the ease of achieving the target due to the best estimation bias.

Furthermore, the findings also clarify that the feedback frequency moderates the effect of prepayment contract frames on slack. Here, the frequency is proven to be able to strengthen the results. The possibility of returning and losing the bonus outside the contract will be increased by providing feedback that enables the company to detect any harmful variant. It motivates individuals to keep the precompensation while implementing budget feedback control by avoiding slack. Therefore, the effects of the interaction between prepayment contract frames and the frequency of the feedback in cutting budget slack will be more reliable. The finding follows the research conducted by Chong & Ferdiansah (2012) and Malmi & Brown (2008),

who stated that sufficient formal control, such as feedback control, is necessary to minimize slack.

It is also in line with the prospect theory by Kahneman & Tversky (1979) and the endowment effect principle by Kahneman (1991), as individuals will attempt to rescue compensation they have received by minimizing any acts undesired by the company, such as slack. Besides, it also follows the principle of myopic loss aversion by Bernartzi & Thaler (1995). The regulation states that while uncertain and faced with a high feedback frequency condition, individuals will attempt to avoid the risk of a detected variant by minimizing slack and neglecting the highest profit they may earn (such as creating slack to smooth their attempt to achieve the company's target). The action is aimed at saving the compensation they have received or pursuing other compensation outside the contract by minimizing acts that potentially reduce the company's revenue, such as slack.

The result confirms that a high feedback frequency is more helpful in eliminating slack than a low one. Fosu et al. (2017) and Anderson (2009) conclude that monitoring involves high cost. Therefore, high feedback frequencies that effectively cut slack will face efficiency issues due to the high feedback cost. On the other hand, a low feedback frequency may not require monitoring costs that are as expensive as a high one, but it lacks effectiveness regarding the elimination of slack. Surprisingly, our further analysis of H3a defines a simple, beneficial interaction effect given to prepayment contract frames and a low feedback frequency in cutting slack. The effectiveness of a low feedback frequency in cutting slack will improve while being encouraged by prepayment contract frames triggered by endowment effects to save compensation, and compensation bonuses outside the agreed contract. The strong endowment effect can be used as one of the methods to

minimize the efforts to mitigate myopic loss aversion behavior by cutting slack, i.e., by reducing the feedback frequency. This research follows the research by Kahneman (1991) and the prospect theory by Kahneman & Tversky (1979), which says that individuals tend to save what they already have, utilizing their precompensation to conduct a more significant effort. It motivates them to eliminate slack, although they are put in a low feedback frequency condition. During a high feedback frequency condition, prepayment contract frames cut slack insignificantly. The intense pressure of a high feedback frequency, due to the increased possibility of detecting potentially harmful variants, strongly motivates individuals to avoid the risk of slack. Benartzi & Thaler (1995) define that individuals avoid risk during a high evaluation frequency condition and abandon the best profit. It also aligns with the research findings by Eriksen & Kvaly (2010) and Lee & Veld-Merkoulova (2016) that the high evaluation frequency will make individuals concerned about the risks.

CONCLUSION AND SUGGESTION

The research shows that the lowest slack was under the clawback frames during prepayment contract frames, then simple clawback and hybrid clawback conditions. This research finds that the effectiveness of simple clawback in minimizing slack was equal to that of hybrid clawback. Therefore, hybrid clawback could be a smoother alternative compensation scheme that is just as effective as simple clawback. With its efficacy equal to simple clawback, hybrid clawback might be an alternative management tool to prevent the possibility of slack due to intense controlling pressure, such as a penalty.

Following the myopic loss aversion, the feedback frequency is sufficient to minimize slack and strengthen the effect of prepayment

contract frames on slack. It is possible to detect harmful variants, such as slack, with a high feedback frequency. However, we should be concerned that a high feedback frequency's effectiveness, such as for detecting slack, may face efficiency problems due to the high monitoring cost paid by a company to obtain the feedback. Surprisingly, we found a simple, beneficial interaction effect that could minimize the damage of a high feedback frequency by optimizing the role of a low feedback frequency.

As with all laboratory experiments, the results of this experiment can be generalized only as far as its design captures essential aspects of the setting one wishes to understand. Firstly, this research mentions that the feedback frequency relies solely on manipulating a predetermined number of evaluations without any direct counter. We employ such a system because the study uses individual-level data and did not consider any negotiation role. Secondly, the assignment regards employers as the final authority stakeholders. Therefore, future researchers may consider using a dyad analysis level to implement the interaction between superiors and subordinates. Future research will assess the preference for inherent risks for each subject, which will have a significant impact on the research findings. Future researchers should also consider individual factors to filter slack tendencies, such as the moral level (Trevino, 1992), including moral reasoning and intensity. They also should consider some other individual characteristics excluded in this research.

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