

The Effect of Compensation Schemes, and Self-Efficacy on Slack Budgeting

Ade Elsa Betavia¹, Nayang Helmayunita², Mia Angelia Setiawan³

¹ Universitas Negeri Padang, Padang, Indonesia, ✉ elsabetavia@gmail.com

² Universitas Negeri Padang, Padang, Indonesia, ✉ nayang.helma@gmail.com

³ Universitas Negeri Padang, Padang, Indonesia, ✉ miaangelinasetiawan@gmail.com

Abstract

This study aims to examine the effect of compensation schemes, self efficacy and moral reasoning on slack budgeting. In this study the hypothesis is proposed that in the slack inducing compensation scheme the slack budgeting will be greater than using the truth inducing compensation scheme, then managers with low self efficacy will do slack budgeting compared to those with high self efficacy. The research design in this study was a quasi 2 x 2 laboratory experiment, with Accounting students who had sat in the 5th semester of Padang State University as lower level managers who participated in budgeting. The statistical method used to test the hypothesis is two-way ANOVA. This study provides results that the compensation scheme can affect slack budgeting actions, self efficacy has no effect on slack budgeting actions, and the interaction between slack inducing compensation schemes with low self efficacy has no effect on slack budgeting actions. The results of this study can contribute in the management accounting literature related to budgetary slack and its causal factors.

Keywords: *slack budgeting, compensation schemes, self-efficacy, moral reasoning*

Introduction

Some studies assume that budgetary slack action is an unethical action and can affect the performance of the company. This makes the main reason that research related to budgetary slack is still important to do to further explore the factors that could be the cause of this action. In addition, research related to budgetary slack with compensation scheme variables and self efficacy variables is rarely used. In addition, this study will also look at the influence of one's moral reasoning in making decisions related to budgetary slack.

In the management accounting literature, agency theory can provide an explanation of budget gaps. According to agency theory, there are differences in interests between principals as company owners and agents as managers of the company. The difference in interests is what drives the action to make a budgetary gap (budgetary slack) by the manager or agent, this can occur in the policy of compensation in accordance with the budget target.

According to Anggraeni (2016), compensation schemes consist of two, namely truth inducing and slack inducing, both schemes are often used in previous studies to see the relationship and their effects on the tendency of budgeting in conducting budget gaps. Anggraeni (2016) states that compensation using the slack inducing or fixed pay plus bonus scheme is a scheme where subordinates are paid a fixed salary plus a bonus if it can exceed the target set and without penalty (penalty). Production results are the same or less than the budgeted target, subordinates will receive compensation in the form of a fixed salary. Compensation using the truth inducing scheme or truth inducing pay scheme is a compensation payment scheme calculated based on the many salaries and bonuses received in accordance with the budgeted targets. The subordinate will receive compensation if the results of the achievement are the same as the actual budget target, if the achievement results exceed or are less than the actual budget target, a penalty will be imposed.

Steven (2002) shows that giving incentives / compensation influences budgetary slack. Stevens stated that compensation through slack inducing had a negative effect on budgetary slack. Furthermore According to Anggraeni (2016) the truth inducing and slack inducing compensation schemes affect the budgetary slack, the

slack inducing scheme influences the increase in bug bug slack, while the truth inducing effect on the lower budgetary slack decreases. Based on this explanation, the first hypothesis proposed is:

H₁: When the compensation given by the company is a slack inducing scheme, then the lower level managers will tend to carry out budgetary slack actions compared to when the company provides compensation with the truth inducing scheme.

In addition to agency theory, another theory that can help to explain budgetary slack is the planned behavior theory (TPB). This theory explains that a person will act and evaluate his actions based on the accessibility of their beliefs. Confidence in self ability is what is called self efficacy. Employees will evaluate their own personal abilities at the time of preparing a budget before they determine the budget targets that they will set. Someone with a high self-efficacy personality is believed to be able to reduce the tendency to do budgetary slack because before they set their performance targets, they have evaluated their own abilities, and are confident in achieving their own abilities. While employees with low self efficacy do not have a strong belief in their own abilities, so they will try to do a budgetary slack.

According to Abdullah (2013), in the preparation of the budget, high self-efficacy can reduce the tendency of budgetary slack practices carried out by the budget makers, whereas low self-efficacy will encourage managers to create a budgetary slack. Lower level managers who have high self efficacy tend to be able to achieve budget targets, while lower level managers who have low self efficacy are not sure in achieving budget targets so they do budgetary slacks to make it easier to achieve budget targets. Based on the explanation above, the second hypotheses that can be submitted are as follows:

H₂: Lower level managers who have low self efficacy will tend to do budgetary slack compared to those who have high self efficacy.

In the truth inducing compensation scheme, bonus compensation will be given if the achievement results are the same as the actual budget target, if the achievement results exceed or are less than the actual budget target, a penalty will be imposed. This can encourage subordinates to set budget targets according to their true abilities, and try to meet the budget targets so that they get compensation without reducing basic salary. However, the slack inducing scheme is calculated based on a fixed salary plus a bonus if the lower manager exceeds the target, but if the work result is below or equal to the budget target, then there will be no penalty.

Self efficacy which is a belief in one's ability will affect the budgetary slack. Subordinates who have low self efficacy tend to be less confident in being able to carry out their duties. This low self efficacy can cause budgetary slack, because subordinates tend not to think about achieving targets but to think of ways to get compensation so as to increase their basic salary.

The above statement can be related that lower level managers who have low self efficacy when slack inducing compensation schemes will be more likely to do budgetary slack because they feel unable to with their own abilities compared to those who have high self efficacy. Based on the explanation above, the third hypothesis proposed is as follows:

H₃: When a company establishes a slack inducing compensation scheme, lower level managers who have low self efficacy will do slack budgeting compared to lower level managers who have high self efficacy.

Methods

Subjects in this study were students majoring in Accounting, Faculty of Economics, State University of Padang in 2016. Students were selected as samples because they considered that after graduating from S1 they could enter the workforce and would become employees in an organization. Students are also quite relevant if used as a subject in experimental research.

This research is a quasi-experimental research. The quasi-experimental design in this study is a 2 x 2 factorial design. The first independent variable consists of a compensation scheme consisting of truth inducing and slack inducing, and the second independent variable is self efficacy consisting of high and low self efficacy.

This study uses an instrument adopted from Chong and Loy (2015) for budgetary slack variables, compensation schemes, and self efficacy. The instruments in this study consisted of six types, namely the first sheet containing an overview of the tasks and participant's personal data. The second part contains the key task code that participants must know in order to be able to do the next work paper. The third part is the learning session, this is useful to find out whether participants understand the instructions that researchers have explained. The fourth part is the training session or production task 1 to find out the abilities possessed by the participants as well as to set the standard of the amount of production desired by the manager (researcher). The fifth and sixth parts in a row are the results of training sessions and estimation of reward points or targets for subsequent work assignments. The last part is the work session used to measure the actual performance or output.

Hypotheses 1, 2, and 3 submitted will be tested using analysis of variance (ANOVA). The hypothesis will be accepted if the two-way ANOVA results show a p-value of less than or equal to 0.05.

Results and Discussion

1. Manipulation Check

The experiments in this study were carried out three times, with a total of 95 participants. The results of the manipulation check analysis showed the results that as many as 92 participants had passed the manipulation check, so as many as 3 people did not pass the manipulation check. This can happen because the participant 2 people do not complete all stages of the given task, and one participant answers incorrectly in the manipulation check question.

Experimental Group	Number of Participants	Number of participants who failed to continue the experiment	The number of participants continued the experiment
Group 1	29	2	27
Group 2	23	-	23
Group 3	21	-	21
Group 4	22	1	21
Total	95	3	92

2. Descriptive Statistics

Table 2 below illustrates the demographic characteristics of participants based on groups for which data can be used in experiments. From this table it can be seen that the majority of participants were women, as many as 72 people (78.26%). In groups 1 to group 4 more dominated by female participants. From this table it can also be seen that all participants are in semester 5 (100%).

Table 2. Demographic Characteristics

Experimental group	Number of participants who continue the experiment	Gender	Semester
group 1	27 people	female: 23 people (85,19%) male: 4 people (14,81%)	Semester 5: 27 people (100%), semester 7: 0 (0%)
group 2	23 people	female: 16 people (69,57%) male: 7 people (30,43%)	Semester 5 : 23 people (100%), Semester 7 : 0 (0%)
group 3	21 people	female: 14 people (66,67%) male: 7 people (33,33%)	Semester 5: 21 people (100%), semester Semester 7 : 0 (0%)
group 4	21 people	female: 19 people (90,48%) male: 2 people (9,52%)	Semester 5: 21 people (100%), semester 7: 0 (0%)

3. Hypothesis Test

The dependent variable tested in this study is slack budgeting. While there are two independent variables in this study, namely the compensation scheme and self efficacy. The compensation scheme is divided into two situations, namely truth inducing and slack inducing. The truth inducing compensation scheme is illustrated that compensation is calculated based on the fixed salary received by the participant in the amount of IDR. 20,000. If the work results are in accordance with the target set, then the participant will get a bonus of IDR. 5,000. However, if the work output exceeds the production budget target or is less than the target, the fixed salary will be reduced by IDR 5,000. The slack inducing compensation scheme is illustrated where participants will be given a fixed salary of IDR. 20,000, plus a bonus of IDR 5,000 for work that passes the budget target, if the work result is less or equal to the budget target, then there is no penalty.

The self efficacy variable uses measurements used by Ardiyani (2017), where in the Ardiyani study participants were divided into two groups of self efficacy. The first group, participants who can achieve the budget target are grouped into high self efficacy, and group two participants who cannot reach the budget target are grouped into low self efficacy.

Normality test is performed to determine whether the data in this study are normally distributed. The results of normality testing with the Kolmogorov-Smirnov Test show the Asymp value. Sig is 0.065, this value is above α 0.05 (table 3). So with these results it can be said that the data is normally distributed so that it meets one of the assumptions of analysis of variance (ANOVA).

Table 3.
Normality Test

		BS
N		92
Normal Parameters ^a	Mean	-.0066
	Std. Deviation	1.01435
Most Extreme Differences	Absolute	.137
	Positive	.137
	Negative	-.121
Kolmogorov-Smirnov Z		1.310
Asymp. Sig. (2-tailed)		.065

a. Test distribution is Normal.

Homogeneity of variance tests were also conducted to find out whether all four groups (groups 1,2,3 and 4) had the same variant. Statistical test results showed the value of the statistical levene of 0.061 values were above 0.05 (table 4). This shows that each group of subjects meets the same variant so that it meets the ANOVA assumption (Hair et al, 2006).

Table 4.
Levene's Test of Equality of Error Variances^a

Dependent Variable:BS

F	df1	df2	Sig.
2.550	3	88	.061

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + SK + SE + SK * SE

Based on the results in table 5, it can be concluded that there is a difference in the average value of slack budgeting, with an F value of 1.384 with a significance value of 0.253. In table 5 this is also used for testing hypotheses 1, 2, and 3.

Table 5.
Tests of Between-Subjects Effects

Dependent Variable:BS

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.218 ^a	3	1.406	1.384	.253
Intercept	.000	1	.000	.000	.989
SK	4.192	1	4.192	4.125	.045
SE	.016	1	.016	.016	.900
SK * SE	.000	1	.000	.000	.986
Error	89.414	88	1.016		
Total	93.635	92			
Corrected Total	93.631	91			

a. R Squared = .045 (Adjusted R Squared = .012)

The first research hypothesis (H1) predicts that when the compensation provided is a slack inducing scheme, then lower level managers will tend to take budgetary slack actions compared to when companies compensate with the truth inducing scheme. The results of testing the data in table 5 show that the compensation scheme can influence slack budgeting actions with a value of $F = 4.125$ with a significance level of 0.045 (truth inducing scheme in cases 1 and 3, with slack inducing cases 2 and 4). So it can be concluded that the compensation scheme has a significant effect on slack budgeting actions. This shows that the first hypothesis can be accepted.

The second hypothesis (H2) predicts that lower level managers who have low self efficacy will tend to do slack budgeting compared to those who have high self efficacy. The test results in table 5 show that the level of self efficacy cannot affect the tendency to take action slack budgeting with a value of $F = 0.016$ with a significance level of 0.900 (high self efficacy cases 1 and 2 with low self efficacy cases 3 and 4). So it can be concluded that self efficacy does not affect lower level managers to take action slack budgeting. This shows that the second hypothesis is rejected.

The third hypothesis states that when companies establish a slack inducing compensation scheme, lower level managers who have low self efficacy will do slack budgeting compared to lower level managers who have high self efficacy. The test results in table 5 show that the F value is 0.00 with a significance level of 0.989. This shows that the third hypothesis cannot be accepted.

4. Discussion

The first hypothesis states that when the compensation provided by the company is a slack inducing scheme, then the lower level managers will tend to take action budgetary slack compared to when the company provides compensation with the truth inducing scheme. Based on the results of the processed data shows a significance value of 0.045, this shows that the first hypothesis can be accepted. This result is in accordance with the results of Anggraeni's (2016) study which states that compensation using the slack inducing or fixed payplus bonus scheme is a scheme where subordinates are paid a fixed salary plus a bonus if it can exceed the target set and without penalty (penalty). Production results are the same or less than the budgeted target, subordinates will receive compensation in the form of a fixed salary.

Waller (1988) states that the budget is used to encourage or motivate subordinates to work to maximize their performance. Motivation of subordinates can be done by giving awards, gifts, praise, or compensation and bonuses. According to Scott (2015: 22) the role of executive compensation planning in motivating and controlling the company's management operations. Subordinates have different perceptions and the need for compensation, so superiors consider the compensation method or scheme used.

The second hypothesis states that lower level managers who have low self efficacy will tend to do budgetary slack compared to those who have high self efficacy. Based on the results of data analysis, a significance value of 0.900 is obtained, this means that the second hypothesis is rejected. The results of this study are not in line with research conducted by Abdullah (2013) which states that in the preparation of the budget, high self-efficacy can reduce the tendency of budgetary slack practices carried out by budget makers, on the contrary low self-efficacy will encourage managers to create a budgetary slack. Based on statistical tests the variable self efficacy does not affect lower level managers to act slack budgeting. This shows that between lower level managers who have a high level of confidence with lower level managers who have a low level of confidence does not affect slack budgeting actions.

The third hypothesis states that when companies establish a slack inducing compensation scheme, lower level managers who have low self efficacy will do slack budgeting compared to lower level managers who have high self efficacy. Based on statistical tests obtained a significance value of 0.986, this means that the third hypothesis was rejected. The results of this study give the meaning that when there is a situation of slack inducing compensation scheme, there is no difference between lower level managers who have a high level of confidence with lower level managers who have a low level of confidence in carrying out slack budgeting actions.

Conclusions

Based on the results of the analysis that has been done before, the researcher can conclude that: (1) Compensation schemes can affect the slack budgeting actions undertaken by lower level managers. (2) Self efficacy has no effect on slack budgeting actions undertaken by lower level managers. (3) The interaction between the situation of the slack inducing compensation scheme with managers who have low self efficacy does not affect the slack budgeting action.

This study has several limitations, including: (1) The case in this experiment is presented in the form of an illustration which is a simplification of situations and conditions in the real world. So the cases presented in the experimental instruments do not fully reflect the cases that occur in the field. (2) There are still participants who do not understand the research procedures, so there are still participants who do not pass the manipulation test. (3) Generalization of research results that are still limited due to limited research participants are only undergraduate students of the Department of Accounting, Faculty of Economics, UNP.

For the next research, some suggestions that might be given are: (1) The treatment given to participants might be more developed so that participants can understand the entire research procedure. (2) Research participants who might be more broadened so that research results can be generalized. (3) Future research might add other relevant variables.

References

- Abdullah, I. (2013). The Influence of Horizontal Equity, Self Efficacy, and Ethical Position on the Creation of Budgetary Slack. *Disertasi*. Virginia Commonwealth University.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 179-211.
- Anggraeni, A. (2016). Pengaruh Self Esteem, Etika, Skema Kompensasi Slack Inducing dan Truth Inducing serta Asimetri Informasi terhadap Budgetary Slack: Study Eksperimen pada Konteks penganggaran Partisipatif. *Skripsi*. Fakultas Ekonomi Universitas Negeri Yogyakarta.
- Apriantini, N. K., Adiputra, M. P., & Sujana, E. (2014). Pengaruh Partisipasi Anggaran terhadap Senjangan Anggaran dengan Penekanan Anggaran dan Komitmen Organisasi sebagai Variabel Moderating. *JIMA Undiksha*, Vol. 2, No. 1.
- Ardiyani, F., & Sukirno. (2017). Pengaruh Self Efficacy, Reward and Punishment, dan Asimetri Informasi terhadap Budgetary Slack: Studi Eksperimen pada Konteks Penganggaran Partisipatif. *Jurnal Nominal*, Vol. 6 No.1 : 66-80.
- Bitlinandas, F., Kamaliah, & Susilatri. (2018). Pengaruh Partisipasi Anggaran, Penekanan Anggaran, dan Asimetri Informasi terhadap Budgetary Slack dengan Ketidakpastian Lingkungan sebagai Variable Moderasi (Studi Empiris pada OPD Kabupaten Kampar Tahun 2018). *Jurnal Online Mahasiswa*, Vol. 1 No.1.
- Chong, V. K., & Loy, C. Y. (2015). The Effect of A Leader's Reputation on Budgetary Slack. *Advances in Management Accounting*, Vol. 25 : 49-102.
- Chong, V. K., & Sudarso, D. (2017). The Effect of Organizational Ethical Climate and Peer Monitoring Control Systems on Budgetary Slack: An Experimental Study. *Asia-Pacific Management Accounting Journal*, Volume 11 Issue 2, 42.
- Damayanti, G. A., & Wirasedana, W. P. (2014). Pengaruh Partisipasi Anggaran, Reputasi, dan Etika pada Kesenjangan Anggaran pada SKPD di Pemerintahan Kota Denpasar. *E-Jurnal Akuntansi Universitas Udayana*, Vol. 9, No. 1 : 133-142.
- Dunk, A. S. (1993). The Effect of Budget Emphasis and Information Assymetry on The Relation between Budgetary Participation and Slack. *The Accounting Review*, 400-410.
- Dwisariasih, J. (2013). Pengaruh Asimetri Informasi, Budaya Organisasi, dan Kohesivitas Kelompok terhadap Hubungan Partisipasi Anggaran dan Kesenjangan Anggaran. *Skripsi*. Fakultas Ekonomi Universitas Negeri Padang.
- Efrilna, P. (2018). Pengaruh Skema Pemberian Insentif dan Tanggung Jawab Personal terhadap Budgetary Slack. *Fakultas Ekonomi Universitas Negeri Padang*.
- Falikhatus. (2007). Interaksi Asimetri Informasi, Budaya Organisasi, dan Group Cohesiveness dalam Hubungan antara Partisipasi Penganggaran dan Budgetary Slack (Studi Kasus pada Rumah Sakit Umum Daerah se-Jawa Tengah. *Simposium Nasional Akuntansi (SNA) X*, Makassar (26-27 Juli 2007).
- Hobson, J. L., Mellon, M. J., & Stevens, D. E. (2011). Determinants of Moral Judgements Regarding Budgetary Slack: An Experimental Examination of Pay Scheme and Personal Values. *Behavioral Research In Accounting*, Vol. 23 No.1 : 87-107.
- Innocenti, S., & Cowan, R. (2019). Self-Efficacy Beliefs and Imitation: A Two-Armed Bandit Experiment. *European Economic Review*, 1-37.
- Kohlberg, L. (1969). *Stage and Sequence: The Cognitive-Development Approach Moral Action to Socialization*. Chicago: Rand McNally.

- Nugraheni, T. S., & Sugiri, S. (2004). Pengaruh Reputasi, Etika, dan Self Esteem Subordinat terhadap Budgetary Slack di bawah Asimetri Informasi. *Journal of Indonesian Economy and Business*, Vol. 19 No. 4 : 375-388.
- Prabandari, S. P., & Sholihah, P. I. (2014). The Influence of Theory of Planned Behavior and Entrepreneurship Education Towards Entrepreneurial Intention. *Journal of Economics, Business, and Accountancy Ventura*, Vol. 17 No. 3 : 385-392.
- Priyetno, A. (2018). Pengaruh Partisipasi Anggaran terhadap Budgetary Slack dengan Gaya Kepemimpinan dan Pertimbangan Etika sebagai Variabel Moderasi. *Jurnal Akuntansi Fakultas Ekonomi Universitas Negeri Padang*, Vol. 6, No. 1.
- Puspita, L. M., & Lubis, I. R. (2017). Pengaruh Reputasi Pemimpin terhadap Budgetary Slack dengan Kejujuran sebagai Variabel Intervening: Sebuah Eksperimen. *Simposium Nasional Akuntansi (SNA) XX*, Jember 1-14.
- Rest, J. R., Narvaez, D., Thoma, S. J., & Bebeau, M. J. (2000). A Neo-Kohlbergian Approach To Morality Research. *Journal of Moral Education*, 381-395.
- Rifqi, R. A., Subekti, I., & Rahman, A. F. (2017). The Effect of Budgetary Participation to Budgetary Slack With External Pressure As Moderating Variable. *Journal of Accounting and Business Education*.
- Sampouw, C. E. (2018). Experimental Study: The Influence of Pay Scheme and Personal Value to Budgetary Slack. *Journal of Applied Management*, Vol. 16 No. 4 : 614-621.
- Savitri, E., & Sawitri, E. (2014). Pengaruh Partisipasi Anggaran, Penekanan Anggaran, dan Informasi Asimetri terhadap Timbulnya Kesenjangan Anggaran. *Jurnal Akuntansi*, Vol. 2 No. 2.
- Scott, W. R. (2015). *Financial Accounting Theory. 7th Edition*. Canada: Pearson Canada.
- Sprinkle, G. B. (2003). Perspectives on Experimental Research in Managerial Accounting. *Accounting, Organizations, and Society*, 287-318.
- Stevens, D. E. (2002). The Effects of Reputation and Ethics on Budgetary Slack. *Journal of Management Accounting Research*, 153-171.
- Sugiyono. (2017). *Metode Penelitian Kombinasi*. Bandung: Alfabeta.
- Suharyadi, & Purwanto. (2017). *Statistika untuk Ekonomi dan Keuangan Modern*. Jakarta: Salemba Empat.
- Waller, W. S. (1988). Slack in Participative Budgeting: The Join Effect of A Truth-Inducing Pay Scheme and Risk Preferences. *Accounting, Organizations, and Society*, Vol. 13 No. 1 : 87-98.
- Weitzman, M. L. (1976). The New Soviet Incentive model. *The Bell Journal of Economics*, 251-257.
- Wirjono, E. R., & Raharjono, A. B. (2007). Pengaruh Karakteristik Personalitas Manajer terhadap Hubungan antara Partisipasi dalam Penyusunan Anggaran dengan Kinerja Manajerial. *Jurnal Kinerja*, Vol. 11 No.1 : 50-63.
- Young, S. M. (1985). Participative Budgeting: The Effects of Risk Aversion and Asymmetric Information On Budgetary Slack. *Journal of Accounting Research*, 829-842.