Pluriform motivation as antecedent and its relationships to budgeting participation and managerial performance (Empirical Study on Manufacturing Companies listed on Indonesian Stock Exchange)

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Abstract

Based on the theories of motivation and self-determination, this research is expected to explain that pluriform motivation influences budgeting participation. This research will show that a different motivation will cause a different consequence in budgeting participation that may affect managerial performance. This research uses mail survey method to collect data from manufacturing companies listed on Indonesian Stock Exchange. The managers from different levels participated as respondents. The research result shows that intrinsic and controlled extrinsic motivation play a role as antecedent in budgeting participation but autonomous extrinsic motivation does not give any influence and gives a different consequence in budgeting participation.

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Keywords: Intrinsic motivation, autonomous extrinsic motivation, controlled extrinsic motivation, budgeting participation, managerial performance

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1. Introduction

Budget is one of the instruments to evaluate the performance of managers. Based on the theory of planning behaviour that the involvement of managers in budgeting process is a behaviour that is believed by managers to give positive impacts in the form of the increase of work performance. The performance of the individual members of an organization in managerial activities also known as managerial performance includes: planning, preparation, implementation of the tasks and functions that are realized in the form of budget setting. One of organizational controlling instruments is budget which is one of the important aspects in management accounting perspective (Hansen and Mowen, 2000). Budget is prepared in a certain time period as a guideline in carrying out organizational operational activities and as a means to evaluate performance.

Based on theory of motivation and theory of self-determination, individuals have certain behaviours because there is a motivation behind their behaviour. According to theory of motivation, the behaviour of managers to participate in preparing and setting budget is caused by a motivation. Motivations can be either intrinsic motivation or extrinsic motivation. Based on the theory of self-determination, there are several kinds of motivation. Some types of motivation in this study is called pluriform motivation which consists of intrinsic motivation, extrinsic motivation and autonomous extrinsic motivation. Pluriform motivation was allegedly an antecedent in this study about budgeting participation. The behaviour of managers to participate in the budgeting is influenced by the pluriform motivation. The behaviour of managers who are directly involved in budgeting will have functional consequences for the organization (Chong and Chong, 2002).

This is supported by a statement written by Chong and Johnson (2007) which states that the functional impact of the budgeting process is shown by an increase in performance. Involvement in budgeting is an opportunity for employees to demonstrate their achievements. Employees will be motivated to engage in budgeting when their performance is measured through the budget. So the pluriform motivation has become the motivation for managers in participating in budgeting will influence their performance. This study will examine the effect of pluriform motivation (intrinsic motivation, extrinsic motivation, autonomous and controlled motivation) as antecedent in the relationship of budgeting participation on managerial performance. This study will demonstrate empirically the effect on the behaviour of the individuals who get involved in budgeting preparation, and its influence on their performance. The contribution of this study is expected to be a reference basis for decision making and organizational management.

2. Literature Review

This budget research uses theory of motivation and theory of self-determination approach. According to Laegaard (2006), some theories of motivation provide a description of what encourages individuals to do something. Individual motivation to do something so they perform certain behaviours which can lead them to the goals to achieved. Capability that is supported by motivation will encourage individuals to achieve certain performance (Gagne and Deci, 2005).

Therefore, it can be said that motivation has a role in creating a behaviour that affects the performance of managers in an organization. Motivation becomes the basis of individuals to behave, and each organization member is motivated to do their tasks and take part in budgeting. So it can be said that the involvement of managers in budgeting preparation is due to the motivation factor they have. Motivational factor is expected to affect managers to be involved in the budgeting process, which directly or indirectly will affect their performance.

Deci and Ryan (2000) has developed a theory of motivation since 1985 which is called theory of self-determination. Theory of Self-determination divides motivation into several types of motivation (intrinsic, autonomous extrinsic and controlled autonomy) which allegedly influence the behaviour of managers. Self-determination theory can be regarded as a macro theory of human motivation on personality and give attention to the growth of individuals and their psychological needs (Story et. Al., 2009). According to the theory of self-determination, different motivations reflect different degrees of behavioural values, so that this theory is used in behaviour study.

Motivation as a unitary concept has been widely described, with each category which is theoretically identified indicates a different functional from each motivation, functionally distinct from the type of motivation (Lee, McInerney, Liem, and Ortiga, 2010). Self-determination theory is widely used by some researchers as a theoretical basis to develop a research that uses motivation variables. Wong-on-Wing et. al., (2010) used a variable of intrinsic
and extrinsic motivation in the relationship between budgetary participation and performance.

Each individual will have many options to do something. Individuals will do their job because they have a motivation, whether it is the motivation within themselves or external motivation. Pluriform motivation is considered to influence managers to participate in budgeting at work unit. If the reward accepted by employees is measured according to performance evaluation using budget target, the employees will be motivated to participate in budgeting. It can be concluded that pluriform motivation will influence the behaviour of budgeting participation which can also influence managerial performance.

2.1 Pluriform Motivation

Motivation is the drive from within oneself to do something (Ryan and Deci, 2000). Motivation is also often described as a plan or desire that arises from an individual to achieve success and to avoid failure in their life (Lee, McInerney, Liem, and Ortiga, 2010). Motivation is a process to achieve goals. An individual who has a motivation indicates that this individual has strength to achieve life success.

Pluriform according to Indonesian Dictionary (2003) means consist of some form. Pluriform motivation in this study describes that motivation consists of several types: (1) intrinsic motivation, (2) autonomous extrinsic motivation (3) controlled extrinsic motivation. Intrinsic motivation is a motivation that comes from within the individual that motivates an individual to do something and that individual gets satisfaction by what he or she does. Autonomous extrinsic motivation is a motivation that is influenced by external influence and arises in one individual; and is integrated or motivated because of status or compensation. Controlled extrinsic motivation is identified as a motivation that encourages an individual because of external rules and this behaviour is made especially to fulfil the external demand. (Wong-On-Wing et al., 2010).

2.2 Budgeting Participation

According to Hansen and Mowen (2000), Budget is a work plan prepared by organizational management that is measured in monetary units using a certain standard within a given period. Budget can be described as managerial plans drawn up by using long-term action plans and objectives of the company, as the embodiment of a work plan within a specific time period. According to Anthony and Govindarajan (2001), the principal purposes of budgeting, are as follows: (1) improve the organization's strategic plan, (2) coordinate the activities undertaken by the parts of the organization, (3) provide the manager with responsibility to authorize the management of organizational resources and provide managers feedback on their performance, (4) as a commitment and agreement and a basis to assess manager’s achievement or performance.

Budgeting participation is a process that the involvement of the individual members of the organization in the preparation of budget and it gives an influence on the preparation of budget targets that are used to evaluate the performance (Wong-On-Wing et al., 2010). According to Anthony and Govindarajan (2001), budgeting preparation has a positive influence on managerial performance, because when subordinates get involved in the budgeting process, there is a tendency they will accept budget targets, and produce an effective information exchange.

2.3 Managerial Performance

Managerial performance is the result of the work of individual members of the organization in managerial activities such as planning, investigation, coordination, supervision, staffing, negotiation and representation (Wong-On-Wing et al., 2010). Managerial performance also shows the ability of a manager working performance in management function in management functions for activities as their main responsibility (Anthony and Govindarajan, 2001). Performance tends to increase when managers use budget to allocate resources. Sufficient resource allocation for the subordinates will make more productive performance of the subordinates. (Fisher et al., 2002). The study of Fisher et. al., (2002) resulted in budgeting participation significantly influencing performance, because budget is useful as the basis of performance evaluation.
2.4 Hypothesis Development

Based on self-determination theory (Deci and Ryan, 2000), individuals are described to be intrinsically motivated if they do one activity for themselves, they have satisfaction and happiness in participating in one activity. Results of study by Wong-On-Wing et. al., (2010) showed that intrinsic motivation and extrinsic motivation are autonomous positively related to the budgeting participation. Whereas controlled extrinsic motivation is negatively related to the budget participation. Therefore, by using the basis of the results of these studies, the research hypothesis on the relationship between motivation pluriform against budget participation are:

**H1:** There is a positive influence between intrinsic motivation and the level of budgeting participation.

**H2:** There is a positive influence between autonomous extrinsic motivation, and level of budgeting participation.

**H3:** There is a negative effect between controlled extrinsic motivation and the level of budgeting participation.

Lee et.al. (2010) stated that the actual performance that is carried out by managers in the implementation of their duties is determined by their efforts. Performance is also influenced by the abilities such as knowledge and skills of the individual in performing their duties and work. Budgeting participation is one of organizational routines that produce a budget that will be used as one of the instruments to evaluate performance. The results of previous studies found a direct positive relationship between budget participation and performance, such as stated in a study by Nouri and Parker (1998), Otley and Pollanen (2000), Chong and Chong (2002), Chong and Johnson (2007). Similarly, the results of a study by Wong-On-Wing et al, (2010), budgeting participation gives a positive influence on managerial performance. Therefore the next hypothesis in this study is stated as follows:

**H4:** There is a positive influence of budgeting participation on managerial performance.

3. Research Methods

This research method uses *purposive sampling* method. The sample in this study are the managers of manufacturing companies listed in Indonesia’s Stock Exchange which served as a manager in their unit for at least 1 (one) year. Methods of data collection in this study is *mail survey*. The response rate is of 23.6%.

3.1 Variable Measurement

Pluriform motivation in this study are some form of motivation, namely: (1) Intrinsic motivation, (2) Autonomous Extrinsic Motivation and (3) Controlled Extrinsic motivation. Pluriform motivation in this study is measured using seven instruments that were developed by Wong-On-Wing et. al., (2010).

Budgeting participation is the extent of the involvement of managers in the budgeting process as the main responsibility of the managers. Budgeting participation was measured by using five instruments developed by Wenztel (2002). The assessment uses a seven-point Likert scale, with lower scores indicate lower participation rate, and higher score shows higher participation rate.

Managerial performance is the performance of individual members of the organization in managerial activities. Managerial performance include the level of managers proficiency level in implementing management activities including planning, coordination, investigation, regulation, negotiation, monitoring, and evaluation. Managerial performance is measured using nine instruments developed by Mahoney et al., (1963) in the Wong-on-Wing et al, (2010).

3.2 Processing Technique and Data Analysis

Data are analyzed using *Structural Equation Modelling* (SEM) analyses technique. This analysis instrument has the ability to combine *measurement models* and *structural models* simultaneously and efficiently (Ghozali, 2008). SEM analysis techniques are also used to evaluate the research model that has been built, as well as to test the research hypothesis.
4. Discussion

4.1. Data Analysis

Questionnaire Validity test can be seen through value of loading factor on the path diagram of variables measurement model studied. Questionnaire items are said to be valid if loading is more than 0.5 (Hair et al, 2010). The results of this study are valid because the loading factor value of each instrument is more than 0.5. Meanwhile reliability test result shows all research construct has construct reliability value of more than 0.7 (Ghozali, 2008). Therefore it can be concluded that the research construct has a fairly good reliability. The test result of multivariate normality shows the value of critical ratio (cr) of kurtosis on multivariate normality is at 4.83 because critical ratio (cr) of kurtosis is less than 7, based on the result it can be concluded that the research data has a normal contribution. Goodness of fit test in this study is presented by Table 4.1 as follows:

Table 4.1 Goodness of fit test results

<table>
<thead>
<tr>
<th>Index</th>
<th>Critical value</th>
<th>Result</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMIN</td>
<td>Expected to be small</td>
<td>1493.066</td>
<td>---</td>
</tr>
<tr>
<td>Probability</td>
<td>≤ 0.05</td>
<td>0.000</td>
<td>Very good</td>
</tr>
<tr>
<td>DF</td>
<td>Positive</td>
<td>353</td>
<td>Very good</td>
</tr>
<tr>
<td>CMIN / DF</td>
<td>≤ 2 or ≤ 3</td>
<td>4.230</td>
<td>Not good</td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0.90</td>
<td>0.688</td>
<td>Not good</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0.90</td>
<td>0.916</td>
<td>Very good</td>
</tr>
<tr>
<td>CFI</td>
<td>≥ 0.90</td>
<td>0.756</td>
<td>Not good</td>
</tr>
<tr>
<td>RMSE</td>
<td>≤ 0.08</td>
<td>0.059</td>
<td>Very good</td>
</tr>
<tr>
<td>RMR</td>
<td>≤ 0.03</td>
<td>0.027</td>
<td>Very good</td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.90</td>
<td>0.729</td>
<td>Not good</td>
</tr>
<tr>
<td>NFI</td>
<td>≥ 0.90</td>
<td>0.706</td>
<td>Not good</td>
</tr>
</tbody>
</table>

The above results inform that model has a goodness of fit under category of fair, which can be seen from AGFI value which is bigger than 0.09 and RMSE and RMR values that meet the criteria that is smaller than 0.08 and smaller than 0.03 for RMR. The determination of feasibility of the research model should not fulfill all the criteria of goodness of fit. So it can be said that the research model meets the criteria for goodness of fit on the values of AGFI, RMSE and RMR. This means that this research model is viable and fit with the data. Furthermore, table 4.2 explains the summary of the results of the estimation of structural model that describes the relationship between latent variables.

Table 4.2 Estimation results of Test Strip & Statistics Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Path</th>
<th>Path Coefficient</th>
<th>p-value</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>MI→PPA</td>
<td>0.081</td>
<td>0.341</td>
<td>0.065</td>
</tr>
<tr>
<td>Second</td>
<td>MEO→PPA</td>
<td>0.061</td>
<td>0.395</td>
<td>0.057</td>
</tr>
<tr>
<td>Third</td>
<td>MED→PPA</td>
<td>-0.287</td>
<td>&lt;0.001</td>
<td>0.094</td>
</tr>
<tr>
<td>Fourth</td>
<td>PPA→KM</td>
<td>0.374</td>
<td>&lt;0.001</td>
<td>0.138</td>
</tr>
</tbody>
</table>

Based on Table 4.2, it can be seen that the intrinsic motivation gives an influence at 6.5% on budgeting participation, autonomous extrinsic motivation gives an influence at 5.7% on budgeting participation and controlled
extrinsic motivation gives an influence at 9.4% on the budgeting participation. Budgeting participation gives an influence at 13.8% on managerial performance.

4.2. Relationships between variables

The relationship between the variables in this study are analyzed using hypothesis test to test the influence of each variable. Hypothesis test is done by analyzing the causal connection (causality) between variables in the model based on the value of the critical ratio (cr). If the direction of the relationship fits the research hypothesis and is supported by cr value that meets the requirements, it can be said that the hypothesis which is being tested receives a strong support. Critical value (cr) is obtained from normal curve (Z tables) at the significance level (0.01) in both directions, that is 
\[
Z_{\alpha/2} = Z_{0.04950} = 2.57.
\]
The test criteria is if the value cr is bigger than the value of its Z table, so it can be concluded there  is a significant influence. Hypothesis test results in this study are presented in Table 4.3 below:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>C.R</th>
<th>Ttable</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>1.201</td>
<td>2.57</td>
<td>Not significant</td>
</tr>
<tr>
<td>H2</td>
<td>1.215</td>
<td>2.57</td>
<td>Not significant</td>
</tr>
<tr>
<td>H3</td>
<td>-2.857</td>
<td>2.57</td>
<td>Significant</td>
</tr>
<tr>
<td>H4</td>
<td>3.374</td>
<td>2.57</td>
<td>Significant</td>
</tr>
</tbody>
</table>

Table 4.3 shows the test results of hypothesis that shows the influence relationship of each variable explained as follows:

4.2.1. Relationship of intrinsic motivation on budgeting participation

The research hypothesis on relationship between pluriform motivation on budget participation, as the first hypothesis which states that "there is a positive influence between intrinsic motivation and the level of budgeting participation," shows an insignificant result that means the hypothesis is rejected. Therefore, intrinsic motivation does not have influence on budgeting participation. These findings do not support the previous study conducted by Wong-On-Wing et al. (2010). This likely happened due to different organizational cultures, where the previous research analysis unit were bank managers in Hongkong, meanwhile the research analysis unit for this study are managers of manufacturing companies in Indonesia. Organizational culture in the banking companies in Hong Kong is relatively more dynamic in giving each individual an opportunity to their employees to make the best achievement as they can do in accordance with their competencies. The intense competition to excel and improve their performance is also one of the factors.

4.2.2. Relationship between autonomous extrinsic motivation on budgeting participation

The second hypothesis which states that "there is a positive influence between autonomous extrinsic motivation on the level of budgeting participation," is not significant, which means that autonomous extrinsic motivation does not affect the budgeting participation. These findings do not support the previous research conducted by Wong-On-Wing et al. (2010). The results do not support the previous study due to the different organizational cultures. Banking companies in Hong Kong are more dynamic with the higher work ethic of employees compared to the work ethic of manufacturing companies in Indonesia.

4.2.3. Relationship of controlled extrinsic motivation on budgeting participation

The relationship of the influence of controlled extrinsic motivation and budgeting participation that is hypothesized
as “there is a negative influence between controlled extrinsic motivation and the level of budgeting participation” indicates a significant result, so it can be concluded that the third hypothesis is accepted. This means there is negative influence between controlled extrinsic motivation. These findings support previous research conducted by Wong-On-Wing et al., (2010). The results also support the theory of self determination which states that individuals will behave in a certain way to meet their own interest. The managers participated in the budgeting participation because they want to show their competence, not because of superior orders or external regulations.

4.2.4. The relationship of budgeting participation on managerial performance

Furthermore, the relationship between budgeting participation on managerial performance is summed up as the fourth hypothesis, and is hypothesized as: "there is a positive influence between budget participation on managerial performance." The result is significant, therefore the hypothesis is accepted. This means there is a positive influence between budgeting participation on managerial performance. These findings support previous research by Nouri and Parker (1998), Chen (2001), Chong and Chong (2002), and Wong-On-Wing et. al., (2010). The results support the theory of motivation which states that individuals will perform certain activities that lead to a particular goal. Managers participated in the budgeting preparation to improve managerial performance.

5. Closing

This study focuses on several variables, among others: pluriform motivation which consists of intrinsic motivation, autonomous extrinsic motivation, controlled extrinsic motivation, budgeting participation and managerial performance variables. The relationship between pluriform motivations on budgeting participation shows different results. On the first and the second hypotheses, the results are not significant, which means that the intrinsic motivation and autonomous extrinsic motivation do not have any influence on budgeting participation. Whereas the result of the relationship of the influence of controlled extrinsic motivation on budgeting participation is accepted. This means that controlled extrinsic motivation has a significant influence on the budgeting participation. On the relationship between budgeting participation on managerial performance, the result is significant and the hypothesis is accepted. This means that budgeting participation has an influence on managerial performance.

Based on the hypothesis test results, it can be explained that the motivation variable that affects the budgeting participation is controlled extrinsic motivation. This shows that the involvement of managers in budgeting in manufacturing companies in Indonesia tends to be urged by controlled extrinsic motivation, other than intrinsic and autonomous extrinsic motivations. The result of this study is different from the results of study conducted by Wong-On-Wing et. al., (2010) that stated that budgeting participation is influenced by intrinsic motivation and autonomous extrinsic motivation. The study also shows that budgeting participation influences managerial performance. This result supports the previous research conducted by Wong-On-Wing et. al., (2010).

This study has several limitations. The results of this study cannot be generalized to different research objects. This study only used analysis unit managers working in manufacturing companies. The result will likely be different if the analysis unit is not only managers of manufacturing companies. The research results indicate the model has a goodness of fit under the category not good, and means that the model is less suited to the data. The research data does not fit the research model because cultural factors were not examined in this study. Another limitation is the small number of indicators on several variables, such as indicators of motivations, variables of motivation, each motivation (intrinsic, autonomous extrinsic and controlled extrinsic) only use three indicators, the result will be different if more than three indicators are used.

References

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