

# DO LEADERSHIP STYLES MODERATE THE RELATIONSHIP OF ORGANIZATIONAL COMMITMENT AND BUDGETARY SLACK? AN EXPERIMENTAL APPROACH

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## ABSTRACT

**Introduction:** this study aims to provide empirical evidence of the factors that can mitigate and encourage budgetary slack. Specifically, this study examines the effect of affective organizational commitment on budgetary slack with the style of leadership as a moderating variable. **Background Problems:** budgetary slack is an unethical action that often occurs in companies and little attention is given to companies that experience losses, especially when it is related to the suboptimal allocation of resources. **Novelty:** Previous studies paid little attention to the direct relationship between affective organizational commitment and budgetary slack. They were limited to investigating the correlation between affective organizational commitment and budgetary slack. This study provides evidence of causality between the two and includes the style of leadership as a moderating factor. **Research Methods:** This research is conducted through an experimental approach using a 2 x 2 between-subjects design. The participants of this research are 64 from the Master of Management (MM) program at Gadjah Mada University (UGM). **Findings:** The result of this study indicates that middle managers with high affective organizational commitment create a smaller budgetary slack than the middle managers with low affective organizational commitment. However, the leadership style is not proven to moderate the relationship between affective organizational commitment and budgetary slack. **Conclusion:** These findings provide theoretical evidence of the self-determination theory that an individual with high affective organizational commitment creates a smaller budgetary slack than an individual with low affective organizational commitment. Therefore, companies need to pay more attention to their employees' commitment.

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## ARTICLE INFO

### *Article history:*

Received 13 January 2018

Received in revised form  
28 January 2019

Received in revised form  
26 May 2019

Received in revised form  
8 July 2019

Accepted 12 July 2019

### *Keywords:*

budgetary slack, affective organizational commitment, supervisor's leadership style

### *JEL Code:*

C91, D21, M41

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## INTRODUCTION

This study investigates the factors that can mitigate or encourage budgetary slack. This is relevant to the practice of budgetary slack, which is an unethical action that often occurs in companies, and little attention is given to companies that experience losses from it, especially when it is related to their suboptimal allocation of resources, where there is a misrepresentation of information within the company through the occurrence of budgetary slack (Steven, 2002; Hobson et al., 2011; and Maiga and Jacobs, 2008). Budgetary slack can occur when middle managers deliberately lower their abilities, or their business units' capabilities to reach the target, during setting a budget target (Hobson et al., 2011). Budgetary slack is considered unethical because it is not in accordance with the norms and traits desired by managers and professional accountants (Maiga and Jacobs, 2008). These practices are often conducted by managers running the production, development, and marketing departments. They take these actions because of the pressure from upper managers to achieve budget goals to survive uncertainty (Davis et al. 2006). In this study, middle managers are assumed to be responsible for setting a budget target and upper managers are responsible for approving the final budget.

From the accounting perspective, budgetary slack has dangerous consequences for future profits or upcoming costs, it can harm the upper manager's resources because of the transfer to the middle managers, and the loss of upper managers' trust to middle managers because of actions taken by middle managers (Huang and Chen, 2010; Kung et al., 2013; Hobson et al., 2011; Gago-Rodríguez & Naranjo-Gil, 2016). Therefore, research into budgetary slack is needed, because budgetary slack is a detrimental act to a company and it needs to be mitigated.

Unethical actions, specifically budgetary slack, have been investigated by researchers and academics. Those studies contribute theoretically or practically to mitigating budgetary slack. Research into budgetary slack begins by testing to find the link between the behavioral perspective and affective organizational commitment with budgetary slack (Nouri and Parker 1996; De Baerdemaeker and Bruggeman, 2015; Nouri and Kyj, 2015) and connecting the reputation, trust, or pressure from upper managers to budgetary slack (Davis et al., 2006; Chong and Loy, 2015; Gago-Rodríguez & Naranjo-Gil, 2016). Nouri and Parker (1996) find that middle managers with high affective organizational commitment will employ participative budgetary skills to decrease budgetary slack, whereas subordinates with low affective organizational commitment will employ participative budgetary methods to increase budgetary slack. De Baerdemaeker and Bruggeman (2015) find that a high affective organizational commitment can decrease the occurrence of budgetary slack. Thus, we believe that the level of commitment is important to the company and should be examined in more depth, because the commitment of a company's members affects their company's achievements. Therefore, we aim to expand the research of De Baerdemaeker and Bruggeman (2015).

This research was conducted in Indonesia, while De Baerdemaeker and Bruggeman (2015) conducted research in Western Europe. So far, any direct relationship between affective organizational commitment and budgetary slack has not been adequately examined in the prior research. Several studies related to budgetary slack in Indonesia include: testing the influence of reputation on the relationship between information asymmetry and budgetary slack under truth-inducing compensation methods (Brahmayanti and Sholihin, 2006); testing the

effect of compliance and perceived responsibility on creating budgetary slack (Grediani and Sugiri, 2010); testing budget participation and budget target clarity on budgetary slack with information on asymmetry, organizational commitment, and budget emphasis as moderating variables (Murtin and Septiadi, 2012); testing whether career uncertainty moderates the relationship between participative budgeting and budgetary slack (Widanaputra and Mimba, 2014); testing the effect of budgetary participation on budgetary slack with information asymmetry, budget emphasis and organizational commitment as moderating variables (Irfan et al., 2016); testing participative budgeting, budgetary slack and job satisfaction in the public sector (Kahar et al., 2016); and investigating whether a shared financial interest in the creation of slack, another employee's awareness regarding misreporting, and perceived fairness affect a manager's honesty in the budget's reporting using a management theory (Rosdini, 2016). Research by Murtin and Septiadi (2012), Irfan et al. (2016) used organizational commitment as a moderating variable. Their results prove that high organizational commitment has a negative influence on the relationship between budget participation and budgetary slack and vice versa. However, the organizational commitment that they examined does not specify the components of organizational commitment used. Meyer and Allen, (1991) say that there are three components of organizational commitment: affective organizational commitment, continuance (sustainability), and normative. We believe that organizational commitment needs to be specifically studied.

The commitment shown by workers is closely related to the leadership style possessed by their superiors. This is in line with the social learning theory, which states that subordinates tend to reflect the behavior of their superiors

(Bandura, 1971). Ceri-Boomset al. (2017) states that leadership is the largest research area related to organizational behavior, because it has important implications that contribute toward the performance of individuals, teams and organizations. Kleine and Weißenberger (2014) find that the leadership style is one of the driving factors that encourages subordinates' organizational commitment. Dale and Fox (2008) state that the style of leadership plays an important role in increasing or decreasing the effect of a stressful working situation and determines the middle managers' commitment toward the company. Thus, the leadership style has a major influence in directing the workers' commitment to encourage or mitigate the budgetary slack behavior.

Specifically, this research is conducted for several reasons. Firstly, there is a need for further research into the area of budgetary slack, as it relates to affective organizational commitment. Only a few researchers examined the commitment of affective organizations in the area of budgetary slack (Nouri and Parker 1996; De Baerdemaeker and Bruggeman, 2015). Meyer et al. (2002) state that affective organizational commitment is the best predictor of working criteria, compared to the continuance and normative commitment. The argument is in accordance with the research from Nouri and Parker (1996), Lau and Moser (2008), Lerroy et al. (2012), and De Baerdemaeker and Bruggeman (2015) who all employed affective organizational commitment variables in their research. However, this research only employs affective organizational commitment. Secondly, as far as we know, the previous research did not discuss the style of leadership and budgetary slack in any great depth. The following are some of the studies carried out in the accounting area that investigate the style of leadership, and some of them investigate leadership toward budgeting

(Brownell, 1983 and Kyj and Parker, 2008); or choices of the design of a control system (Abernethy et al., 2010); the working attitude, such as a clear vision and fair assessment (Hartmann et al., 2010); and fair procedures and a fair distribution through participative budgetary and organizational commitment (Kohlmeyer et al., 2014). Widyaningsih (2011) has examined whether the leadership style influences the relationship between budget participation and budgetary slack. She conducted a study of 62 people who acted as heads of various different sections of Bandung SKPD by distributing questionnaires. She used two leadership styles, namely relationship-oriented and task-oriented. The results of her research show that participative budgeting had an effect on budgetary slack, meaning that the higher the level of participative budgeting, the higher was the occurrence of budgetary slack. Meanwhile, the leadership style is not proven to moderate the relationship between participative budgeting and budgetary slack.

Stogdill and Coons' (1957) in Abernethy et al. (2010) proposed two types of leadership styles. They are the consideration style of leadership (relationship-oriented) and the initiating style of leadership (task-oriented). Task-oriented and relationship-oriented leadership styles represent the daily behavior of a leader among all the other types of leaders (Holtz and Harold, 2013). Holtz and Harold (2013) examined the effect of task-oriented and relationship-oriented leadership toward unproductive working behavior. They find that a leader who is highly task-oriented and has little relationship-oriented behavior causes unproductive behavior among the workers. They also state that unproductive behavior is dangerous to the company because that deviates from the company's norms. Unethical working behavior includes stealing, disobedience, verbal abuse,

physical assault, and secrecy. They state that further research can investigate other unethical working behavior, such as stealing personal data, disobedience, and formal loss. Therefore, we interpret that the leadership style is an important factor which can influence the relationship of the affective organizational commitment possessed by a company's workforce, especially for budgetary slack actions.

Based on the motivation for the research described above, this study specifically aims to, first, examine the effect of affective organizational commitment on budgetary slack, and second, examine whether the style of leadership can moderate the relationship of affective organizational commitment with budgetary slack. The results of this study indicate that the middle managers with high affective organizational commitment create smaller budgetary slack than the subordinates with low affective organizational commitment. However, the leadership style is not proven to moderate the relationship between affective organizational commitment and the budgetary slack.

This research makes several contributions, as follows. Firstly, this research contributes theoretically by successfully finding supportive evidence that an individual with high affective organizational commitment will create less budgetary slack than an individual with low affective organizational commitment. The difference between this research and the previous research is that it successfully proves causality between affective organizational commitment and budgetary slack through the use of an experimental method. Secondly, it contributes practically to companies by suggesting that they need to pay more attention to their employees' commitment. It is hoped that the companies can create systematic procedures for their employees' recruitment and resource management, in order to lessen unethical

working behavior; the occurrence of budgetary slack is an example of one such behavior. Thirdly, it contributes academically as the result of the study provides references for further research related to budgetary slack.

This part has explained the issues, problems, motivations and the aims of the research. The following part will explain the background to the research, the theories about budgetary slack, affective organizational commitment, managers' styles of leadership, and the logic that serves as the basis for the formulation of the hypotheses. Then, the experiment's procedures that will be used to test the hypotheses of this research will be explained, and this is followed by a discussion of the results. Finally, the last part will provide the conclusions of the research, any limitations of the research, and recommendations for further research.

## **LITERATURE REVIEW**

### **1. Budgetary Slack**

Budgetary slack is an action where managers refuse to invest any effort during participative budgeting sessions. They tend to focus on a budget that requires the least effort to achieve the best compensation for them, based on their budget (Gago-Rodríguez and Naranjo-Gil, 2016). Budgetary slack will benefit the lower-level managers, but harm their upper managers, because they deliberately do less than they are capable of. They will propose lower budget targets than the actual target they can achieve to their upper managers. This can occur because of an information asymmetry, which is the difference in the information obtained between agents (middle managers) and principals (upper managers) (Merchant, 1985; Chow et al., 1988; and Fisher et al., 2002a, 2002b). Agents have more information than principals so that the principal cannot monitor the real capabilities or

the potential possessed by the agent. Private information will be used as a control in this study. In this study, middle managers are assumed to be responsible for setting a budget target and upper managers are responsible for approving the final budget.

From an accounting perspective, budgetary slack has dangerous consequences for future profits or upcoming costs, harming the upper managers' resources because of the transfer to the middle managers, and losing the upper managers' trust to middle managers because of actions taken by middle managers (Huang and Chen, 2010; Kung et al., 2013; Hobson et al., 2011; Gago-Rodríguez & Naranjo-Gil, 2016). Thus, high levels of budgetary slack can be detrimental to the company and need to be investigated.

Some of the researchers employ agency theory to explain the existence or the occurrence of budgetary slack (Merchant, 1985; Young, 1985; Chow et al., 1988; Chow et al., 1991; and Fisher et al., 2002a, 2002b). They find that agents tend to ignore their company's interests and favor their personal interests. Various studies, such as those by Nouri and Parker (1996), De Baerdemaeker and Bruggeman (2015), and Nouri and Kyj (2015) have been conducted in relation to budgetary slack in the behavioral accounting area, to try to mitigate this budgetary slack which is linked to organizational commitment. The potential for research in the behavioral domain for organizational interests can still be expanded in various contexts. We employ commitment and leadership styles as factors to test both the high and low levels of budgetary slack in companies. In contrast, the previous studies did not consider that the leadership style influenced the relationship of organizational commitment with budgetary slack.

## 2. Organizational Commitment

Organizational commitment is defined as an individual's relative strength of mind to become part of an organization/company (Porter et al., 1974; and Kleine and Weißenberger, 2014). It can be seen in at least three factors, namely: a strong belief in the company's purpose and values, a willingness to make an adequate effort on behalf of the company, and a strong motivation to maintain his/her membership of the company (Mowday et al., 1979; and Kleine and Weißenberger, 2014). This implies that commitment is an important factor that needs to be taken into consideration for the success of an company.

There are three components of commitment, namely: affective, continuance, and normative commitment (Meyer and Allen, 1991; Ketchand and Strawser, 2001; Wong-On-Wing et al., 2010; Wallace et al., 2011; and Wallace et al., 2013). Firstly, the affective commitment includes the employees' emotions, identification, and participation in the company (a commitment that is based on an individual's willingness to do something). Secondly, the continuance commitment is possessed by employees and is based on their calculations of what happens to them if they leave the company (cost based commitment). Third, the normative commitment is a commitment where employees remain with the company because they feel they have an obligation.

Researchers will only test the commitment of affective organizations because affective organizational commitment is the best predictor among the working criteria, compared to the continuance (sustainability) and normative commitments (Meyer et al., 2002). A high level of affective commitment is characterized by participation, a feeling of pride, and loyalty to the company (Rousseau and Aubé, 2010). Thus, the middle managers with high levels of

affective organizational commitment will act in accordance with the company's norms, which are in line with their own personal norms. They also tend to be loyal to the company in which they work. Their loyalty prevents them from doing unethical acts such as creating budgetary slack. On the other hand, the middle managers with low levels of affective organizational commitment tend to be less loyal; moreover, they have a greater possibility of doing something unethical, such as creating budgetary slack.

## 3. Task-Oriented and Relationship-Oriented Leadership Style

The style of leadership employed is a key factor in encouraging the development of subordinates' organizational commitment (Kleine and Weißenberger, 2014). The subordinates' behavior reflects their leaders' behavior (Anthony and Govindarajan, 2007). This is in line with the Bandura's social learning theory which states that subordinates tend to reflect on the behavior of their superiors (Bandura, 1971). Consequently, the leadership style used by the superiors has a major influence on the level of commitment possessed by their subordinates and on the actions taken by subordinates with regard to the company and its demands.

Managers have diverse leadership styles. We employ two leadership styles from Ohio State University's research namely: the consideration leadership style (relationship-oriented) and the initiating leadership style (task-oriented). The relationship-oriented leadership style shows the extent to which leaders involve their subordinates when making decisions, do they consider opinions from their subordinates, and show concern for their welfare (Stogdill and Coons' 1957 in Abernethy et al., 2010). Relationship-oriented leaders act in ways that are friendly and supportive and show concern for their subordinates' needs and feelings (Yukl, 2010). For

example, doing personal assistance for middle managers, finding time to listen to their problems, defending them, consulting them on important issues, being willing to accept their suggestions, and treating them fairly. Fernandez (2008) finds that relationship-oriented leaders are positively related with the workers' job satisfaction and performance. This happens because relationship-oriented leaders can improve the communication and cooperation among their subordinates. This type of leader is able to encourage those qualified staff below him/her to participate in deciding on a budget (Kyj and Parker, 2008).

On the other hand, a task-oriented leadership style shows the extent to which top management (leaders) designate the work environment by implementing uniform procedures and defining people's roles and responsibilities (Stogdill and Coons' 1957 in Abernethy et al., 2010). Task-oriented leaders define and structure their roles and the roles of those below them toward achieving tasks (Yukl, 2010). For example, giving assignments to their subordinates, maintaining definite standards of performance, asking their subordinates to follow standardized procedures, emphasizing the importance of meeting deadlines, criticizing bad work, and coordinating the activities of different subordinates. Fernandez (2008) finds that task-oriented leaders are positively related with their work units' performance, but are not related to job satisfaction. This happens because the subordinates feel task-oriented leaders are considered to be impersonal, excessive, authoritarian, and dictatorial. This perception ultimately lowers morale and the workers' satisfaction. In line with Holtz and Harold (2013), they found that leaders who have a high level of task orientation and low relationship orientation cause unproductive behavior among the workers. Thus, the upper manager who applies a high

task-oriented leadership style will be seen as limiting the middle managers' autonomy and pressuring them to achieve goals, who will tend to have a low relationship orientation.

In this study, we will emphasize private information, where not all the middle managers' actions are known by the upper managers. The upper managers who apply a high relationship-oriented leadership style will be viewed by their middle managers as supportive and not using task-oriented methods to direct their middle managers. It will make the middle managers feel happy with their upper managers' involvement and consequently they will try to work loyally for the company and do their best.

#### **4. Hypotheses Formulation**

##### ***Organizational Commitment and Budgetary Slack***

Every company has workers with various characteristics and motivations. The Self-Determination Theory (SDT) is an approach to identify an individual's motivation and personality for doing something (Ryan and Deci, 2000). SDT differentiates among autonomous and control motivation, and extrinsic and intrinsic motivation. This theory assumes that any individual act is motivated by something. Therefore, companies need to look at the motivation possessed by their workers so that the actions taken by the workers are aligned with the company's stated goals.

The organizational commitment possessed by subordinates is one of the factors that determine the success of a company. Organizational commitment is characterized by three factors, namely: a strong belief about the company's purpose and values, a willingness to make an adequate effort on behalf of the company, and a strong motivation to maintain membership of the company (Mowday et al., 1979; and Kleine and Weißenberger, 2014). This

study proxy's motivation with the affective organizational commitment possessed by middle managers. Meyer and Maltin (2010) state that affective organizational commitment is similar to a form of autonomous motivation. They state that satisfaction from an individual's needs is a prerequisite to experiencing autonomous motivation. Autonomous motivation means that the individual is free to participate in the activities consistent with their values (Ryan and Deci, 2000). This interprets that workers will act in accordance with values that are consistent with theirs. This value is embedded in their personality and will determine their acts.

Middle managers within a company are often involved in matters of budget regulation. They are often assigned to make decisions regarding the budget's targets for the success of a company. However, the budget's targets set by the middle managers, can be detrimental to the company when they tend to deliberately reduce their efforts to achieve budgeted targets (Gago-Rodríguez & Naranjo-Gil, 2016). This action is a budgetary slack action and is considered unethical because it harms the company (Steven, 2002; Hobson et al., 2011; and Gago-Rodríguez & Naranjo-Gil, 2016).

Managers have different levels of affective organizational commitment. High affective commitment is indicated by participation, pride, and loyalty to the company (Rousseau and Aubé, 2010). In line with the research of Nouri and Parker (1996) and De Baerdemaeker and Bruggeman (2015), they found that managers with high affective organizational commitment are able to decrease the budgetary slack, whereas managers with low affective organizational are more likely to focus on their own ambitions, which tends to create budgetary slack. These studies show that managers with high affective organizational commitment will behave according to the values that are consistent with

their own. They display loyalty to the company. These types of managers, if instructed to set the budget's targets, tend to set targets that will benefit the company. On the contrary, managers who have a low affective organizational commitment tend to set budget targets that are far below the capabilities that the company has. Thus, the hypothesis for this research is as follows:

H1: The middle managers with high affective organizational commitment create less budgetary slack than the middle managers with low affective organizational commitment.

### ***Organizational Commitment, Leadership Style, and Budgetary Slack***

The actions of subordinates are closely related to how their leaders treat them. Yukl (1989), Kleine and Weißenberger (2014) say that leadership is a process in which those in charge affect the commitment and obedience toward an assignment of those under them by supervising the undertaking of the assignment, strategizing, and facilitating the groups' or company's activities. This is in line with Bandura's social learning theory (1971), which says that subordinates tend to reflect the behavior of their superiors. It can be assumed that leaders play a very important role in controlling their subordinates, so they act in harmony with the goals of the company.

Leaders have their own leadership styles that they believe work for leading a company. Kleine and Weißenberger (2014) say that the style of leadership is one of the driving factors that foster their subordinates' organizational commitment. They also state that the type of leadership connects the commitment of the mid-level managers to the upper-level managers in the company. That is, the leadership style used by upper managers has a major influence on the commitment possessed by middle managers, which ultimately will determine the actions that will be



carried out by these middle managers; such as in the case when they are given assignments to manage the budget's targets. The leadership style of their upper manager will encourage the commitment possessed by his/her middle managers to follow up on what should be done. Middle managers can act in harmony with the company's goal of making budget targets, according to the capabilities they can achieve or vice versa, by acting unethically and creating budgetary slack. Therefore, the next hypothesis of this study is as follows:

H2: Leadership style moderates the affective organizational commitment with budgetary slack.

Stogdill and Coons (1957) in Abernethy et al. (2010) classify two leadership styles, namely: the consideration leadership style (relationship-oriented behavior) and the initiating leadership style (task-oriented behavior). Ketchand and Strawser (2001) find that the task-oriented and relationship-oriented leadership styles are the antecedents for developing the organizational commitment possessed by junior-level auditors and the effect it has on the company. Dale and Fox (2008) say that a leader who demonstrates a relationship-oriented style of leadership can improve his/her subordinates' emotional needs and help develop social participation. In this way, the internalization process of a company's values by the subordinates probably occurs so they are willing to participate in developing the company. In line with the research of Kyj and Parker (2008), they found that upper managers who use a relationship-oriented style of leadership can encourage their middle managers to control the budget. Other researchers also state that leaders who employ a relationship-oriented style of leadership can establish a relationship with their subordinates based on beneficial trust, caring, and support (Fleishman and Harris, 1962; and Kyj and Parker, 2008). De

Vries et al. (2010) state that a relationship-oriented leader is more communicative. A communicative leader will strengthen the social exchange between his/her subordinates and him/herself to improve their performance (Hartmann and Kramer, 2014). Holtz and Harold (2013) state that relationship-oriented leaders can develop a pleasant working environment. Meanwhile, a leader who shows no relationship-oriented mannerisms tends to act in a superior manner, is generally ignorant and treats people in an unpleasant manner (rude). This kind of attitude possibly makes the subordinates act harshly, break the rules and be unproductive (Holtz and Harold, 2013). Gago-Rodriguez and Naranjo-Gil (2016) find that the more middle managers trust their upper managers, the greater the totality of the middle managers in implementing the budget proposals and consequently this results in a decrease in the budgetary slack, compared to the middle managers who have less trust to their upper managers. This indicates that relationship-oriented upper managers can encourage their middle managers to develop affective organizational commitment, and help their company to reduce budgetary slack.

Neubert et al. (2008) states that a task-oriented leader has a negative correlation with unproductive behavior. The managers who maintain control over the budget have the ability to decrease the budgetary slack (Van der Stade, 2000; and Hartmann and Kramer, 2014). In line with the research of Dale and Fox (2008), they find that both the task-oriented and relationship-oriented leadership styles have a positive correlation with organizational commitment. According to their statement, the subordinates believe that a leader with a task-oriented style of leadership has more rules and formal procedures for them to follow. With that result, the subordinates feel highly responsible and have a higher affective organizational commitment.

However, this positive perspective towards task-oriented leaders is not fully supported. The previous research by Fleishman and Harris (1962) found that the employees' complaints increased when they were led by someone with a task-oriented style of leadership. This statement is supported by the research of Holtz and Harold (2013) who found that unproductive behavior is at its peak when the leaders have a high-level of the task-oriented style of leadership, and a low level of the relationship-oriented style of leadership. Although there are different research results, they predict that task-oriented style leaders reduce the affective organizational commitment possessed by their subordinates, because they view their leaders as only being results-oriented, without seeing the process that has been carried out by subordinates to make the organization successful so they dare to conduct unproductive behavior to achieve the results desired by superiors such as creating a budgetary slack.

Dale and Fox (2008) state that the style of leadership plays an important role in both increasing and decreasing the effect of a stressful working environment and determining the subordinates' commitment toward the company. Meyer and Maltin (2010) state that a committed individual will potentially benefit the company, although in some condition the individual's commitment is susceptible to work stress. They also state that when this happens, the tension that is felt by the workers with a high level of affective organizational commitment is not as high as those with a low level of affective organizational commitment. The Banduras's social learning theory implies that the leadership style employed by the people in charge determines their subordinates' commitment and

eventually affects their subsequent actions. Therefore, the relationship-oriented upper-level managers will possibly be seen as wise leaders by the middle managers. Finally, they will be motivated to improve their commitment and support the success of the company. On the other hand, the task-oriented upper-level managers will be seen as a threat and place restrictions on the work-force. It is because the upper-level managers tend to prioritize the achievement of set targets and pressure their middle managers to develop their potential, which ultimately can cause them to try to achieve the goals they have been set in an unethical manner, such as by making a large budgetary slack. Specifically, if hypothesis (H2) above is significantly supported, then there will be a follow-up test. So, it is hypothesized as follows:

H2a: The middle managers with a high level of affective organizational commitment create less budgetary slack when their upper manager implements a relationship-oriented style of leadership as opposed to a task-oriented style.

H2b: The middle managers with low affective organizational management create less budgetary slack when their upper manager implements a relationship-oriented style of leadership as opposed to a task-oriented style.

## 5. Research Model

According to the literature review and hypotheses development, we build the research model to visualize the effect of both the style of leadership and the affective organizational commitment to budgetary slack. The visualization of the research model is as follows.

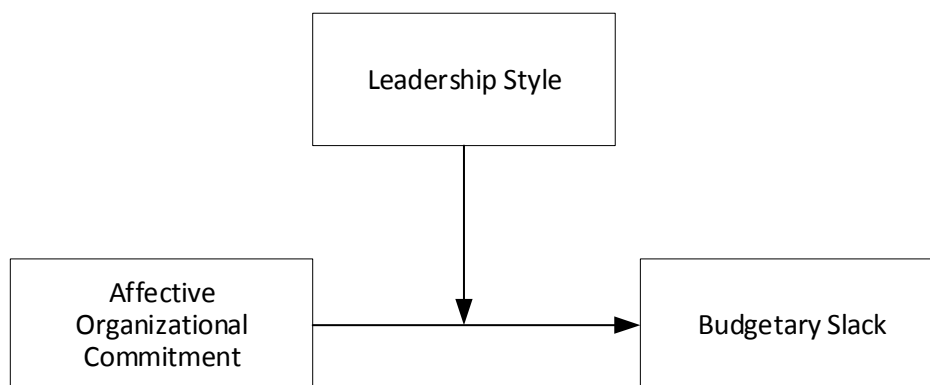


Image 1. Research Model

**RESEARCH METHODOLOGY**

**1. Research Design and Participants**

The experimental method is a research design that investigates a phenomenon by manipulating a situation through various research procedures, and then observing and interpreting the results of the manipulation (Nahartyo, 2013). This research employs a true experimental research method with 2x2 among the subjects. The researchers employ this true experimental research method because the independent variable can be manipulated, and the manipulation can be done randomly on the subjects' groups to improve the homogeneity among the groups (Nahartyo, 2013). The main objective of the experiment is to present empirical evidence for theories that can explain and predict the phenomena of causality (Nahartyo and Utami, 2016). Table 1 shows the 2x2 experimental design between the subjects.

**Table 1.** 2 x 2 between subjects design

Affective Organizational Commitment	Leadership Style	
	Relationship-Oriented	Task-Oriented
High	Cell 1	Cell 2
Low	Cell 3	Cell 4

The subjects of the research are the students from the Master of Management (MM) program at Gadjah Mada University (UGM). The

researchers choose this class of students because business students are often used in behavioral research, especially in observations that involve the process of human information and decision making (Ashton and Kramer, 1980; and Chong and Loy, 2015). In this research, the participants were assumed to be middle managers who were responsible for setting a budget target. The participants act as production managers of PT. ARITMATIKA. The subjects in this research number 84 participants, but 20 of them did not pass the manipulation check. Thus, there are only 64 participants (76.2%). The subjects either have some work experience or are currently in work.

The instrument employed in this research is adapted and modified from Chow (1983) and Chong and Loy (2015). We held a group discussion with students from the Master of Accounting Science FEB (Faculty of Economic and Business), UGM, to get recommendations for, and criticism of, the research instrument. In addition, the researchers undertook a pilot test with 46 students from a regular class of the MM program, UGM, to understand the quality as well as the effectiveness of the manipulation technique (Nahartyo and Utami, 2016).

From the 46 participants in the pilot test, only 37 participants passed the manipulation check. The group discussion and pilot test were

executed before we conducted the proper experiment.

## 2. Research Procedure

It took three stages to conduct the main experiment. The first stage consisted of namely an overview of the assignment, the exercise, and the assignment's implementation. The purpose of the first stage is to assess the participants' performance and to get them used to the assignment. For the assignment's overview, we explain to the participants the role they will carry out during the experiment (research). They are asked to act as the production manager for PT. ARITMATIKA whose responsibility is to set a budget target. Each participant was given a booklet that contained a description of the task, a practice worksheet and a decoding key. They are instructed to perform a decoding task adapted from Chow (1983) and Chong and Loy (2015). After the participants understand the overview of the assignment, they do the exercise in two minutes to get ready for the next assignment. They answer two questions; they have to find solutions by coding several letters and translating them into numbers, based on the code's guidebook, and then calculate the values manually. The participants will be rewarded for every correct answer. There are two types of reward points, namely type I and II. Type I consists of four letters (for example, I-BASE) that will be matched with two numbers (for example, B= 12, A= 24, S= 26, E= 34), while type II consists of four letters (for example, II-BOTH) that will be matched with three numbers (for example, B= 612, O= 998, T= 234, H= 925). If the participants answer a type I question correctly, they will get 25 points. However, if they answer a type II question correctly, they will get 75 points. Reward points represent employees' performance capability, and are used by participants as the basis for setting their budget target.

In the assignment's implementation, the participants are asked to solve some more coding tasks, in three minutes. The procedure is similar to the earlier exercise. They are given ten questions with the same proportion of type I and type II questions. The participants have two assignments for coding tasks. The points from each participant are accumulated after finishing each assignment. The highest number of points will be set as the participants' best estimation of the assignment (performance capability) that they are able to achieve within a given timeframe.

The second stage is the internalization of the payment scheme. In this stage, a slack-inducing pay scheme is explained to the participants. We employ a slack-inducing pay scheme because it generally motivates the middle managers to demand bonus payments that exceed the budget for manufacturing the targets (Stevens, 2002; and Hobson et al., 2011). The slack-inducing pay scheme is as follows:

$$P = \text{Rp}100.000 \text{ if } A \leq B \quad (1)$$

$$P = \text{Rp}100.000 + \text{Rp}5.000 (A - B) \text{ if } A > B \quad (2)$$

A is the actual performance (the best performance), and B is the total budget for producing the targets. The first equation illustrates the pay scheme with a salary of Rp100.000. The payment is made to the middle managers regardless of whether the actual performance (A) is less than or the same as the desired number of targets (B), as stated in the slack-inducing pay scheme. Meanwhile, the second equation illustrates the salary plus a bonus payment. The payment is made to the middle managers if they have actually produced more targets (A) than they were asked to (B). This scheme is make-believe, in that no actual payment is involved. However, the concept of maximizing their compensation is explained to participants, and it is expected that they will act according to theory (as discussed) and create slack in their budgets.

In the third stage, the participants is given an explanation of their commitment as middle managers at PT. ARITMATIKA and a description of the behavior of their upper managers in the organization. Four scenarios are designed to illustrate the middle managers' behavior with high and low affective organizational commitment as well as the upper managers with task-oriented and relationship-oriented styles of leadership. The participants with high affective organizational commitment are characterized as being proud of, and loyal to, their company, and are in accordance with its vision, mission, and purpose; they try to always do their best for the company, and always try to achieve the set production target. On the other hand, the participants with low affective organizational commitment are shown as not being loyal to the vision, mission, and purpose of the company because it is not in accordance with their values, and making an effort to complete the company's assignments is not a priority for them.

The participants who get a scenario with upper manager who has a relationship-oriented leadership style are informed that the upper manager takes good care of them, listen to their opinions, and treat them fairly. On the other hand, the participants who get a scenario with upper manager who has a task-oriented leadership style are informed that the upper manager value achieving the set a budget target of production, emphasize the deadline, and criticize any of the middle managers who do not achieve their target. Also, all the important decisions are made by the upper manager. Then, the participants are asked to set a budget target that will be proposed to the upper manager after finishing the three stages, by considering three aspects, namely their best performance points (best estimation), pay schemes, and the characteristics of their commitments, as well as the characteristics of their upper manager, in the company.

In this experiment, the private information is under our control. In a private setting, the participants are told that their upper manager does not receive information related to their productive capacity. Therefore, the manager cannot possibly have information related to their performance capabilities.

### **3. Budgetary Slack Measurement**

Budgetary slack is measured by subtracting the target budget with the best estimation (Anthony and Govindarajan, 2007). In this research, the best estimation is seen as the actual performance (A) while the target budget is seen as the proposed budget (B).

## **RESULT AND DISCUSSION**

Prior to the hypotheses testing, we conducted introductory tests that consisted of random sampling tests, the subjects' characteristics demography, and a time-lapse experiment test. A random sampling test was conducted by utilizing a chi-square test. The results reveal that there is no difference in the subjects' characteristics among the groups (Pearson  $\chi^2$  age = 3.566; gender = 6.609; group study programs = 1.060; semester = 4.001; GPA (Grade Point Average) = 8.310; courses = 6.047; work experience = 6.577; monthly income = 7.271). The results also show that the placement of the participants into the experimental group or control group was successfully done in a random manner, without considering the factors that belong to the participants. The next test examined the effect of the subjects' characteristics on the budget. The result of a one-way ANOVA indicates that either the increasing or decreasing budgetary slack is not affected by the demographic characteristics of the subjects. The data in Table 2 shows that (F age = 1.555; gender = 0.506; study program = 0.835; semester = 0.770; GPA = 1.638; courses = 0.047; work experience = 0.220; monthly

income = 0.067; time = 0.354) do not have a significant relationship with the dependent variable. Thus, the action of the participants in carrying out budgetary slack is not influenced by differences in the characteristics of the subjects.

**Table 2.** Test results of the demographic characteristics of the dependent variable

Demographic Characteristics	Budgetary Slack		
	Df	F-Statistics	Sig
Age	4	1.555	0.198
Gender	1	0.506	0.480
Study program	1	0.835	0.364
Semester	4	0.770	0.549
GPA	2	1.638	0.203
Courses	3	0.047	0.986
Work experience	3	0.220	0.882
Monthly income	2	0.067	0.935

### Descriptive Statistics

Table 3 shows that the middle managers with high affective organizational commitment create less budgetary slack, with an average (standard deviation) of 14.8438 (77.99384) than the leaders with low affective organizational commitment 57.9688 (90.78386). Furthermore, relationship-oriented upper managers have an average (standard deviation) 25,7576 (89,59214) while task-oriented upper managers have an average (standard deviation) 47.7419

(83.51486). This interprets that middle managers led by relationship-oriented upper managers create less budgetary slack than task-oriented upper managers.

In detail, table 3 shows that middle managers with high commitment and led by relationship-oriented upper managers have an average (standard deviation) 10.9375 (94.41431) while middle managers with low commitment and led by relationship-oriented upper managers have averages (standards deviation) 39.7059 (85.26559). This interprets that middle managers with high commitment and lead by relationship-oriented upper managers create less budgetary slack than middle managers with low commitment. Other results show that middle managers with high commitment and lead by task oriented upper managers have an average (standard deviation) 18.7500 (60.20797) while middle managers with low commitment and lead by task oriented upper managers have an average (standard deviation) 78.6667 (95.27154). This interprets that middle managers with high commitment and lead by task-oriented upper managers create less budgetary slack than middle managers with low commitment.

**Table 3.** Descriptive statistics of budgetary slack

Affective Organizational Commitment	Leadership Style of Management		Total
	Relationship-oriented	Task-oriented	
High	Group 1 (N= 16)	Group 2 (N= 16)	N= 32
	Mean= 10.9375	Mean= 18.7500	Mean= 14.8438
	Std= 94.41431	Std= 60.20797	Std= 77.99384
Low	Group 3 (N= 17)	Group 4 (N= 15)	N= 32
	Mean= 39.7059	Mean= 78.6667	Mean= 57.9688
	Std= 85.26559	Std= 95.27154	Std= 90.78386
Total	N= 33	N= 31	N= 64
	Mean= 25.7576	Mean= 47.7419	Mean= 36.4063
	Std= 89.59214	Std= 83.51486	Std= 86.72374

### Hypothesis Testing

The data for H1 is analyzed by utilizing t-test. A different t-test is used to compare the average of the two groups that are not related to each other (Ghozali, 2011). Table 4 gives the results of the t-test. Hypothesis 1 states that middle managers with high affective organizational commitment create less budgetary slack than middle managers with low affective organizational commitment. The result of the test proves significant statistical support for H1 ( $p= 0.023$ ; one-tailed) so that H1 is supported. The result of this research shows that affective organizational commitment has an effect on budgetary slack.

The data for H2 is analyzed by utilizing a two-way ANOVA to express the effect of each variable on the dependent variable. The researchers utilized this type of ANOVA for

several reasons: to examining the asymmetrical relationship, and for testing one dependent variable in the metric scale (ratio) and some independent variables in the non-metric scale by considering the variance that exists in each category (Gudono, 2015). Table 5 provides the results of the two-way ANOVA. Hypothesis 2 predicts the effect of affective organizational commitment and the style of leadership with budgetary slack. The results of the test do not provide significant statistical support for H2 ( $F= 0.539$ ;  $p= 0.466$ ) so H2 is not supported. The result shows that there is no interactional effect of both the style of leadership and the affective organizational commitment on budgetary slack. The simple effect of H2a and H2b does not need to be tested because H2 is not supported.

**Table 4.** The results of t-test for equality of means

		T	df	Sig (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
<b>Budgetary Slack</b>	<b>Equal variances assumed</b>	-2.038	62	0.046	-43.12500	21,15770	-85.41864	-0.83136
	<b>Equal variances not assumed</b>	-2.038	60.623	0.046	-43.12500	21,15770	-85.43776	-0.81224

**Table 5.** The results of the hypothesis test *two-way ANOVA* 2 x 2 between subjects

Sources	Df	Mean Square	F	Sig
Corrected model	3	14113.546	1.963	0.129
Intercept	1	87515.513	12.170	0.001
X1 (leadership style of management)	1	8733.835	1.214	0.275
X2 (affective organizational commitment)	1	31398.586	4.366	0.041**
X1*X2	1	3873.268	0.539	0.466
Error	60	7191.380		
Total	64			
Corrected total	63			

a. R Squared = 0.089 (Adjusted R Squared = 0.044)  
Additional information \*\*= significant rate 5%.

### Robustness Testing

This research was conducted at different times. Thus, we conducted a time lapse experiment test to provide confidence that the reduction and increase in the budget's slack were not influenced by differences in the timing of the experiment. This test was done using a one-way ANOVA. This study examines the independent variable, which is the time of the implementation of the experiments, at 10:00 WIB and 19:30 WIB. Table 6 below presents details of the results of testing the time of the experiment on the dependent variable using a one-way ANOVA.

**Table 6.** The results of time-lapse experiment test on the dependent variable

Time-Lapse Experiment	Budgetary Slack		
	Df	F-Statistics	Sig
Time	1	0.354	0.554

The data in Table 6 shows that time ( $F = 0.354$ ;  $p > 0.554$ ), does not have a significant relationship with the dependent variable. Thus, the participants' desire to carry out budgetary slack is not influenced by differences in the timing of the experiment.

### CONCLUSIONS AND SUGGESTION

This research finds the effects of affective organizational commitment on the occurrence of budgetary slack. An individual with high affective organizational commitment is able to mitigate the occurrence of budgetary slack, whereas an individual with low affective organizational commitment creates greater budgetary slack. The results are in accordance with the Self Determination Theory (SDT) that states people will act based on the values they possess. However, this research does not find the effects of an interaction between affective organizational commitment and leadership style on budgetary slack.

This research has inevitable limitations. Firstly, there are several different guides in this research so there is a possibility that the participants received different explanations. Further research can utilize recorded instructions as a guide to achieving better treatment reliability. Secondly, the utilization of the style of leadership in this research does not consider the high level or low-level structure of both the relationship-oriented and task-oriented leadership styles. In reality, a leader employs both leadership styles at various levels and times. Future research can employ the four types of leadership style from *Ohio State*, as suggested by Kreitner and Kinicki (2008), namely: high relationship-oriented and low task-oriented; high relationship-oriented and high task-oriented; low relationship-oriented and low task-oriented; and low relationship-oriented and high task-oriented. Thirdly, this research mainly focuses on affective organizational commitment. According to Meyer and Allen (1991) organizational commitment consists of three components, namely: affective organizational commitment, and normative and continuance. The forthcoming research can examine the effects of other commitments on the creation of budgetary slack. Fourthly, this research does not examine the factors that precede an individual's commitment to their company. In reality, an individual's commitment is preceded by several factors, such as personal characteristics, occupational roles, work characteristics or work experience, the leader's and group's relationship, organizational characteristics, and the cost of an individual leaving the company (cost of departure). Ketchand and Strawser (2001) state that those factors can be the antecedent variables for the commitment variable. The upcoming research can examine factors that can be the antecedent for a suggested commitment by Ketchand and Strawser (2001).



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