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# The Effect of Accounting Control and Management Control on Managerial Performance Through Participation in Budget Preparation as an Intervening Variable at PT. GARAM (Persero)

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**ABSTRACT**

A business is an organizational structure that utilizes human, natural, and economic resources for its goals. Effective human resources management, accounting, and budget preparation are crucial for regulating activities. The purpose of this research is to analyze the effect of management and accounting controls on budget preparation participation and managerial performance. This research technique uses a quantitative and associative approach. The study's participants were all PT. Garam (Persero) managers. The sampling strategy then used census or analytic methods to choose 49 managers from the overall population. The analytical method utilizes structural equation modeling using PLS 4 software tools and mediation testing using the Sobel test calculator. The study found that accounting control variables significantly affect budget preparation participation, but not management performance. Management control variables did not significantly influence either. However, budget preparation participation emerged as a significant factor impacting managerial performance and acted as a moderator between accounting control and managerial performance. Interestingly, this moderating role was not observed in the relationship between management control and managerial performance. The findings emphasize the importance of accounting control in fostering participative budget preparation, which in turn enhances managerial performance. This study contributes to understanding the interplay between controls, participation, and performance in organizational settings.

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## Introduction

In this era of globalization, competition between companies is getting tighter. This will force each company to improve its performance as much as possible to win the competition. However, improving performance should be supported by adequate resources (Tensay & Singh, 2020). One of the most important resources in an organization is human resources or labor (Ahmad Yani, 2022; Dwita & Sadana, 2021; Kurniawati & Sidiq, 2020). Human resources in an organization are an important factor in investing in recruiting, selecting, and retaining human resources (Pratama et al., 2019).

A company can be seen as an organizational system of human, natural, and other economic resources to achieve goals (Ryandono et al., 2019). Human resources in an organization are one of the most important factors that determine organizational effectiveness, for this reason, every company needs a management control system intending to regulate organizational activities through organizational leaders so that they are following the company's desired goals (Järvenpää et al., 2023). Management control is a process a manager attempts to influence organizational members to implement organizational strategies. Some of the activities included in management control are planning activities to be carried out, organizing activities, communicating and evaluating information, making decisions about whether an activity will be carried out or not, and how influencing people in the organization to change their behavior (Rizka & Gowon, 2021).

Management control is necessary in every company. This managerial control is a system designed to regulate every activity of organizational team members by organizational managers to achieve the goals and targets the company wants to achieve (Wardhana et al., n.d.). Management control is also useful for determining and monitoring activities carried out by the company. The aim of implementing a management control system in a company is to facilitate the achievement of company goals. The concept of managerial control needs to be applied in companies to assist management in controlling all activities to achieve organizational goals effectively and efficiently (Santoso & Kusuma, 2023). The implementation of a management control system needs to be implemented within the company, this is done to find out whether the system is functioning as it should and to find out whether the system can help the company achieve its goals (Bali, 2022). The accounting control system is one part of the internal control system that is useful for managing and controlling the organization's financial records. With accounting controls, the financial reports prepared can be assessed and measured for their suitability, and with accounting controls, errors will be minimized (Laoli & Ndraha, 2022).

Government Regulation (PP) Number 60 of 2008 defines "internal accounting control as an integral process of actions and activities carried out continuously by management and all employees to provide adequate confidence in the achievement of organizational goals through effective and efficient activities, reliability of financial reporting, safeguarding state assets, and compliance with laws and regulations". According to Paramitha (2016) "Accounting control is a process of influencing other people in a company to effectively and efficiently achieve company goals through certain strategies". One form of accounting control is planning an effective budget (Baku & Hasan, 2021). In planning the preparation of the budget so that it can run effectively and efficiently, it is necessary to involve several employees who are competent in their fields and of course, have a connection in the preparation of the budget, this is commonly referred to as participation in budget preparation (Prasetya et al., 2023).

Budget preparation participation is a process that describes individuals who are involved in budget preparation and have an influence on budget targets (Qosim et al., 2023). The budget prepared will influence future decision-making. Participation in budget preparation will influence managerial performance, because, with participation in budget preparation, managers who feel involved will be responsible for budget implementation so that subordinates are expected to be able to implement the budget better, especially in terms of the ability to achieve targets determined by the company (Indrawati, 2020).

**Table 1. Comparison between Sales Targets and Realized Sales of PT. GARAM**

| Description | 2022 (IDR) | 2023 (IDR) | Value |
|---|---|---|---|
| Packaged coarse salt | Rp.64.959.763 | Rp.116.194.747 | Rp.51.234.984 |
| Packaged fine salt | Rp.48.362.851 | Rp.60.820.986 | Rp.11.918.135 |

Source: Researcher, 2024

Based on the table above, it is known that in 2022 there was a decline, but in 2023 the company experienced an increase so the target was achieved, given the conditions experienced by PT. SALT Accounting control systems and management controls have not been implemented optimally, thus affecting managerial performance and causing the Company to experience a decline. This is in line with research studies Sulistyowati (2019) and Baku & Hasan (2021) which states that accounting control has a positive and significant effect on managerial performance. The influence between research variables provides managers with the implication that accounting control turns out to have a greater influence on managerial performance compared to personal control and behavioral control. Accounting control has the most dominant influence on managerial performance compared to behavioral control and personal control.

Then also research Sari & Herawati (2021), Naibaho (2019) and Rahmad et al., (2016) which states that management control influences managerial performance. A management control system is needed in every organization, because the system is designed to regulate the activities of organizational members through the organization's leaders (managers) so that they are in line with the company's desired goals. Along to research Giusti et al. (2018), Susanti (2022) and Haslindah et al. (2020) which states that budget participation has a positive influence on managerial performance. This means that the implementation of budget participation has a directional influence on managerial performance. Increasing budget participation will have an impact on increasing managerial performance.

## Literature Review

### Contingency Theory

Contingency theory is based on the premise that no accounting system can be established generally in all areas of the organization and all situations, so a management accounting system must be designed that is first adapted so that its use can be effective. This means that the management accounting system implemented by an organization depends on the particular situation being faced (Widiastri, 2017). The contingency approach means that the level of reliability of the management accounting system has different effects for each organizational situation so the level of information characteristics of the management accounting system may not always be the same for each organization in each condition. Organizations face contingencies to create appropriate configurations expected to create organizational effectiveness and improve managerial performance. Having an effective management accounting system can help leaders in making decisions. The more sophisticated an organization's management accounting system is, the more effectively it can assist leaders in making decisions (Widiastri, 2017). In this research, researchers will examine the effect of participation in budget preparation on performance through a management accounting system based on contingency theory.

## Managerial Performance

Managerial performance is one of the important factors in a company because increasing managerial performance is expected to improve company performance. Managerial performance obtained by managers is also a factor that can be used to increase company effectiveness. Managerial performance shows management's ability to carry out management functions which are business activities, which of course always involve decision-making (Hamdi, 2018). According to Mahoney et al (1963), Managerial performance is an individual's performance in managerial activities, such as planning, investigation, coordination, evaluation, supervision, staff selection, negotiation, and representation. Managers produce performance by directing the talents and abilities, as well as the efforts of several other people within their area of authority (Azhari, 2021).

Managerial performance is the result of work achieved by a manager in realizing the goals, objectives, vision, and mission through the implementation of management functions which include planning, investigation, coordination, evaluation, supervision, staffing, negotiation, and representation. Several factors can influence managerial performance according to Baron and Kenny (1998) in Setyarini and Anastasia (2008), including team factors (work systems and facilities provided by the company). Personal factors (skills, self-confidence, individual motivation, and commitment). Leadership factors (quality of motivation/spirit, guidelines for motivating managers or organizational group leaders). Situational factors (changes in circumstances and pressures that come from both the internal and external environment of the company) (Azhari, 2021), in managerial performance activities, including:

1. Planning
   Determine goals, policies, and activity plans such as work scheduling, budget preparation, and program preparation.
2. Investigation
   Collect and prepare information for records, reports, and accounts measuring results and analysis of work.
3. Coordination
   Exchange information with people in other parts of the organization to relate and adjust programs, inform other departments, and liaise with other managers.
4. Evaluation
   Assessing and measuring proposals, observing and reporting performance, assessing employees, assessing results records, assessing financial reports, and checking service quality.
5. Supervision
   Directing, leading, and developing subordinates, training, explaining work regulations to subordinates, assigning work assignments, and handling complaints.
6. Staff Selection
   Maintaining the workforce, recruiting, interviewing, selecting new employees, placing, promoting, and transferring employees.
7. Negotiation
   Providing supporting facilities entering into contracts with prospective buyers and bargaining as a group.
8. Representative
   Promote the company's general goals by providing verbal consultations or connecting with individuals outside the company.

## Management Control

Every company needs a management control system because the system is designed to measure the activities of organizational members through the leaders (managers) so that they are following the company's desired goals. The control process is carried out by determining goals, implementation strategies, measuring, and analyzing achievements. According to Kaunang et al., (2021) explains that the management control system is a series of actions and activities that occur in all organizational activities continuously. Management control is not a separate system within an organization but must be considered an important part of every system used by management to organize and direct its activities. A management control system is a system used by management to influence members of its organization to implement organizational strategies efficiently to achieve organizational goals (Rotinsulu et al., 2021). Indicators of management control are as follows (Rotinsulu et al., 2021): 1) Organizing; 2) Policy; 3) Planning; 4) Recording; 5) Reporting.

## Accounting Controls

The accounting control system is one part of the internal control system that is useful for managing and controlling the organization's financial records. With accounting controls, the financial reports prepared can be assessed and measured for their suitability, and with accounting controls, errors will be minimized (Gunawan et al., 2019). The indicators used to measure accounting control variables are as follows (Hertati et al., 2021): 1) Separation of functions; 2) Procedures for granting authority; 3) Documentation procedures; 4) Accounting Procedures and Records; 5) Physical supervision; 6) Free internal inspection.

## Participation in Budget Preparation

Budget participation is a budgeting approach that allows managers who will be responsible for budget performance, to participate in budget development, budget participation communicates a sense of responsibility to lower-level managers and encourages creativity. Participation in budget preparation is the level of individual involvement and influence in determining and compiling budgets within a division or section, both periodically and annually (Wokas et al., 2022).

Participation in budget preparation is a reflection of the manager's perspective regarding the involvement of subordinates in budget preparation, decision-making, the number of beneficial influences, and the contribution of ideas to the budget. Participation in budget preparation can be said to be one manifestation of the element of willingness to sacrifice in defending the country. Good participation from employees is a treatment that manifests a voluntary statement from the individual to be able to make sacrifices for the organization or company. Apart from that, this can increase the role of employees in the organization or company where they work (Siswiraningtyas & Yuhertiana, 2021)(Wardhana, 2023).

Sinaga (2018) said that the dimensions of budget participation can be seen from the characteristics of budget participation, namely the involvement of managers and superiors in the budget preparation process. There are no very clear indicators regarding budget participation because this is closely related to human attitudes and behavior. In this research, the author refers to the indicators used by Sinaga (2018) to measure budget participation. These indicators are:

1. Participation in budget preparation
2. Contribution to preparing the budget which is his responsibility.
3. The influence of managers in determining the final budget amount for which they are responsible.
4. The superior's reasons for revising the budget prepared or proposed by the manager.
5. The frequency with which managers discuss proposed budgets

6. The frequency with which superiors ask for managers' opinions or suggestions when preparing a budget.

## Hypothesis Development

### The Effect of Accounting Control on Budget Preparation Participation and Managerial Performance

Organizational structure theory focuses on how organizational structure influences employee behavior and performance. This theory states that different organizational structures can produce different levels of performance. Accounting controls can play an important role in determining an effective organizational structure by Determining the level of centralization or decentralization through Accounting controls can be used to determine how much authority is given to managers at various levels of the organization; Establish coordination and control through accounting controls that can help ensure that different departments and units within an organization work together effectively; Facilitate decision making through accounting controls that can provide managers with the information they need to make the right decisions (Mukaro et al., 2023).

This is in line with the research Sulistyowati (2019) and Baku & Hasan (2021) which states that accounting control has a positive and significant effect on managerial performance. The influence between research variables provides managers with the implication that accounting control turns out to have a greater influence on managerial performance compared to personal control and behavioral control. Accounting control has the most dominant influence on managerial performance compared to behavioral control and personal control. Thus, the first hypothesis can be written as follows:

***$H_1$: Accounting control has a positive and significant effect on participation in budget preparation***

***$H_2$: Accounting control has a positive and significant effect on managerial performance***

### The Effect of Management Control on Budget Preparation Participation and Managerial Performance

Management control systems theory focuses on how management control systems are used to control employee behavior and performance at all levels of the organization. This theory states that an effective management control system can help an organization achieve its goals. Management control can influence managerial performance by clarifying organizational strategy through management control which can be used to communicate organizational strategy to employees at all levels, including managers. This helps managers understand what is expected of them and how they can contribute to the achievement of organizational goals (Baku & Hasan, 2021).

Monitor performance through Management controls that can be used to track the performance of managers and their departments. This helps managers to identify areas where they can improve their performance and make necessary adjustments, and encourages desired behavior through management controls that can be used to motivate managers to act for the organization. This can be done through various means, such as providing incentives, recognizing good performance, and providing sanctions for poor performance. Facilitates decision-making: Management controls can provide managers with the information they need to make informed decisions. This includes information about the organization's financial performance, market conditions, and competitors (Sari & Herawati, 2021b; Syaputri & Rimet, 2024).

This is in line with the research Sari & Herawati (2021), Naibaho (2019) and Rahmad et al., (2016) which states that management control influences managerial performance. A management control system is needed in every organization, because the system is designed to regulate the activities of organizational members through the organization's leaders (managers) so that they are in line with the company's desired goals. Thus, the first hypothesis can be written as follows:

***$H_3$: Management control has a positive and significant effect on participation in budget preparation***

***$H_4$: Management control has a positive and significant effect on managerial performance***

## The Effect of Budget Preparation Participation on Material Performance

Budgetary control theory focuses on how budgets are used to control managers' behavior and performance. This theory states that an effective budget can motivate managers to achieve organizational goals. Budgetary control can influence managerial performance by: Helping managers to allocate resources effectively because Budgets can help managers to allocate their resources effectively to achieve organizational goals; Increases accountability as Budgets can hold managers accountable for their use of resources; and Facilitate coordination because the Budget can help to facilitate coordination between different departments and units in the organization (Siswiraningtyas & Yuhertiana, 2021; Wokas et al., 2022).

This is in line with research Giusti et al. (2018), Susanti (2022) and Haslindah et al. (2020) which states that budget participation has a positive influence on managerial performance. This means that the implementation of budget participation has a directional influence on managerial performance. Increasing budget participation will have an impact on increasing managerial performance. Thus, the first hypothesis can be written as follows:

***$H_5$: participation in budget preparation has a positive and significant effect on managerial performance***

Based on the development of the hypothesis described above, the analysis model proposed in this research is:

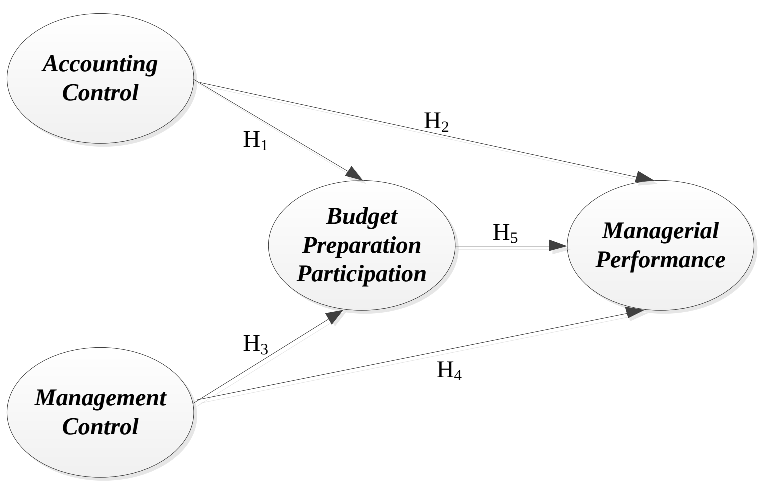


**Figure 1. Model of variables**

Source: Author (2024)

## Methodology

This research is quantitative with an associative approach Ahyar et al. (2020). The population in the study were all managers at PT. Garam (Persero). Then the sampling technique uses census techniques or analysis techniques which involve all members of the population as a sample, totaling 49 managers. The analysis technique uses structural equation modeling analysis with partial least squares (PLS) 4 software tools, with mediation tests using the Sobel test calculator tool (Hair et al., 2020; Sugiyono, 2017).

## Results and Discussion

Descriptive statistics are used to provide an overview of the data used in research. In this research, the descriptive statistical data measures used are minimum value (*min*), maximum value (*max*), average value (*mean*), middle value (*median*), and standard deviation (*std. deviation*). Descriptive statistics of the variables used in this research can be seen in the table below:

**Table 1. Descriptive Statistic**

| No | Variable | Mean | Standard Deviation |
|---|---|---|---|
| **1** | *Accounting Control* | 3,78 | 0,56 |
| **2** | *Management Control* | 3,76 | 0,57 |
| **3** | *Budget Preparation Participation* | 3,76 | 0,53 |
| **4** | *Managerial Performance* | 3,73 | 0,61 |

Source: Data Processing Results (2024)

Table 1 shows the respondent's answers to the 6 statements submitted related to the accounting control variable (X1). Based on the table, it is known that the indicator with the largest average answer value lies in indicator X14 with the statement "At the agency where I work, every transaction has been recorded in the accounting notebook" and the indicator used as a basic decision-making tool" obtained an average respondent answer of 3.82. Then the indicator with the lowest average value is indicator X11 with the statement "The company separates accounting functions in preparing financial reports" and indicator X15 with the statement "At the agency where I work, financial reports are reviewed and approved first by the head "finance/accounting subsection before distribution as a form of physical supervision" where the average respondent answer was equal to 3.73.

Then in the management control variable (X2), it is known that the indicator with the largest average answer value is an indicator. Then the indicator that has the lowest average value is indicator X23 with the statement "The top managers make a plan by setting targets that must be achieved before company activities are carried out" and indicator ” where the average respondent's answer was equal to 3.69. Selanjutnya variable participation in budget preparation (X3). It is known that the indicator with the largest average answer value is indicator X31 with the statement "All managers participate in the budget preparation process" with an average respondent answer of 3.84. Then the indicator that has the lowest average value is an indicator. Finally, the managerial performance variable (Y) shows that the largest average answer value lies in indicator Y7 with the statement "I also propose providing supporting facilities and entering into contracts with prospective buyers and bargaining as a group" with an average respondent answer of 3.88. Then the indicator that has the lowest average value is indicator Y3 with the statement "I also exchange information with people in other parts of the organization to link and adjust programs, inform other departments, relationships with other managers" where the average respondent's answer is the same. -equal to 3.63.

## Measurement Model Analysis

From the existing steps for using SmartPLS 4.0, the first step that must be taken is to assess two criteria in using data analysis techniques, namely assessing the outer model through Construct reliability and Validity, and Discriminant validity. The results of the initial research model construction carried out by researchers with SmartPLS are as follows:

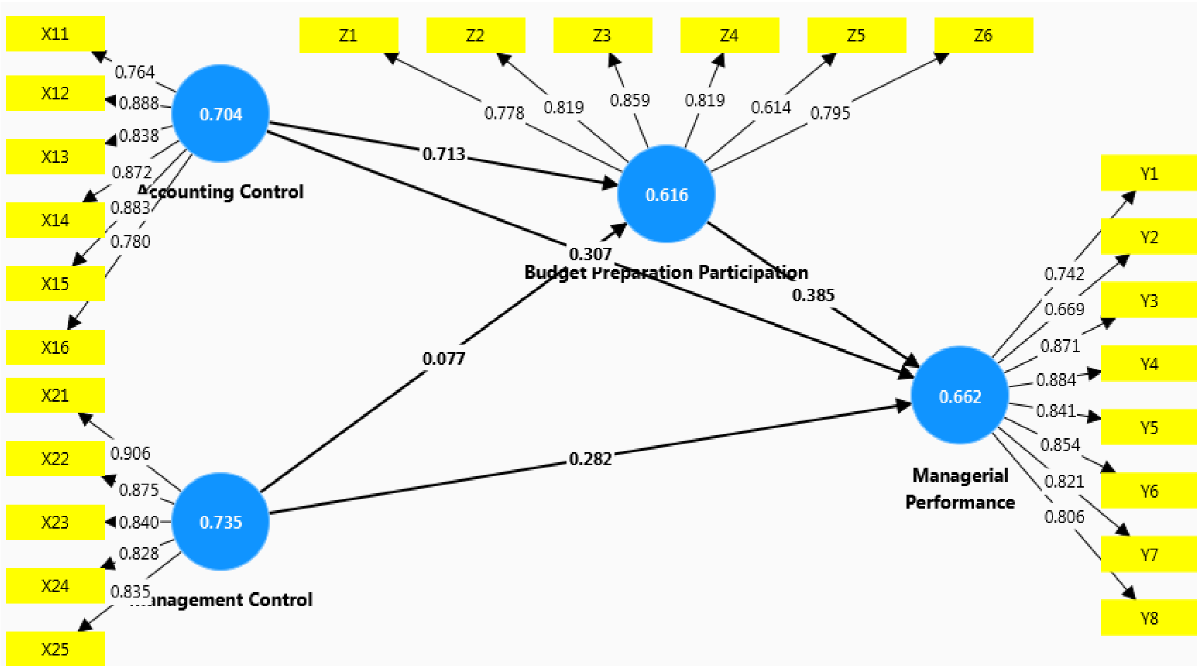


**Figure 2. PLS Algorithm Initial Research Model**

Source: Data Processing Results (2024)

In the picture above, the line connecting the indicator and the construct shows the outer loading value, and the line connecting the constructs shows the path coefficient value and the value in the circle shows the AVE value.

## Convergent Validity

Convergent validity is defined as convergence across one or more methodologies. Traditionally, the problem is the amount to which two or more scales (sets of items) correlate across methods, although it can also apply to convergence within scales. In structural equation modeling, observable elements are loaded into a latent component or variable (Shara et al., 2020). To establish convergent validity, the collection of items must load strongly and substantially on the latent variable, but they must be obtained using distinct procedures. This is challenging when measuring scale items inside a single instrument, such as a survey. This difficulty is less severe when a large number of documents are collected from a variety of sources: items loading on a single latent component originate from several sources (Hair et al., 2020). The results of convergent validity are shown using the factor loading values listed below:

**Table 2. Factor Loading Value**

| No | Accounting Control | Management Control | Budget Preparation Participation | Managerial Performance |
|---|---|---|---|---|
| **X11** | 0,764 | | | |
| **X12** | 0,888 | | | |
| **X13** | 0,838 | | | |
| **X14** | 0,872 | | | |
| **X15** | 0,883 | | | |
| **X16** | 0,780 | | | |
| **X21** | | 0,906 | | |
| **X22** | | 0,875 | | |
| **X23** | | 0,840 | | |
| **X24** | | 0,828 | | |
| **X25** | | 0,835 | | |

| | | | | |
|---|---|---|---|---|
| **Z1** | | | 0,778 | |
| **Z2** | | | 0,819 | |
| **Z3** | | | 0,859 | |
| **Z4** | | | 0,819 | |
| **Z5** | | | 0,614 | |
| **Z6** | | | 0,795 | |
| **Y1** | | | | 0,742 |
| **Y2** | | | | 0,669 |
| **Y3** | | | | 0,871 |
| **Y4** | | | | 0,884 |
| **Y5** | | | | 0,841 |
| **Y6** | | | | 0,854 |
| **Y7** | | | | 0,821 |
| **Y8** | | | | 0,806 |

Source: Data Processing Results (2024)

Based on the known data presented in the table above, each research variable indicator has a factor loading value between a score of 0.5 and above 0.7. This can still be said to be quite good because according to Hair et al. (2020) a reliability indicator value above 0.70 is included in the good category, 0.40 to 0.70 is considered sufficient, and only if it is below 0.40 it can be said to be unfit (Yudha et al., 2024). Referring to the explanation above, it can be concluded that the indicators used in this research still meet the validity criteria and can be used for further analysis.

## Discriminant Validity

Discriminant validity is conducted to ensure that each concept of the latent model is distinct from other variables (Hair et al., 2020). The complete results of the discriminant validity test are presented in the table below:

**Table 3. Cross loading**

| | Accounting Control | Budget Preparation Participation | Management Control | Managerial Performance |
|---|---|---|---|---|
| **X11** | 0,764 | 0,607 | 0,765 | 0,660 |
| **X12** | 0,888 | 0,623 | 0,702 | 0,665 |
| **X13** | 0,838 | 0,605 | 0,572 | 0,720 |
| **X14** | 0,872 | 0,566 | 0,688 | 0,685 |
| **X15** | 0,883 | 0,643 | 0,696 | 0,712 |
| **X16** | 0,780 | 0,809 | 0,599 | 0,719 |
| **X21** | 0,669 | 0,633 | 0,906 | 0,739 |
| **X22** | 0,648 | 0,556 | 0,875 | 0,718 |
| **X23** | 0,683 | 0,485 | 0,840 | 0,588 |
| **X24** | 0,620 | 0,498 | 0,828 | 0,623 |
| **X25** | 0,807 | 0,579 | 0,835 | 0,641 |
| **Y1** | 0,725 | 0,645 | 0,508 | 0,742 |
| **Y2** | 0,683 | 0,595 | 0,466 | 0,669 |
| **Y3** | 0,686 | 0,771 | 0,650 | 0,871 |
| **Y4** | 0,665 | 0,673 | 0,606 | 0,884 |
| **Y5** | 0,613 | 0,673 | 0,543 | 0,841 |
| **Y6** | 0,665 | 0,615 | 0,626 | 0,854 |
| **Y7** | 0,703 | 0,596 | 0,811 | 0,821 |
| **Y8** | 0,659 | 0,659 | 0,782 | 0,806 |
| **Z1** | 0,591 | 0,661 | 0,581 | 0,697 |
| **Z2** | 0,606 | 0,778 | 0,473 | 0,617 |
| **Z3** | 0,672 | 0,859 | 0,634 | 0,668 |
| **Z4** | 0,582 | 0,819 | 0,453 | 0,667 |
| **Z5** | 0,555 | 0,614 | 0,430 | 0,500 |
| **Z6** | 0,633 | 0,795 | 0,449 | 0,622 |

Source: Data Processing Results (2024)

Based on the data presented in the table above, each indicator in the research variable has the largest cross-loading value on the variable it forms compared to the cross-loading value on the other variables. Based on the results obtained, it can be stated that the indicators used in this research have good discriminant validity compiling their respective variables.

## Composite Reliability and Cronbach's Alpha

Cronbach's Alpha is used to determine the minimum value for the reliability of a construct, where data is said to be reliable if the value is greater than 0.7. Meanwhile, Composite Reliability is used to measure the actual reliability value of a construct, with a value greater than 0.70. Composite Reliability is considered a better method than Cronbach's Alpha for testing the reliability of a model. The results of the Composite Reliability and Cronbach's Alpha tests will be presented in the table below:

**Table 4. Composite Reliability and Cronbach's Alpha**

| | Croncbach's Alpha | Composite Reliability (rho_a) | Composite Reliability (rho_c) | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| **Accounting Control** | **0,915** | **0,916** | **0,934** | **0,704** |
| **Budget Preparation Participation** | **0,872** | **0,878** | **0,905** | **0,616** |
| **Management Control** | **0,910** | **0,916** | **0,933** | **0,735** |
| **Managerial Performance** | **0,926** | **0,929** | **0,940** | **0,662** |

Source: Data Processing Results (2024)

The table above shows that the Composite Reliability (rho_a) and Composite Reliability (rho_c) values for accounting control are 0.916 and 0.934, values for management control are 0.916 and 0.933, values for budget preparation participation are 0.878 and 0.905 and values for managerial performance are 0.929 and 0.940. The second Composite Reliability value is above 0.7, which indicates that the data meets the criteria. The Cronbach's Alpha value in the image above is 0.915 for accounting control, 0,910 for management control, 0,872 for budget preparation participation, and 0,926 for managerial performance. Therefore, this value is more than 0.6, which indicates that the data meets the criteria. Judging from the results of the loading factor values, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted.

## Hypotesis Test Result

Correlation between variables is measured by looking at the path coefficient in the range of -1 to 1 (Fauziana et al., 2022). The relationship between latent variables is said to be significant if the path coefficient is at the level of 0.05 (Ghifara et al., 2022). The level of correlation significance is measured by comparing the T-Statistics with the Critical value of 1.96 (Pratiwi et al., 2022), where if the T-Statistics value > Critical value then there is a significant influence above 5% (Febriyanti et al., 2022). The results of hypothesis testing in this research are reflected in the figure and table below:

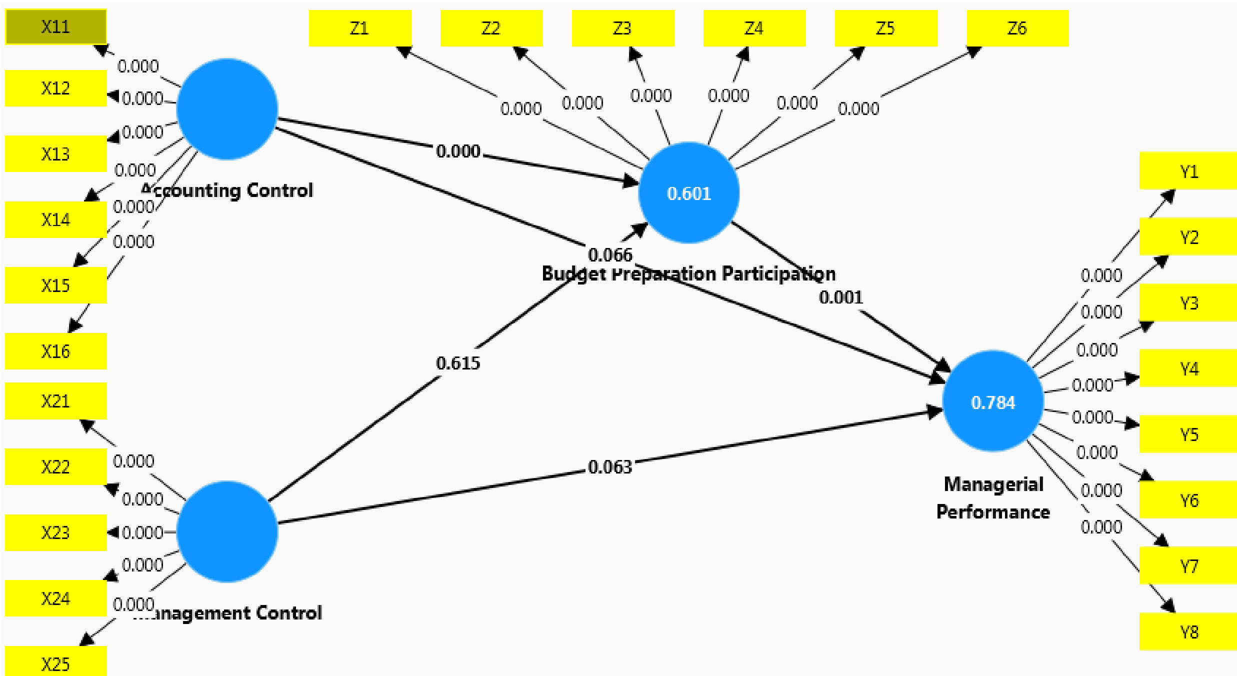


**Figure 3. Calculation Results (Bootstrapping) of the Second Research Model**

Source: Data Processing Results (2024)

The image above is emphasized by the presentation of the path coefficient table which describes the relationship between the hypothesized variables. More details as follows:

**Table 5. Path Coefficient**

| | Original sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (O/Stedev) | P values |
|---|---|---|---|---|---|
| **Accounting control ⇒ Budget preparation participation** | 0,713 | 0,709 | 0,135 | 5,289 | **0,000** |
| **Accounting control ⇒ Managerial performance** | 0,307 | 0,309 | 0,167 | 1,840 | **0,066** |
| **Budget preparation participation ⇒ Managerial performance** | 0,385 | 0,384 | 0,118 | 3,257 | **0,001** |
| **Management control ⇒ Budget preparation participation** | 0,077 | 0,088 | 0,152 | 0,503 | **0,615** |
| **Management control ⇒ Managerial performance** | 0,282 | 0,278 | 0,152 | 1,862 | **0,063** |

Source: Data Processing Results (2024)

Based on the table above, it can be seen that accounting control has a significant effect on budget preparation participation (5.289: 0.000) but does not have a significant effect on managerial performance (1.840; 0.066). This can happen because of the view that organizational structure theory focuses on how organizational structure influences employee behavior and performance. This theory states that different organizational structures can produce different levels of performance. Accounting controls can play an important role in determining an effective organizational structure by Determining the level of centralization or decentralization through Accounting controls can be used to determine how much authority is given to managers at various levels of the organization; Establish coordination and control through accounting controls that can help ensure that different departments and units within an organization work together effectively; Facilitate decision making through accounting controls that can provide managers with the information they need to make the right decisions (Mukaro et al., 2023).

This is in line with the research Sulistyowati (2019) and Baku & Hasan (2021) which states that accounting control has a positive and significant effect on managerial performance. The influence between research variables provides managers with the implication that accounting control turns out to have a greater influence on managerial performance compared to personal control and behavioral control. Accounting control has the most dominant influence on managerial performance compared to behavioral control and personal control.

Then, the management control variable does not have a significant influence on either budget preparation participation (0.053; 0.615) or managerial performance (1.862; 0.063). This incident can be explained from another point of view, Management control systems theory focuses on how management control systems are used to control employee behavior and performance at all levels of the organization. This theory states that an effective management control system can help an organization achieve its goals. Management control can influence managerial performance by clarifying organizational strategy through management control which can be used to communicate organizational strategy to employees at all levels, including managers. This helps managers to understand what is expected of them and how they can contribute to the achievement of organizational goals (Baku & Hasan, 2021).

Monitor performance through Management controls that can be used to track the performance of managers and their departments. This helps managers to identify areas where they can improve their performance make necessary adjustments, and encourage desired behavior through management controls that can be used to motivate managers to act for the sake of the organization. This can be done through various means, such as providing incentives, recognizing good performance, and providing sanctions for poor performance. Facilitates decision-making: Management controls can provide managers with the information they need to make informed decisions. This includes information about the organization's financial performance, market conditions, and competitors (Sari & Herawati, 2021b; Syaputri & Rimet, 2024). This is in line with the research Sari & Herawati (2021), Naibaho (2019) and Rahmad et al., (2016) which states that management control influences managerial performance. A management control system is needed in every organization because the system is designed to regulate the activities of organizational members through the organization's leaders (managers) so that they are in line with the company's desired goals.

Then the budget preparation participation variable appears to be proven to influence the managerial performance variable (3.527; 0.001). This could be due to budgetary control theory focusing on how budgets are used to control managers' behavior and performance. This theory states that an effective budget can motivate managers to achieve organizational goals. Budgetary control can influence managerial performance by Helping managers to allocate resources effectively because Budgets can help managers to allocate their resources effectively to achieve organizational goals; Increases accountability as Budgets can hold managers accountable for their use of resources; and Facilitate coordination because the Budget can help to facilitate coordination between different departments and units in the organization (Siswiraningtyas & Yuhertiana, 2021; Wokas et al., 2022). This is in line with the research Giusti et al. (2018), Susanti (2022) and Haslindah et al. (2020) which states that budget participation has a positive influence on managerial performance. This means that the implementation of budget participation has a directional influence on managerial performance. Increasing budget participation will have an impact on increasing managerial performance.

Next, the role of participation in budget preparation in mediating the influence exerted by accounting control and management control will be proven. The complete results are as follows:

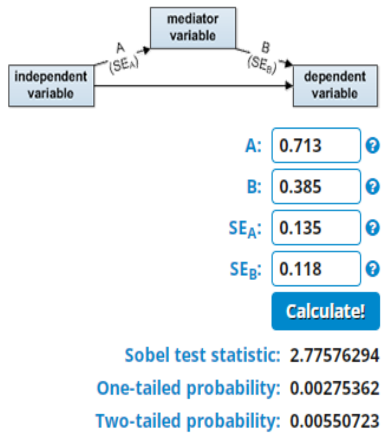


**Figure 4. Calculation Results (Sobel test) of Role Mediation Accounting Control on Managerial Performance**

Source: Data Processing Results (2024)

The figure above calculates the role of participation in budget preparation in mediating the influence of accounting control on managerial performance. By looking at the one-tailed probability (0.002) and two-tailed probability (0.005) which are all smaller than the required critical value, namely 0.05, it can be concluded that the budget participation participation variable is proven to be a mediating variable in the influence of accounting control on managerial performance. Then the results of the mediation test on the influence of management control on managerial performance will also be presented, in full as follows:

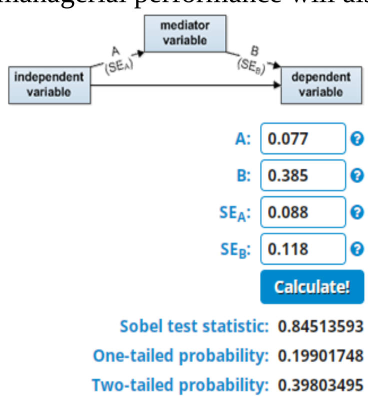


**Figure 5. Calculation Results (Sobel test) of Role Mediation Management Control on Managerial Performance**

Source: Data Processing Results (2024)

The figure above calculates the role of participation in budget preparation in mediating the influence of management control on managerial performance. By looking at the one-tailed probability (0.199) and two-tailed probability (0.398) which are all smaller than the required critical value, namely 0.05, it can be concluded that the budget participation variable is proven to be a mediating variable in the influence of management control on managerial performance.

## Conclusion

Based on the test results, it was found that the accounting control variable had a significant effect on budget preparation participation, but did not have a significant effect on managerial performance. The management control variable was not proven to have a significant influence on both budget preparation participation and managerial performance. Meanwhile, the participation variable in budget preparation is proven to have a significant effect on managerial performance. Not only that, this research also found a role as a mediating variable for budget participation variables in the relationship between accounting control variables and managerial performance. However, this result was contrary to the relationship between management control variables and managerial performance.

The recommendation for the findings in this research is that it is hoped that companies can use it as a contribution to thinking in making decisions to choose the right type of control in order to increase the effectiveness of control, which in the end can improve individual, managerial, and organizational performance. Meanwhile, the implication of the research conveyed is that company management should pay attention to the patterns and mechanisms of accounting control and management control so that they are implemented transparently and accountable. This provides a guarantee of controlled, systematic, and sustainable operational activities, to support the achievement of performance following company goals. Not only that, by involving participating in budget preparation for competent managers and employees, they will provide maximum effort in achieving performance. Not only that, the findings in this research provide additional reference and literacy for managers to study existing problems within the company, to map the level of the problem, how to solve it, PIC, and time targets until re-evaluation.

## Author's Contribution

Each author makes valuable contributions in the areas of research, article writing, data collection, data organization, and analysis. Each author collaborates to provide guidance and action throughout data collection and analysis.


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