The Role of Budgetary Participation and Environmental Uncertainty in Influencing Managerial Performance of Village Government

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Abstract: Research aims: This study aims to examine the influence of budgetary participation and environmental uncertainty on the managerial performance of the village government. In addition, it examines the budgetary participation as an intervening variable. Design/Methodology/Approach: The research was conducted using a survey method by distributing questionnaires to village governments in Bantul Regency, Indonesia. Totally, 118 completed questionnaires were returned. Data analysis was conducted using a partial least squares (PLS) approach. Research findings: The results revealed that budgetary participation and environmental uncertainty significantly influenced managerial performance. Besides, environmental uncertainty was found as a determinant of budgetary participation implementation. This study confirmed that budgetary participation had an intervening role in the environmental uncertainty-managerial performance relationship. Theoretical contribution/Originality: This research found that the budgetary participation has a role as intervening variable between the environmental uncertainty-managerial performance relationship, in the context of a village government study. Practitioner/Policy implication: Referring to the results, the village government needs to appreciate the practice of budgetary participation to encourage managerial performance, especially to convert the negative impact of environmental uncertainty to be a chance to achieve managerial performance. Research limitation/Implication: This research was only undertaken in the scope of Bantul regency. Therefore, the generalization ability of this study is limited. Keywords: Budgetary participation; Environmental Uncertainty; Managerial Performance; Village Government; Intervening Variable

Introduction

Studies related to managerial performance have attracted many researchers. Various studies have been carried out both in terms of determinants and consequences (Agbejule, 2005; Chong & Eggleton, 2007; De Romario, Dwija, Badera, & Putra, 2019; Hall, 2008; Hammad, Jusoh, & Ghozali, 2013; Lau & Lim, 2002; Murwaningsari, 2008). However, specific studies related to managerial performance and its association
with budgetary participation and environmental uncertainty, especially in the village government setting, are still receiving little attention. Departing from this condition, the related study is necessary to address that gap and resolve some problems brought by environmental uncertainty conditions faced by village governments in Indonesia after new village reform.

A new Village Act No. 6 of 2014 has been ratified to encourage the Indonesian government to enhance national development from the village level. The development proclaimed by the Indonesian government is applied by allocating certain funds from the state budget to all villages in Indonesia. Since the act comes into force, Indonesian Ministry of Finance reported that the village funds allocation has been increasing every year from IDR 20.67 trillion (2015), IDR 46.98 trillion (2016), IDR 60 trillion (2017), IDR 60 trillion (2018), and IDR 70 trillion (2019). To gain advantages from the fund allocation, village governments are given an authority to manage and run its governmental process. The authority aims to improve the efficiency and effectiveness of public services; hence, it reaches every level of society, particularly the village community. Furthermore, authority and independence are expected to be able to encourage the better performance of the village governments (Nadir, 2013).

After almost six years, however, the village fund has neither been optimized nor made a significant contribution to the village development. It was corrupted by irresponsible village apparatus, instead. Numerous mass media revealed that the Indonesian Parliament criticized the non-optimal use of the village funds (www.cnbcindonesia.com, 2019). The critics come due to poor absorption rate of village funds and serious corruption scandals detected in many village governments, which harm Indonesia around 40.6 Billion Rupiahs (equivalent to 2.9 million US dollars) from 2014 until 2018 (www.nasional.kompas.com, 2018). The main cause for the suboptimal budget absorption rate and corruption scandals is inextricable from the quality of human resources and governance practices, such as the weak systems of planning, implementing, and evaluating the use of village funds (Amirullah, 2016; Mada, Kalangi, & Gamaliel, 2017; Triyono, Ahyani, & Arfiansyah, 2019). Seeing such conditions, therefore, it is crucial to implement a good governance practice at all village governments in Indonesia (Bastian, Wardani, & Riyani, 2014). Governance practices, such as budgetary participation, are significant to guarantee that huge money of village funds can be managed well and be able to promote performance enhancement to the village governments (Akbar, Pilcher, & Perrin, 2012).

Supposedly, giving additional to village income should be able to improve the managerial performance of the village government. As a public sector organization, the village government is demanded to have performance-oriented towards the community interests (Nurrizkiana, Handayani, & Widiastuty, 2017). To determine the managerial performance of the village government, several factors need distinguished consideration, such as budgetary participation and environmental uncertainty. The budgetary participation is needed by the village government as a strategic control instrument to plan and coordinate the resources they have (Crain & O’Roark, 2004; Kimunguyi, Memba, & Njeru, 2015). Budgetary participation mechanisms can help the
village government for preparing good planning, coordination, and communication of the village government programs (Joshi, Al-Mudhaki, & Bremser, 2003). To set a good budget, participation from all elements in the village government is crucial. Rosman, Shafie, Sanusi, Johari, and Omar (2016) found that budgetary participation improved the non-financial performance of a non-profit organization (Tapatfeto, 2014; Wiratno, Ningsih, & Putri, 2016). It also improves staff motivation and commitment to the budget, fosters creativity among all levels of staff, enhances a sense of responsibility (Hoque, 2005), as well as job satisfaction and performance (Weil & Maher, 2005).

Another factor that influences managerial performance is environmental conditions. Uncertainty of the village government environment can hinder the performance of the apparatus in implementing the management process within the organization (Hoque, 2004). Environmental uncertainty is a condition where a person or organization is difficult to predict the future. The main sources of uncertainty of the environment include community demand or aspiration, requirements obligated by new regulation, and technology changes (Govindarajan, 1986). Environmental uncertainty in the village context is caused by many requirements that have to be fulfilled by the village governments, such as accountability, transparency, and organizational performance and goals (Basuki & Ridha, 2012). Planning of programs and activities that are arranged in high uncertainty of environmental conditions will cause a problem since the apparatus will not be able to predict future demand on the village government accurately. Likewise, monitoring activities are also affected by the uncertainty of environmental conditions (Hammad et al., 2013). If planning and monitoring are disturbed so that the performance appraisal process will be hampered (Schulz, Wu, & Chow, 2010).

Currently, however, related study about managerial performance and its correlation on budgetary participation and environmental uncertainty, particularly in village governments, is lacking. The most related studies were undertaken in the business sector (Hoque, 2004; Irawanto, 2015; Jermias & Setiawan, 2008; Rosman et al., 2016), while related research on public sector focused on both state and local government scope (Basuki & Ridha, 2012; De Romario et al., 2019; Tahar & Sofyani, 2020). Seeing such conditions, the related study on governance practices in the village government, specifically related to budgetary participation to promote the managerial performance and mitigate the potential negative impact of environmental uncertainty, is crucial to be conducted. Hoque (2005) argues that the budgetary participation mechanism can help to ensure that the estimation of budget needed and appropriate activities to be conducted are more accurate and reliable. It also leads to greater acceptance from the organization’s members, and by applying this policy, management can motivate the staff to perform better by giving them further opportunities to participate in budgeting activities, such as planning, executing, and evaluating. Seeing the advantages brought by this mechanism, efforts to achieve performance will be more directed and more likely to be achieved. Explicitly, this study investigates the influence of budgetary participation practices and environmental uncertainty on the managerial performance of the village government. This study also investigates budgetary participation as an intervening role in the relationship between environmental uncertainty and managerial performance.
The argument of this variable is treated as intervening, which is explained further in the hypothesis chapter.

The result of this study provides practical recommendations to practitioners, namely village governments, specifically related to the factors that should be considered to enhance managerial performance in the village government. The study results also contribute to the literature (body of knowledge), especially as additional discussion toward goal-setting theory and literature related to managerial performance topic in the village government context, which is still very limited.

**Literature Review and Hypotheses Development**

**Theoretical underpinning**

This study employs goal-setting theory to discuss the relationship between budgetary participation and managerial performance of village governments. Locke (1975) claims that goals, which are clearly defined, realized, and understood by groups within an organization, will trigger higher levels of achievement if it is accompanied by the acceptance of the goals set (Basri, 2013; Locke, 1975). Moreover, Locke and Latham (2013) also suggest that the existence of clear goals and objectives can mitigate ambiguity and lack of direction for organization staff. One of the fundamental doctrines of goal-setting theory is the separation between learning and performance goals (Locke & Latham, 2002).

Locke (1975) contend that there are five principles in goal-setting: (1) the goal must be clear, (2) goals must have a medium to a high level of difficulty, (3) organization members must accept that goal, (4) organization members must receive feedback regarding their progress in trying to achieve these goals, and (5) objectives that are determined in a participatory manner are better than goals that are set by only one party. The outcome of goal-setting relies on whether the participating parties perceive that the goals are understood, prominent, challenging, and attainable (Locke & Latham, 2002). One of the crucial implications of this theory is that management provides the opportunity for organization members to participate in determining their judgments about the results of operations based on specified objectives. It means that if they talk about the results, then they are actually assessing themselves and is likely to get a deep insight into how they should improve their attitudes, ways of working, and behavior (Locke & Latham, 2013; Sholihin, Pike, Mangena, & Li, 2011). As budgetary participation is expected to make all management members understand the rationale of the activities planned, the budget set, and targets that must be achieved to enable better performance, this policy is in line with the goal-setting scenario.

Every goal set by the organization is formulated in a budget plan. It is to make it easier for teamwork in the organization to achieve its performance targets, which is in accordance with the vision and mission. A budget does not only contain plans and nominal amounts needed to carry out activities or programs, but also contains goals to
be achieved (Jones & Pendlebury, 2010). In some cases, the targets set in a participatory manner produce superior performance, meaning that individuals will have the best performance if given the target assignment by their superiors. It is consistent with the premise of the goal-setting theory, which claims that specific and difficult goals, with feedback implemented in a participatory mechanism, will result in high performance (Robbins & Judge, 2008).

**Budgetary Participation and Managerial Performance**

Budgetary participation helps to ensure that estimates are more accurate and reliable, leading to greater acceptance from the organization’s members (Hoque, 2005). Using this policy, management can motivate the staff to perform better by giving them further opportunities to participate in budgeting activities. Besides, it also can facilitate learning and acquisition of more knowledge or information within the organization (Rosman et al., 2016). Tapafeto (2014) revealed that budgetary participation would improve managerial performance, which in turn promotes organizational performance (Hill, 2005). Budgeting is not limited to activities determining the amount of money that will be spent on the activities. Instead, it is an essential strategic control instrument to give pivotal information, particularly in the process of planning, executing, and controlling programs, activities, and strategies that the organization runs to achieve objectives formulated (Hansen, Mowen, & Guan, 2007; Mowen & Hansen, 2006).

Preparation of budget can act as a planning and performance criteria, where the budget can be used as a control system to measure managerial performance (Hansen et al., 2007). According to the goal-setting theory point of view, managers who have involved in budgetary participation practices will understand budget goals better (Locke, Shaw, Saari, & Latham, 1981). As the performance of managers will be assessed based on budget targets achieved, managers would be serious in preparing and controlling the budget realization. As a consequence, it would increase their managerial performance.

Wiratno et al. (2016) and Rosman et al. (2016) found that participation in budget preparation and manager performance had a significant positive relationship. Yahya, Ahmad, and Fatima (2008) discovered that there was a direct relationship between budgetary participation and managerial performance in the Malaysian Ministry of Defence. Chong and Johnson (2007) suggested that the cognitive effect of participation in goal-setting allows subordinates to gather, exchange, and share job-relevant information. The availability of job-relevant information allows subordinates to develop effective strategies or plans, which will help them to exert effort over time, in an attempt to attain their goals. Chong, Eggleton, and Leong (2005) showed that the higher the intensity of market competition, the more positive was the relationship between budgetary participation and performance. Based on the arguments above, it makes sense that the budgetary participation mechanism also has a positive impact on the managerial performance of village governments.

**H1**: Budgetary participation positively influences the managerial performance of the village government.
Environmental Uncertainty and Managerial Performance

Hwang (2005) defined that environmental uncertainty is a limitation in assessing the probability of failure or successful decision being made. In Indonesia, the village government is under the control of three upper parties, namely the village ministry, the home ministry, and the regency government. In addition, the village government must implement new policies and technological changes that are present as a consequence of the new village act. Additionally, the aspirations of the village community also become matters that must be taken seriously by the village government. Such conditions make the uncertainty in the village government very high (Sofyani, Pratolo, & Saleh, 2020).

Basuki and Ridha (2012) argue that the environmental uncertainty could be determined by many aspects from outside the organization, such as rapid changes in a certain period or the existence of regulations that differ from one another and must be obeyed. Milliken (1987) contends that environmental uncertainty can be defined through three components; one of them is a lack of information relating to environmental factors associated with the decision-making situation given.

Most studies found that environmental uncertainty would have a positive impact on organizational performance (Badri, Davis, & Davis, 2000; Lau & Lim, 2002; Swamidass & Newell, 1987). This argument based on the assumption that uncertainty, such as high market competition, will encourage companies to more carefully formulate specific strategies to change uncertainty into opportunities to excel in market competition and ultimately lead to better performance. This condition is reasonable since people in the company can formulate good strategies and are supported by adequate organizational resources such as technology. In contrast, different conditions will occur in the context of the village government that does not have adequate human and organizational resources as in companies to deal with environmental uncertainty (Sofyani et al., 2020; Sofyani, Suryanto, Wibowo, & Widiastuti, 2018). The environmental uncertainty faced by the village government is more likely to lead to disruptions to the organization’s managerial performance. This notion is plausible and in line with Milliken (1987), arguing that the higher uncertainty faced by the organization, often, can promote some difficulties for managers to reach managerial performance if the management does not have the required capability to formulate a fit strategy. Based on that situation, it is logical if environmental uncertainty is predicted to impact the managerial performance of the village government negatively.

\[ H_2: \text{Environmental uncertainty negatively influences the managerial performance of the village government.} \]

Environmental Uncertainty and Budgetary Participation

According to various literature which explains that budgeting practices, as seen from the perspective of goal setting theory, bring benefits in the form of measurable targets, scheduled realization, and evaluation carried out routinely (Jones, Lande, Lüder, & Portal, 2013; Jones & Pendlebury, 2010). Then, we propose that uncertainty becomes a
determinant of budgetary participation practice. It means that organizations that see the potential for uncertainty will be encouraged to be more disciplined to manage the budget and program planned so that the objectives of the organization can be achieved. This argument is in line with Hammad et al. (2013). They found that environmental uncertainty, to some extent, is an essential factor in designing an efficient and effective management accounting system. Schulz et al. (2010) found that there was an increasing use of comprehensive performance measures and performance-based compensation among firms facing higher perceived environmental uncertainty. Kattan, Pike, and Tayles (2007) discovered that the design of management accounting and control systems adopted was more mechanistic in times of environmental and political stability, but became more organic in periods of greater uncertainty.

Since village governments have gained authority and independence in financial management, the existence of environmental uncertainty in terms of overlapping regulations, the demands from the community, and the adoption of new policies (Sofyani et al., 2018) make them have to be able to meet all demands. To deal with these conditions, the village government will be encouraged to increase participation in managing the organization, including in the budgeting process. This strategy fits with the village government that has robust characteristics with mutual cooperation culture.

$H_3$: Environmental uncertainty positively influences budgetary participation in the village government.

Budgetary Participation as Intervening

According to goal-setting theory, the clarity of the managerial process that is based on a neatly arranged budget will provide adequate information to management in managing the organization (Locke, 1975), and therefore, the right decision can be made. Lau and Lim (2002) argue that high participative procedures are perceived to be fair, and the increase in participation, in turn, is likely to improve the organization managers' performance, which eventually leads to high managerial performance. Sofyani et al. (2018) found that participation in villages can be a factor that can drive village government performance. It is because high participation from the village staff and community leaders can be a control to motivate the village head to carry out his managerial duties. In addition, the mechanism of participation is a source of ideas to encourage village governments to continue to be creative in running their government, primarily related to the completion of programs instructed by regulations from the village ministry, the home ministry, the regency government, and the village community itself. It clearly shows that in uncertain conditions, control mechanisms are believed to be able to mitigate the challenges that arise (Swamidass & Newell, 1987). It may also occur in the practice of budgetary participation, given that the activities carried out by the village government are undoubtedly related to the budget. In the environmental uncertainty condition, good control of the budget through budgetary participation mechanisms will be able to improve the managerial performance of village governments (Badri et al., 2000; Lau & Lim, 2002; Swamidass & Newell, 1987).
Lau and Lim (2002) found that procedural justice had an indirect effect on performance via participation. Hoque (2004) revealed the existence of a significant and positive association between management’s strategic choice and performance acting through management’s high use of non-financial measures for performance evaluation. Yuen (2007) found that indirect relationships existed between the two antecedent variables (work attitude and a need for achievement) and job performance, with participation in budgeting as an intervening variable.

Given that situation, it is logical if budgetary participation as a control mechanism within the village government is predicted to intervene in the environmental uncertainty-managerial performance relationship.

**H4:** Budgetary participation intervenes in the relationship between environmental uncertainty and managerial performance of the village government.

Based on the hypotheses developed, this study formulated a research model, as shown in Figure 1.

![Figure 1 Research Model](image)

**Research Method**

This study used a survey method to test the hypotheses proposed. This research was conducted in village governments located in the Bantul Regency scope. Bantul was chosen as the location for the study because some village governments became a benchmark in Indonesia, and also most of them had implemented some good governance practices, including budgetary participation. Random sampling techniques were employed to determine the sample since all villages had the same opportunity to be chosen. However, the villages involved in this study were also selected utilizing cluster sampling by considering the highest and the lowest of fund village allocation and locations (North, South, East, and West). It aimed that this study could obtain an ideal proportion of samples based on village conditions that differed in terms of development and location.

Data collection has taken two months, from January to February 2019. To get a high response rate, we distributed the questionnaires and took them directly from the
respondents in their village government offices. We informed the respondents that their names would be anonymous for security and confidential purposes. The completion of the questionnaire took 15-20 minutes. To represent the sample, the respondents were selected based on their involvement in the planning and budgeting process, budget execution, and budget evaluation. Therefore, each sample was represented by four respondents who were involved in budgeting activities; the village head, village secretary, division head, and hamlet head. A total of 118 completed questionnaires were usable and able to proceed for analysis.

The research instrument was adapted from Mahoney (1963) for managerial performance, Milani (1975) for budgeting participation, and Basuki and Ridha (2012) for environmental uncertainty. Before conducting a field survey, we organized experts’ validation to obtain input (Zikmund, Babin, Carr, & Griffin, 2013). We have involved two experts from one university in Yogyakarta who were in a level of associate professors and doctors. We asked them to leave comments on the questionnaire. Once some suggestions were received, we made improvements to the questionnaire in terms of word usage, sentence structure, the number of questions, and sentence length for each question (Abu Hasan, 2013; Fowler Jr, 2013). All items were converted to a series of statements to allow responses. The measurement of all questions used a five-point Likert-type scale, where 1 = "Strongly disagree" to 5 = "Strongly agree."

To test the hypotheses, the data were analyzed employing the partial least square (PLS). The PLS is a latent variable modeling technique used by several dependent constructs (Fornell & Larcker, 1981) and has been used in many business and accounting studies (Sholihin & Ratmono, 2013). According to Akbar et al. (2012), the PLS approach is suitable for this study because it makes minimal data assumptions and requires a relatively small sample size and a theoretical foundation that is not strong (Chin, Marcolin, & Newsted, 2003). According to Hair Jr, Sarstedt, Hopkins, and Kuppelwieser (2014), when using PLS, researchers need to follow a multi-stage process that consists of (1) model specification; (2) external model evaluation; and (3) inner model evaluation. The model specification stage was related to the set-up of the inner and outer models. The outer models, also known as the measurement models (validity and reliability test of the construct), were used to evaluate the relationships between the indicator variables and their corresponding construct. The inner model or structural model showed the relationships between the constructs of exogenous and endogenous variables being evaluated.

### Result and Discussion

Before we test the hypotheses formulated, the outer models were tested. That kind of test consisted of validity and reliability test. The validity test included a convergent and discriminant validity test. The convergent validity test used the outer loading score. The results indicated that the outer loading scores of all variables’ indicators were already higher than 0.4 (see Table 1).
Table 1 Outer Loading Score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Code</th>
<th>Loading Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial performance</td>
<td>Completion of Work on Time</td>
<td>MP1</td>
<td>0.799</td>
</tr>
<tr>
<td></td>
<td>Routine Coordination</td>
<td>MP2</td>
<td>0.716</td>
</tr>
<tr>
<td></td>
<td>Program Consultation</td>
<td>MP3</td>
<td>0.855</td>
</tr>
<tr>
<td>Budgetary participation</td>
<td>The intensity in preparing the budget</td>
<td>PIB1</td>
<td>0.912</td>
</tr>
<tr>
<td></td>
<td>Direct involvement in the budgeting process</td>
<td>PIB2</td>
<td>0.887</td>
</tr>
<tr>
<td></td>
<td>Collection of aspirations in the budgeting process</td>
<td>PIB3</td>
<td>0.814</td>
</tr>
<tr>
<td>Environmental uncertainty</td>
<td>Efforts to meet regulatory demands</td>
<td>EU1</td>
<td>0.867</td>
</tr>
<tr>
<td></td>
<td>Efforts to meet the demands of community aspirations</td>
<td>EU2</td>
<td>0.899</td>
</tr>
<tr>
<td></td>
<td>Efforts to establish good relations with the community</td>
<td>EU3</td>
<td>0.699</td>
</tr>
<tr>
<td></td>
<td>Sharing of positive information to gain public support</td>
<td>EU4</td>
<td>0.775</td>
</tr>
<tr>
<td></td>
<td>Efforts to implement the good village governance</td>
<td>EU5</td>
<td>0.900</td>
</tr>
</tbody>
</table>

Thus, according to Hair, Black, Babin, Anderson, and Tatham (2006), convergent validity has been fulfilled. Besides, PLS analysis revealed that the score of construct loading on its construct was higher than on other constructs (see Table 2).

Table 2 Discriminant Validity Score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Environmental uncertainty</th>
<th>Managerial performance</th>
<th>Budgetary participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental uncertainty</td>
<td>0.832</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial performance</td>
<td>-0.218</td>
<td>0.792</td>
<td></td>
</tr>
<tr>
<td>Budgetary participation</td>
<td>0.192</td>
<td>0.331</td>
<td>0.872</td>
</tr>
</tbody>
</table>

It concluded that the discriminant validity was also fulfilled (Gefen & Straub, 2005). Moreover, Cronbach’s Alpha scores of all constructs were higher than 0.6, and the composite reliability scores for all constructs showed agreed level and have met the rule of thumb, as shown in Table 3 (Chin et al., 2003; Fornell & Larcker, 1981). Hence, it can be concluded that all constructs have met the criteria of validity and reliability, and therefore, the hypotheses testing could be executed.

Table 3 Cronbach’s Alpha, Composite Reliability, and AVE Score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental uncertainty</td>
<td>0.888</td>
<td>0.917</td>
<td>0.692</td>
</tr>
<tr>
<td>Managerial performance</td>
<td>0.709</td>
<td>0.834</td>
<td>0.628</td>
</tr>
<tr>
<td>Budgetary participation</td>
<td>0.841</td>
<td>0.905</td>
<td>0.760</td>
</tr>
</tbody>
</table>

Hypotheses test result summary is presented in Table 4. It can be seen that budgetary participation practice had a positive influence, while the condition of environmental uncertainty had a negative influence on the managerial performance of the village government apparatus. Moreover, environmental uncertainty also affected the implementation of budgetary participation practices. It means that the existence of uncertainty conditions, which may become a challenge in the future, leads the village
government to take the initiative to run one of the new public management practices, namely budgetary participation.

**Table 4 Hypotheses test result summary**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direction</th>
<th>Original Sample</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP -&gt; MP</td>
<td>H₁</td>
<td>+</td>
<td>0.388</td>
<td>5.275</td>
<td>0.000*</td>
</tr>
<tr>
<td>EU -&gt; MP</td>
<td>H₂</td>
<td>-</td>
<td>-0.292</td>
<td>3.569</td>
<td>0.000*</td>
</tr>
<tr>
<td>EU -&gt; BP</td>
<td>H₃</td>
<td>+</td>
<td>0.192</td>
<td>1.986</td>
<td>0.048**</td>
</tr>
<tr>
<td>EU -&gt; BP -&gt; MP</td>
<td>H₄</td>
<td>+</td>
<td>0.075</td>
<td>1.677</td>
<td>0.094***</td>
</tr>
</tbody>
</table>

Note: BP: Budgetary participation; EU: Environmental uncertainty; MP: Managerial performance. *significant at alpha 0.01; **significant at alpha 0.05; *significant at alpha 0.10.

Then, this study revealed that budgetary participation intervened in the relationship between environmental uncertainty and managerial performance of the village government apparatus. Interestingly, it was found that the direction of environmental uncertainty influenced managerial performance, which was directly negative, then changed to positive when the relationship occurred indirectly through budgetary participation. Based on this intervening test, it reinforced that good governance practices in the form of budgetary participation had a vital role in encouraging the managerial performance of the village government apparatus. Apart from the significance value of the intervening test, which was not so strong, at alpha 0.01, this variable is still essential to consider as its partial effect was positively significant on managerial performance.

**Discussion**

This research result confirmed that budgetary participation had a positive impact on achieving managerial performance, hence, H1 was supported. This result is consistent with Tapatfeto (2014), Wiratno et al. (2016), Rosman et al. (2016), Mada et al. (2017), Sofyani et al. (2018), and Pratolo, Atmaja, and Sofyani (2020). The budget preparation process can act as a planning and performance criteria, which is used, in turn, as a control toward managerial performance (Hansen et al., 2007). This finding confirmed the goal-setting theory as proposed by Locke et al. (1981) that managers who have involved in budgetary participation practices will understand budget goals better (Locke et al., 1981), which then perceived to be helpful in carrying out managerial functions. In the village government, budgetary participation was carried out at the planning and controlling stages through regular weekly, monthly, quarterly, and annual evaluations (Sofyani et al., 2018). Management at all levels and community leaders are involved in this budgetary participation process. This practice provides benefits for gathering positive input and support to resolve the various demands that must be met and the goals to be achieved by the village government (Pratolo et al., 2020). Technically, how constraints must be addressed and what strategies are suitable to be applied can be found through this budget participation practice. The budgetary participation is also considered as another form of direct accountability practice of village government and able to enhance public trust (Sofyani et al., 2018).
This study also supported H2 that environmental uncertainty reduced the managerial performance of village governments. It is in line with Hirst (1987) that under uncertain conditions, the managerial process would become more difficult and less effective. Technically, village governments that do not implement budgetary participation will have difficulty meeting demands and goals, especially after the village act amendment. It is because they do not have a control strategy that helps to collect and process the information needed in decision making amid environmental uncertainty. It is what triggers the village government difficult to achieve optimal managerial performance. Sofyani et al. (2020) found that many village governments copied and pasted performance and budget reports from other villages that were considered to be advanced because they did not implement good governance practices, including budgetary participation.

Nonetheless, several previous studies found different results, which showed the positive influence of environmental uncertainty on organizational performance (Darya, 2012; Eriani & Fanani, 2019). This difference is due to most of the previous studies examining the relationship between environmental uncertainty and managerial performance in advanced companies. Those prior studies concluded that the company's success in achieving good performance in uncertainty condition was caused by their ability to formulate a control strategy to make uncertainty to be controllable and subsequently became an organizational strength for competition (Badri et al., 2000; Swamidass & Newell, 1987). The supported of H2 indicated that in the context of organizations that did not yet have established resources such as human, governance practices, and technology such as village governments in Indonesia, they would face difficulties in achieving managerial performance (Milliken, 1987). These results support the idea of a contingency related to environmental uncertainty-managerial performance relationships (Chenhall, 2003; Donaldson, 2001; Fisher, 1998; Hoque, 2004).

Furthermore, this study supported H3 that awareness to consider the uncertainty was precisely to be the determinant of village governments to implement budgetary participation. It aimed to ensure that uncertainties could be controlled by the organization in achieving performance. This result is in line with some prior studies. Swamidass and Newell (1987) found that environmental uncertainty influenced manufacturing strategy variables, such as manufacturing flexibility and the role of manufacturing managers in strategic decision-making. The manufacturing strategy, in turn, influenced firm performance. Chong and Chong (1997) and Hammad et al. (2013) found that environmental uncertainty, to some extent, is an essential factor in designing an efficient and effective management accounting system. Badri et al. (2000) identified strong relationships between environmental factors, such as labor availability, competitive hostility, government laws and regulations, political concerns and market dynamism, and the operations strategy choices by the firms to compete. Hoque (2004) found that management’s high use of non-financial measures for performance evaluation intervened in the association between management’s strategic choice and performance. This finding indicated that to face environmental uncertainty, most village governments are encouraged to improve good governance practices within the organization, including budgetary participation. This result is also in line with Sofyani et al.
al. (2018) that most village governments in Bantul regency have begun to adopt new public management (NPM) practices after the reform of the village act. It is based on the awareness of the increasing environmental uncertainty in terms of demands from regulatory, society, organizational culture, and technology changes. For the institutionalization of NPM practices, many villages received supervision from Regency government and academics from universities.

Besides, this study confirmed that budgetary participation had an intervening role in environmental uncertainty-managerial performance relationships. Thus, it supported H4 and indicates that the budget as a strategic instrument could mitigate any ambiguity about the activities that must be carried out and completed caused by environmental uncertainty (Tahar & Sofyani, 2020). It illustrates the benefits that might be obtained if the budgeting was done in a participatory manner, rather than only being managed individually by top management. In the old era, the village government relied heavily on the figure of the village head. The absence of regulations related to participatory budgeting in the old act made the village experienced strong managerial hegemony (Cohen, Krishnamoorthy, & Wright, 2008). It had a disadvantage in the village administration. In addition, it also made the village dependent on the village head figure. Therefore, the village government works well if the village head is visionary, honest, highly committed, and has sufficient managerial capability, and vice versa. The mechanism of budgetary participation makes the village government no longer dependent on the village head since the organizational movement will be supported by many parties involved through the budgetary participation mechanism. It is subsequently believed to be able to drive the managerial performance.

This last research finding is consistent with Cheng (1984), who found that the higher the level of uncertainty, the more coordination conducted by an organization to pursue target performance. This finding is also in line with Badri et al. (2000) that successful organizations (high performers) are those who can adopt competitive priorities that best fits the conditions of the environment, notably stability and dynamism. Moreover, they suggested that most firms accept their environment as given and install the mechanism to react to its forces. High performers match the complexity of their external environment by utilizing environmental variables as sources for effective controls within their organizations. Given those arguments, environmental uncertainty is indeed to be a factor that is carefully considered by management to design the effective control mechanism thorough implementation of accounting policies in the village government, in this case, is budgetary participation.

**Conclusion**

This study aims to examine the effect of budgetary participation and environment uncertainty on managerial performance. A total of 30 village governments in Bantul regency were involved as samples. In summary, this research found that budgetary participation and environmental uncertainty are essential factors that need to be considered in encouraging managerial performance, given the significant influence of
both. This study also found that the existence of environmental uncertainty was motivated by the village government to implement budgetary participation. Finally, budgetary participation was found to have a role as an intervening variable. The presence of budgetary participation could make environmental uncertainty had a positive impact on managerial performance.

Departing from the those findings, we highlighted prominent contributions both in practical and theoretical. Practically, it is suggested that the village governments that face many demands from regulations, higher government and the community, governance, and technological changes, or in conditions of environmental uncertainty, need to implement budgetary participation. It is because budgetary participation plays a vital role in encouraging the managerial performance of the village government and able to change the negative impact of environmental uncertainty to be positive toward managerial performance. Theoretically, this research confirms the goal-setting theory, especially in the context of the public sector, namely the village government, where related studies are rarely discussed. As a premise of goal setting theory, the process to make the organization goal be clearly understood by organization members through budgetary participation has been found to contribute positively to the managerial performance of the village government. Also, it can change the negative influence to be positive of the relationship between environmental uncertainty and managerial performance.

Despite its important contribution, this study has several limitations. First, this study only examined two determinants of village government managerial performance. Further studies need to investigate other potential variables, especially in terms of internal organizational capabilities, such as performance-based budgeting practices, performance measurement systems, and implementation of good governance principles. Last but not least, this research was only carried out in the village government within the Bantul regency scope. It is because of the research permission given by the local government of Special Region of Yogyakarta Province, higher authority, only for one regency, namely Bantul. Given the vastness of Indonesia and the diverse characteristics of villages in the various areas, the results of this study are not strong enough to produce generalizable results. Therefore, the next study is essential to be conducted on village governments in other regions, which certainly have different organizational cultural contexts.

References


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