



## The Role of Budgetary Control on Managerial Performance in Fertilizer Companies in Indonesia

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### Abstract

**Objective** – This study aims to examine the influence of budgetary control on managerial performance of fertilizer companies in Indonesia with the characteristics of budgetary goal and knowledge of cost management as moderating variables.

**Design/methodology** – This study uses 144 samples of respondents from middle to upper level managers in the fertilizer industry, i.e. subsidiaries of Pupuk Indonesia. Data collection is carried out by utilizing survey questionnaires. Data analysis is performed using Moderating Regression Analysis (MRA).

**Results** – The findings indicate that budgetary control, characteristics of budgetary goal and knowledge of cost management influence managerial performance. Furthermore, characteristics of budgetary goal and knowledge of cost management was found to moderate the influence of budgetary control on managerial performance.

**Research limitations/implications** – This study is only limited to the companies that are engaged in the fertilizer industry, hence its results cannot be used for the purpose of generalization. Apart from that, the characteristics of budgetary goals and knowledge of cost management variables in this study are only quasi moderator variables.

**Keywords** Budgetary Control, Characteristics of Budgetary Goals, Knowledge of Cost Management and Managerial Performance.

### 1. Introduction

Budgetary control in principle is mainly concerned with continuous and daily supervision activities of financial management, especially with the use of the budget. Sondang P. Siagian (2000) reveals that budgetary control is a systematic process or effort in setting implementation standards with the aim of planning activities, information systems on financial use, comparing real implementation with planning to determine and regulate irregularities and making corrections in accordance with the plan which has been determined, so that the goals are achieved effectively and efficiently.

In controlling the budget, the characteristics of budgetary goals are important because the budget is drafted after considering the aspects of human behavior hence it can motivate the executive manager to achieve the targets that has been set in the budget. Kennis (1979) develops characteristics of budget that consider the aspects of human behavior. The five characteristics are (1) Budgetary preparation participation (Budgetary Participation), (2) Clarity of budgetary objectives (Budgetary Goal Clarity), (3) Budgetary Feedback, (4) Budgetary Evaluation, (5) Difficulty of Budgetary objectives (Budgetary Goal Difficulty).

In addition to the characteristics of budgetary goals, in controlling the budget, knowledge of cost management is also very important for an executive manager to carry out budgetary realization in accordance with the cost structure in the company. Hansen, Mowen & Guan (2007: 5) emphasized that cost management is a form of

management accounting that allows a business to predict future expenses to help reducing the possibility of exceeding the budget that has been set by the company. If it is implemented properly, cost management can reduce production costs for products and services, increase in the value which is given to customers and increase company profits.

This study is extending previous studies such as Balogun (2015) in his research "Budgetary control and Organizational Performance" which reveals that budgetary control has a very strong relation with organizational performance because budgetary control provides support to the performance structure and as a resource control tool in organization. Then Yoga (2015) in his research "The Influence of Budgetary Control on Managerial Performance with Motivation as an Intervening Variable" states that budgetary control has a significant influence on managerial performance. Whereas Siyanbola (2013) who conducts research on "The Impact of Budget and Budgetary Control on the Performance of Manufacturing Company in Negeria" reveals that budget and budgetary control in a manufacturing company are very influential on improving company performance of which the company is able to operate more effectively and efficiently so that the company is able to fulfill its obligations to shareholders. The difference between this study and the previous ones is that this study uses populations and samples from fertilizer companies in Indonesia. In addition, in this study the author uses the variables on characteristics of budgetary goals and knowledge of cost management as moderating variables.

The purpose of this article is to examine whether budgetary control, characteristics of budgetary goals and knowledge of cost management influence managerial performance both simultaneously and partially and whether characteristics of budgetary goals and knowledge of cost management can moderate the influence of budgetary control on managerial performance. The discussion will begin with literature review followed by research methods. The next section discusses the results of this study, and finally conclusions, limitations, and suggestions for future research are briefly explained.

## **2. Theoretical Framework and Hypothesis Development**

### *2.1 Managerial Performance*

Performance is one of the elements that can increase the effectiveness of the company. Suwatno and Priansa (2011) also state the definition of performance as a work achievement that is achieved by a person according to the prevailing size, within a certain period of time, regarding the work and behavior and actions. The performance of a person can be measured based on the extent on the achievement of a person on the work that is given to.

Managerial performance includes the level in competence of managers in carrying out management activities which include planning, coordinating, investigating, regulating, negotiating, representing, supervising, and evaluating (Natsir, 2010). The measurement of managerial performance as it is stated by Milani (1975) includes several indicators; planning, investigating, coordinating, evaluating, supervising, staffing, negotiating, and representing. Indicators of measuring managerial performance have been used by Haryanti and Othman (2012), and Hastuti and Susanto (2015).

### *2.2 Budgetary Control*

Control is one of the vital functions in the management process. Nevertheless this function is often overlooked and misinterpreted. With the emergence of large and modern companies that require efficient operation, control function has drawn a significant role along with other management functions. Hand (1986) in Isaac (2015) identifies three basic stages in the budgetary control process as follows:

- 1) Setting a predetermined standard.
- 2) Measurement of actual performance on predetermined standards.

- 3) Corrective action if necessary to show actual conditions in accordance with the predetermined standards. The concept of budgetary control cannot be separated from executive responsibility.

According to Brown and Howard (2002) in Isaac (2015) budgetary control can be seen as a cost control system that includes; budgetary preparation, department coordination and assigning responsibilities, comparing actual performance with those that are budgeted and acting on results to achieve maximum profitability. The measurement of budgetary control in this study consisted of seven items that are developed by Stede (2001) with indicators: emphasis on budgetary targets, not easy to revise the budget, focus on budgetary details, not easily tolerate budgetary target deviations, and intensive communication.

### *2.3 Characteristics of Budgetary Goals*

The budgeting system is a component that plays a role in realizing the arrangement of a financial plan both short and long term. According to Kenis in Munawar (2006) the characteristics of budgetary goals have five dimensions: (1) Participation in budgeting (budgetary participation), namely the involvement level of managers in budgetary preparation, (2) Clarity of budgetary goals (budget goal clarity) is the extent of budgetary targets that are stated clearly and specifically and understood by those responsible for its achievement, (3) Budgetary evaluation is an action taken to trace deviations on the budget to the department which is concerned and used as a basis for the evaluation of performance on department, (4) Budgetary feedback is the result which is obtained from its efforts to achieve goals as a basis for experiencing success or failure. (5) Difficulties in budgetary goals (budget goal difficulty) are range of goals from very loose and easily achieved until very tight and cannot be achieved.

### *2.4 Knowledge of Cost Management*

Knowledge according to Bergeron in Sangkala (2007) is information that has been organized, synthesized, summarized to improve understanding, awareness or understanding. And according to Knowledge Transfer International (KTI) in Sangkala (2007), knowledge is information that has been changed into the capability to act effectively. The knowledge that is used in this study is about cost management. Cost management itself according to Blocher dkk (2011) is the development and use of cost management information. Cost management information is developed and used to implement organizational strategies. And includes financial information about costs and revenues, and non-financial information about customer retention, productivity, quality, and other success key determinants for the organization.

Knowledge of cost management in this study is measured by using several indicators that are developed by Shields and Young (1994) describing the knowledge of a manager about the scope and responsibilities of his work consisting of: knowledge of cost management, awareness of costs, experience in managing costs, comparing expenses, checking costs, the attitude of caution, and evaluating results.

### *2.5 The Influence of Budgetary Control on Managerial Performance*

Budgetary control in principle is directed to achieving objectives functionally and effectively, the proposed actions are measured in the budgetary framework. Budgetary control is a process to ensure that the budget until specific matters are carried out appropriately and efficiently. Halioui and Leclere (2008) state that it is necessary to improve the rationality of organizational management for an effective budgetary control system by reducing the freedom of managers to achieve budgetary goals.

Budgetary control has a very strong relation with organizational performance because budgetary control provides support to the performance structure and as a means of controlling resources within the organization (Balogun, 2015). Control is a

method of control within an organization through the establishment of standards and targets regarding income and expenditure, and continuous monitoring of performance by comparing the budget and actualization. A strict control system is a performance evaluation tool that focuses on its ability to achieve budgetary goals (Anthony and Govindarajan, 1998 in Stede 2001). In other words, budgetary control in the viewpoint of Anthony depends on how the company is paying attention to its objectives to meet budgetary performance targets.

#### *2.6 The Influence on Characteristics of Budgetary Goals on Managerial Performance*

The budgeting system is a managerial planning and control tool. Organizations including companies need a budget as an important component to translate the entire strategy into short-term and long-term plans and goals. In addition, the budget also functions as a tool to coordinate, communicate, motivate and evaluate performance (Kenis, 1979).

Haryanti (2016) Budget implementation that has not been effective can also be caused by other elements in the budget. A budget can run effectively if the budgetary preparation and implementation meet five indicators in Budgetary Goal Characteristics which consist of budgetary participation, clarity of budget targets (budget goal clarity), budgetary evaluation, budgetary feedback, and the difficulty of budgetary goals (budget goal difficulty).

#### *2.7 The Influence on Knowledge of Cost Management on Managerial Performance*

Knowledge of cost management is used for how managers think short and long term to control the costs that are incurred in the company. The knowledge of a manager in cost control is needed to reduce inefficient expenses. According to Hansen, Mowen & Guan (2007: 5), cost management is a form of management accounting that allows a business to predict future expenditures to help reducing the possibility of exceeding the budget that has been set by the company.

Knowledge of cost management is useful as a guide in the process of budgeting and controlling costs that are less efficient and can also use goods that are not economically valuable to be of economic value (Nevita, 2014). Knowledge of cost management is useful as a guide in the process of budgeting and cost control costs that are less efficient and can also utilize goods that are not of economic value to be of economic value (Nevita, 2014). Savitri, Ritonga & Ayuni (2015) in their research suggest that knowledge of cost management has a positive influence on the relation between budgetary participation and managerial performance, the higher the knowledge of cost management, the more positive the relation between budget participation and managerial performance.

#### *2.8 The Influence on Characteristics of Budgetary Goals on Budgetary Control Relation with Managerial Performance*

The budget is not just a financial plan in the organization but as a means of control, coordination, communication, performance appraisal, and motivation. Haryanti (2016) reveals that if the components in the characteristics of budgetary goals can be fulfilled in a budget, then the budget has fulfilled its function in the organization. With the fulfillment of the budget function, it is expected that managerial performance in the organization will increase. Better budget achievement shows that managerial performance in the organization is also getting better because the organization is able to achieve the budgeted targets.

Mutmainah (2015) in her research reveals that the better the characteristics of the budgetary goals that are set will further improve managerial performance. With the characteristics of budgetary goals which include; budgetary participation, clarity of budgetary goals, budgetary feedback, budget evaluation, difficulties of budgetary goals, top management can obtain information about the environment that is being

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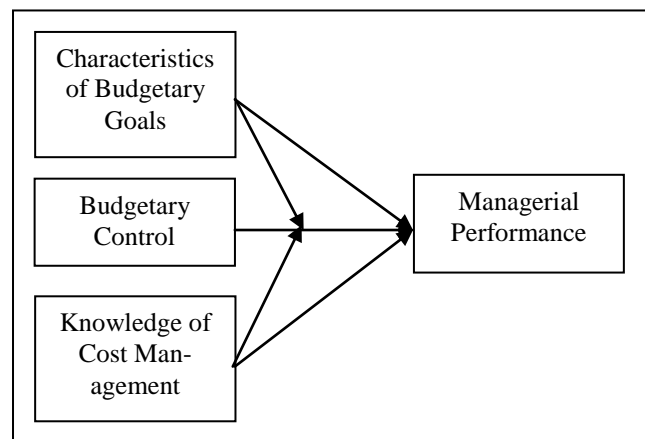
and will be faced. Indirectly also gives managers responsibility which is expected to stimulate their creativity.

### 2.9 The Influence of Knowledge of Cost Management on Budgetary Control Relation with Managerial Performance

Shields and Young (1994) in Agbejule (2006) say that managers who have a broad understanding of costs that are related to output and other important variables generally have good knowledge of cost management. Knowledge of cost management is used for how managers think short and long term to control the costs that are incurred in the company. The knowledge of a manager in cost control is needed to reduce inefficient expenses.

According to Gandasuli (2009) knowledge of cost management has the ability to be a guide in budgeting in improving control of costs in order to improve managerial performance. The cost structure that exists in manufacturing companies is more complex than the cost structure that exists in other companies (Agbejule and Saarikoski, 2006). The cost structure is more complex because they have more production processes and also a longer production cycle compared to other companies. A more complex cost structure causes a need for knowledge of cost management in preparing budgets so that control costs can be maximized so as to help improving managerial performance.

Based on the discussion of the variables and previous research that are mentioned above, the framework of thinking in this study is as follows:



**Figure 1**  
Scheme of Thinking Framework

Based on the above framework, the hypothesis that will be tested in this study can be stated:

- H<sub>1</sub> Budgetary control, characteristics of budgetary goals and knowledge of cost management influence simultaneously on managerial performance.
- H<sub>2</sub> Budgetary control influences managerial performance.
- H<sub>3</sub> Characteristics of budgetary goals influences managerial performance.
- H<sub>4</sub> Knowledge of cost management influences managerial performance.
- H<sub>5</sub> Characteristics of budgetary goals moderate the influence of budgetary control on managerial performance.
- H<sub>6</sub> Knowledge of cost management moderates the influence of budgetary control on managerial performance.

### 3. Research Method

The design of this study is quantitative research, that is the research methods based on positivism philosophy which is used to examine the population or particular sample, data collection by using research instruments, data analysis is quantitative or statistics with the aim of testing a predetermined hypothesis.

### 3.1 Population and Sample

In this study the object which is taken is fertilizer companies which are a subsidiary of PT. Pupuk Indonesia (Persero). The population in this study are 191 of all departments/work units that exist under the subsidiaries of PT Pupuk Indonesia (Persero) which are engaged in the fertilizer industry. Distribution of questionnaires is 191 questionnaires (in the form of goggle form) that are addressed to all departments/work units which are located in subsidiaries of PT Pupuk Indonesia via email and messaging applications of cross platform (whatsapp).

### 3.2 Data Analysis Method

For the construction of a new conceptual framework for the implementation of RM, Data analysis method in this study uses interaction regression of Moderating Regression Analysis (MRA). This moderation regression analysis aims to find out whether the moderating variable will strengthen or weaken the relation between independent and dependent variables (Ghozali, 2011). The regression equation which is used in this study refers to the regression equation that is published by Liana (2009), namely:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 X_2 + \beta_5 X_1 X_3 + \epsilon$$

Information:

Y	: Managerial Performance (KM)
$\alpha$	: Constanta
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$	: Coefficient of Regression
X <sub>1</sub>	: Budgetary Control (PA)
X <sub>2</sub>	: Characteristic of Budgetary Goals (KTA)
X <sub>3</sub>	: Knowledge of Cost Management (PMB)
X <sub>1</sub> X <sub>2</sub>	: Moderating variable of relation between X <sub>1</sub> and Y
X <sub>1</sub> X <sub>3</sub>	: Moderating variable of relation between X <sub>1</sub> and Y
$\epsilon$	: Estimation errors

## 4. Result and Discussion

### 4.1 Validity and Reliability Test

Validity testing technique uses Product Moment correlation technique from Pearson with a significance level of 5% to determine the proximity of the influence between independent variables with the dependent variable. To test the validity, if the correlation coefficient is  $r \geq 0.3$  (minimum 0.3), then the instrument item is declared valid (Sugiyono, 2014). The results of the analysis with SPSS (Statistical Package for Social Science) in this study indicate that the statement items of the research variables obtain r count value ranging from 0.483-0.874. This means that all statement items are declared valid, because the r count value is greater than 0.3. Whereas the reliability testing results indicate that the variables of managerial performance, budgetary control, characteristics of budgetary goals, and knowledge of cost management obtain the value of the alpha coefficient  $> 0.8$ . Thus, the reliability test of questionnaires describes the consistency or constancy of measurement results.

### 4.2 Classic assumption test

The classic assumption test is the normality test by using the non-parametric statistical test of One-Sample Kolmogorov-Smirnov Test. The results of data processing show normal data is distributed with a significance level of  $> 0.05$ . Multicollinearity test is done with a correlation matrix by looking at the value of VIF (Variance Inflation Factor) and the value of tolerance. It can be concluded that the regression model is freed from multicollinearity between independent variables. Heteroscedasticity test is done by looking at scatterplot graphs. The results show that the criteria for heteroscedasticity does not occur when scatterplots show randomly spread points, it can be concluded that heteroscedasticity does not occur in the regression model.

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### 4.3 Hypothesis testing

Based on the tests that are carried out by using the SPSS program, the influence of each variable in detail can be seen in Table 1.

Variables	Unstandardized Coefficients		Std. Coefficients	t	Sig.
	B	Std. Error			
Constanta	2.161	1.801		1.200	.232
PA	.168	.065	.175	2.580	.011
KTA	.114	.026	.356	4.300	.000
PMB	.432	.087	.383	4.961	.000
PA * KTA	.012	.004	2.374	3.131	.002
PA * PMB	.043	.013	2.222	3.208	.002
Coefficient of Correlation (R) : 0.831 <sup>a</sup>					
Coefficient of Determination (R <sup>2</sup> ) : 0.691					
Adjusted R Square : 0.685					

Source : Processed Data (2018)

Based on Table 1, it is concluded about hypothesis test between variables as follows:

The testing results together show the regression coefficient value ( $\beta$ ) of each variable is 0.168 for budgetary control variables ( $\beta_1$ ), 0.114 for characteristic of budgetary goal variables ( $\beta_2$ ) and 0.432 for knowledge of cost management variables ( $\beta_3$ ). Determination of the hypothesis states that if there is at least one value of  $\beta_i$  ( $i = 1,2,3,4$ )  $\neq 0$ :  $H_a$  is accepted, meaning that budgetary control, characteristics of budgetary goals and knowledge of cost management together influence managerial performance. While the results of testing the determination coefficient simultaneously also shows that the correlation coefficient (R) of 0.831 has a degree of relation (correlation) between the independent variables on the dependent variable of 83%, meaning that budgetary control, characteristics of budgetary goals and knowledge of cost management have strong relation with managerial performance. The determination coefficient ( $R^2$ ) is 0.685, the adjusted value  $R^2$  is used to see the influence of the independent variable on the dependent variable. This shows that 68.5% of managerial performance variables can be explained by variables on budgetary control, characteristics on budgetary goal and knowledge of cost management. Whereas the rest is 31.5% due to other factors that are not included in this study.

The testing results for the second hypothesis are conducted to find out whether budgetary control influences managerial performance. The testing results show a significance value of 0.011 or less than 0.05,  $H_0$  is rejected and  $H_a$  is accepted, meaning that budgetary control influences managerial performance. Thus, it can be said that the increasing budgetary control in each department/work unit, the better the managerial performance will be. The main objective of budgetary control is as a management tool in assisting the operational control process which is more directed at the efforts to minimize the operational costs of company. The results of this study support the research of Balogun (2015) and Yoga (2015).

The testing results of the third hypothesis in this study are conducted to determine whether the characteristics of budgetary goals influence managerial performance. The testing results show a significance value of 0.000 or less than 0.05 then  $H_0$  is rejected and  $H_a$  is accepted, meaning that the characteristics of budgetary goals have a positive influence on managerial performance.

**Table 1**  
Results of Regression Testing on Interaction



The implementation of budget that has not been effective can also be caused by other elements in the budget. A budget can run effectively if the preparation and implementation of budget meet five indicators in Budgetary Goal Characteristics which consist of budgetary participation, clarity of budgetary goals (budget goal clarity), budgetary evaluation, budgetary feedback, and difficulties of budget goals (budget difficulty goals). The results of this study support the research of Haryanti (2016).

The testing results the fourth hypothesis in this study are conducted to determine whether knowledge of cost management influences managerial performance. The testing results show a significance value of 0.000 or less than 0.05 then  $H_0$  is rejected and  $H_a$  is accepted, meaning that knowledge of cost management has a positive influence on managerial performance.

Knowledge of cost management is used for how managers think in short and long term to control the costs that are incurred in the company. Knowledge of cost management is also useful as a guide in the process of budget preparation to control costs that are less efficient and can also use goods that are not of economic value to economic value. Knowledge of cost management is used for how managers think in short and long term to control the costs that are incurred in the company. The results of this study support the research of Savitri, Ritonga & Ayuni (2015).

The study results show that the characteristics of budgetary goals as moderator strengthened the relation of budgetary control and managerial performance in departments/work units within the subsidiaries of PT Pupuk Indonesia (Persero). Characteristics of budgetary goals variable in this study are quasi-moderating variables (quasi moderator). Quasi moderators are moderating variables that interact with predictor variables as well as becoming predictor variables (Solimun, 2010). This study shows that the characteristics of budgetary goals moderate the influence of budgetary control on managerial performance, the magnitude influence is only 0.012 or 1.2%. This can be interpreted that the characteristics of budgetary goals strengthen the influence of budgetary control on managerial performance by 1.2%. Thus, the higher the characteristics of the budgetary goals in a department/work unit in controlling the budget towards the goals that will be achieved, the more department/work unit managerial performance will increase.

The budget is needed by an organization to translate the entire strategy into short-term and long-term plans and goals. Furthermore, as the importance of the budget function as a planning and control tool within the organization, the budgetary preparation, implementation and evaluation process needs to be carried out so that it can be adjusted to the budgetary goals (Saukani, 2015).

Statistical results show that knowledge of cost management as a moderator strengthens the relation of budgetary control to managerial performance in departments/work units within the subsidiaries of PT Pupuk Indonesia (Persero). Knowledge of cost management variable in this study is also a quasi moderator variable. Quasi moderator variables are moderating variables that interact with predictor variables as well as become predictor variables (Solimun, 2010). This study shows that knowledge of cost management moderates the influence of budgetary control on managerial performance. The magnitude influence is 0.043 or 4.3%. This can be interpreted that knowledge of cost management strengthens the influence of budgetary control on managerial performance by 4.3%. Thus, the higher the knowledge of cost management in a department/work unit in controlling the budget towards the goals that will be achieved then the managerial performance of department/work unit will also increase. Gandasuli (2009) states that knowledge of cost management which is possessed by managers influences their own perceptions of managerial performance. This result also indicates that budgetary participation itself is not significantly related to managerial performance.



## 5. Conclusions and Limitations

Based on the results of the research and the previous discussion, it can be concluded that budgetary control, characteristics of budgetary goal and knowledge of cost management influence managerial performance. In addition, characteristics of budgetary goals and knowledge of cost management are quasi moderator variables that moderate the influence of budgetary control on managerial performance.

This study is limited especially in terms of research methods hence its results cannot be arbitrarily generalized. Several limitations of this study are noted. First, this study is only limited to the companies that are engaged in the fertilizer industry, so that the results of this study cannot be used for generalization, and allow differences in the research results and conclusions when it is carried out on different research objects. Second, the characteristics of budgetary goals and knowledge of cost management variables in this study are only quasi moderator variables. Lastly, the variables that are used to measure managerial performance are limited to budgetary control as independent variables, characteristics of budgetary goals and knowledge of cost management as moderators, hence there may be other factors that can influence managerial performance.

Based on the limitations of the study, it is therefore suggested that there is a need to improve their understanding of budgetary control, the characteristics of budgetary goals and knowledge of cost management both at the time of budgeting and budget so that the performance of the department/work unit in particular and the company in general can be achieved maximally in accordance with the planned objectives. Subsequent research can be carried out in the manufacturing and non-manufacturing companies in Indonesia, so as to generalize the results of the study. Last but not least future research may instead test the characteristics of budget goal and knowledge of cost management variables as intervening variables.

## References

- Agbejule., Adebayo., and Lotta Saarikoski. (2006). The Effect of Cost Management Knowledge on The Relationship between Budgetary Participation and Managerial Performance. *The British Accounting Review* 38 (2006) 427-440.
- Balogun, A., Mamidu, A.I., Owuze, C.A. (2015). Budgetary Control and Organizational Performance. *Journal of Education Research in Natural and Sosial Sciences (JERNASS)* Vol, No.1, 2015.
- Blocher, Edward J., Stout., David E., Cokins, Gary. (2011). *Manajemen Biaya Penekanan Strategis*. Fifth Edition. Jakarta: Salemba Empat Publisher.
- Gandasuli, James R. (2009). Pengaruh Partisipasi Penyusunan Anggaran Terhadap Kinerja Manajerial: Pengetahuan Manajemen Biaya Sebagai Variabel Pemoderasi. *Kajian Akuntansi*, Vol. 1, No. 2. (Agustus, 2009), pp. 84-99.
- Ghozali, Imam. (2011). *"Aplikasi Analisis Multivariat dengan Program SPSS 19"*. Fifth Edition, Body of Publisher-Undip. Semarang.
- Halioui K, and Leclere D. (2008). Budgetary Slack and Effectiveness of the Control: A configurational approach. *Eur. Med. Econ. Financ. Rev.*, 3(2):96-120
- Hansen, Mowen dan Guan. (2007). *Cost Management : Accounting & Control, Sixth Edition*.
- Haryanti, H. (2016). Pengaruh *Budgetary Goal Characteristics* terhadap Kinerja Manajerial dengan Kecukupan Anggaran dan Komitmen Organisasi sebagai Variabel Pemoderasi Pada Universitas Negeri Yogyakarta. *Journal of Nominal Universitas Negeri Yogyakarta* Volume V No.1 in 2016.
- Hariyanti, I., & Othman, R. (2012). Budgetary Participation: How it Affect Performance and Commitment. *Journal Accountancy Business and The Public Interest*, 53-73.
- Hastuti, I., & Susanto, H. (2015). The Participation Influence in Composing Budget Towards Managerial Performance Through an Organizational Commitment (A

- study in Sukoharjo Regional Government). *Journal of Sainstech Politeknik Indonusa Surakarta*, 1, 1-12.
- Herciu, Mihaela. (2010). "The Relation Between Managerial Performance And Firm Performance - Several Considerations", *Revista Economica*, Lucian Blaga University of Sibiu, Faculty of Economic Sciences, vol. 49(1-2), pages 51-58, 04.
- Isaac, L. Lawal, M. & Okoli, T. (2015). A Systematic Review of Budgeting and Budgetary Control in Government Owned Organizations. *Research Journal of Finance and Accounting ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)* Vol.6, No.6, 2015. [www.iiste.org](http://www.iiste.org).
- Kennis, I., (1979), Effects of Budgetary Goal Characteristics on Managerial Attitudes and Performance. *The Accounting Review*. LIV.2. pp. 707-72.
- Liana, L. (2009). Penggunaan MRA dengan SPSS untuk menguji pengaruh moderating terhadap hubungan antara variabel independen dan variabel dependen. *Journal of Teknologi Informasi DINAMIK*. 14(2), 90-97.
- Milani, K. (1975). The Relationship of Participation in Budget-Setting to Industrial Supervisor Performance and Attitudes: A Field Study. *The Accounting Review*, 50, 274-284.
- Munawar, Irianto, Gugus, Nurkhoilis. (2006). Pengaruh Karakteristik Tujuan Anggaran Terhadap Perilaku, Sikap, dan Kinerja, Aparat Pemerintah provinsi di Kabupaten Kupang. *Simposium Nasional Akuntansi 9*. Padang
- Mutmainah, (2015). Pengaruh Karakteristik Tujuan Anggaran Dan *Group Cohesiveness* Terhadap Kinerja Manajerial. *Jurnal Ilmu & Riset Akuntansi Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya* Vol. 4 No. 8 (2015).
- Natsir, M. (2010). Pengaruh Partisipasi Dalam Penyusunan Anggaran Terhadap Kinerja Manajerial dan Motivasi Sebagai Variabel Intervening. Semarang: University of Diponegoro.
- Nengsy, H., Sari, R. N., & Agusti, R. (2013). Pengaruh Partisipasi Penyusunan Anggaran Terhadap Kinerja Manajerial Dengan *Job Relevant Information*, Kepuasan Kerja, dan Motivasi Sebagai Variabel Intervening. *Journal of Accounting*, 2, 1-17.
- Nevita, Imaningati, & Farida (2014). Pengaruh Partisipasi Anggaran terhadap Kinerja Manajerial dengan Pengetahuan Manajemen Biaya dan Budaya Organisasi sebagai Variabel Pemoderasi. *Journal of Prestasi* Vol.13 No. 1 June 2014. STIE BANK BPD Jateng.
- Sangkala. (2007). *Knowledge Management*. Jakarta: PT. Raja Grafindo Persada.
- Sarjono, Hariadi., & Julianita, W. (2011). *SPSS vs Lisrel. Sebuah Pengantar, Aplikasi untuk Riset*. Jakarta: Salemba Empat.
- Saukani, Rasuli & Darlis (2015). Pengaruh Karakteristik Tujuan Anggaran terhadap Kinerja Manajerial dengan Motivasi sebagai Variabel Intervening pada Pemerintah Daerah Kabupaten Merangin. *Journal of Sorot*, Volume 10, Nomor 2, Oktober 2015 pp. 179 – 193.
- Sekaran, U. (2006). *Metodologi Penelitian Untuk Bisnis*. (Fourth Edition). Jakarta: Salemba Empat.
- Savitri, Ritonga dan Ayuni (2015). Pengaruh Partisipasi Anggaran Terhadap Kinerja Manajerial Dengan Kepuasan Kerja Dan Pengetahuan Manajemen Biaya Sebagai Variabel Moderating. *Journal of Ilmiah Ekonomi dan Bisnis* Vol. 12, No. 2, September 2015: 166-181 EISSN : 2442-9813 ISSN : 1829-9822.
- Shields, M., Young, M. (1994). Managing Innovation Costs: A Study of Cost Conscious Behavior by R&D Professionals. *Journal of Management Accounting Research* 6, 175-196.
- Siyambola, Tunji,T. (2013). The Impact of Budget and Budegtary Control On The Performance Of Manufacturing Company In Negeria. *Journal of Business Management & Social Sciences Research (JBM&SSR)* Vol.2 No. 12, December 2013. ISSN No:2319-5614.
- Supriyono, R. A. (2001). *Akuntansi Manajemen I Edisi 1*. BPFE. Yogyakarta.

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Control,  
Managerial  
Performance**

- Solimun, (2010). Analisis Variabel Moderasi dan Mediasi. *Online Article*. Accessed on May 18, 2018. [https://www.academia.edu/8314503/Solimun\\_Program\\_Studi\\_Statistika\\_FMI\\_PA](https://www.academia.edu/8314503/Solimun_Program_Studi_Statistika_FMI_PA).
- Sondang P. Siagian (2000). Fungsi-fungsi Manajerial, Bumi Aksara. Jakarta
- Stede,V, Wim A. (2001). Measuring 'tight budgetary control'. *Management Accounting Research*, 2001, 12, 119–137.
- Susanto, Firman David. (2006). Pengaruh Pengendalian Anggaran Terhadap Prestasi Kerja. Skripsi. Faculty of Economics Jember.
- Suwatno dan Donni Juni Priansa. (2011). *Manajemen SDM dalam Organisasi Publik dan Bisnis*. Bandung : Alfabeta.
- Yoga, Agus.S. (2015). Pengaruh Pengendalian Anggaran Terhadap Kinerja Manajerial Dengan Motivasi Sebagai Variabel Intervening. *Jurusan Akuntansi Universitas Jember (Artikel Ilmiah Mahasiswa Tahun 2015)*.