The Mediating Role of Management Accounting Systems that Influence Management Style on Managerial Performance

Abstract—The purpose of this study is to examine the mediating role of management accounting systems that influence management style on managerial performance in hospitals. The theory used in this study is the contingency theory. The population of the study is all managers or leaders in hospitals in Palembang both private and public hospitals. The respondent of this research is financial managers, human resources managers, operational managers, and chief financial officers. The result of this study indicates that the management style has a positive and significant effect on management accounting systems. This is also for management accounting systems that have a positive and significant effect on managerial performance. However, management style on managerial performance shows an insignificant result. It shows that the direct impact between management style and managerial performance is not related, but the indirect impacts are related. Management accounting systems have mediation role.

Keywords: management style, managerial performance, management accounting systems

I. INTRODUCTION

The accounting system must fulfill three objectives, namely to improve cost efficiency within hospitals without compromising the quality of institutional services, allowing hospitals to maximize their resources through service line management, and highlighting opportunities for continuous improvement in hospital operations [1].

Previous research related to management styles that affect performance [2]; [3]; [4]; [5]. Furthermore, management style positively influences management accounting systems [6]. Additionally, managers who use MAS information in a wider scope are able to make more effective managerial decisions to set appropriate targets and evaluate achievements, which in turn increases managerial performance [7]; [8]; [9]; [10]. This research was conducted in several different countries. These countries are Russia [3]; United Kingdom [2] Germany [5]; Andalucia [6]; Chinese [10]; Australia [7]; [8]; United Emirates Arab [3].

This research is different from previous studies, this research empirically test through surveys at hospitals in Palembang. This study focuses on testing and analyzing management style on manager performance through management accounting systems. Thus, the purpose of this study is to propose a research framework related to Management Accounting Systems. The rest of the paper proceeds as follows. Section 2 explains the previous research and lays out the hypotheses. Section 3 suggests the research method and model in order to prove the hypotheses. Empirical evidence provides in Section 4. In Section 5, we summarize and conclude the result of research.

II. HYPOTHESES DEVELOPMENT

A. Theory

Some research related to management accounting claims that contingency theory is a very dominant paradigm [20]. The contingency approach as a theory began in the mid 1960s and this approach developed very rapidly in the field of management accounting [22]. The main proposition of contingency theory is that contingency theory assesses firm performance highly dependent on the fit between organizational contextual factors [23]. The management accounting system is an organizational control mechanism that can facilitate control by making reports and creating concrete actions on the performance appraisal of each component in an organization [24]. Previous researches have examined management styles that affect performance [1]; [2]; [3]; [4]. Furthermore, Management style positively influences management accounting systems [6]. Additionally, Managers who use MAS information in a wider scope are able to make more effective managerial decisions to set appropriate targets and evaluate achievements, which in turn increases managerial performance [7]; [8]; [9]; [10]; [25]. Based on contingency theory, several factors influence performance. In this study, management style, and management accounting systems impact on managerial performance.

B. Hypotheses Development

![Fig 1. The Research Framework](image)

Management Style and Managerial Performance
Previous studies examines management styles that affect performance [1]; [2]; [3]; [4]. This research was conducted from several different countries United Kingdom [1]; United Arab Emirates [2]; Russia [3]; Germany [4]. The hypothesis is follow:

H1: There is a positive association between management style and managerial performance

Management Style and Management Accounting Systems

An important issue related to management style is the extent to which managers are involved with the collection of relevant information to optimize their decision making [21]. Management style influences the achievement of organizational goals through organizing, leading, and controlling organizational resources [11]. Management style positively influences management accounting systems [6]. The hypothesis proposed is:

H2: There is a positive association between management style and Management Accounting Systems

Management Accounting Systems and Managerial Performance

Management accounting systems are associated with managerial performance used to improve performance [12]. With a high degree of uncertainty, managers use management accounting information systems more broadly improve performance [13]; [14]; helps managers understand and carry out work better [15]. Managers who use MAS information in a wider scope are able to make more effective managerial decisions to set appropriate targets and evaluate achievements, which in turn increases managerial performance [7]; [8]; [9]; [10]; [25]. Based on the explanation above, the hypothesis is follow:

H3: There is a positive association between management Accounting Systems and managerial performance.

III. METHODS

A. Types of research

The type of this research is quantitative research. Quantitative research is the process of gaining knowledge that uses data in the form of numbers as a means to analyze information about what you want to understand [16]. This research uses primary data by survey at hospital in Palembang.

B. Population, and Samples

This study uses population as a sample to all hospitals in Palembang include public and private hospitals. The respondent of this study is financial managers, operational managers, chief financial officers, human resources managers etc.

C. Data collection technique

The data collection technique use in this study is to do survey at hospitals in Palembang. The survey was conducted by giving questionnaires directly or online to research respondents.

D. The definition of the operational variable

Management accounting system.

Management accounting system is a system that provides relevant and reliable financial and non-financial information so that it can be used as a consideration in decision making [17]. The management accounting system in this research is referred to as a mediating variable and is measured using instruments from [18]. Chenhall dan Morris (1986) with nineteen questions on a scale of 1 to 9 with broad scope, timeliness, aggregation and integration indicators. The instrument shows how the manager's accounting system, on a Seven-point scale (Seven-Point Scale) from 1 “very unused” to 7 "is very used”.

Managerial Performance

[19] stated that the manager's role is a set of functions that encompass all management performance that must have definitions and relationships that are integrated with one another. Managerial performance is the success of an organization in achieving the goals and objectives set by the organization [17]. The performance in this research is called the dependent variable or the dependent variable and is measured using instruments from [18] with nine questions on a scale of 1 to 9. The indicators used in this instrument consist of nine things such as planning, investigation, coordination, evaluation, supervision, staffing, negotiation, representing and overall performance. The instrument indicates how the Manager's performance, on a Seven-point scale (Seven Point Scale) from 1 “very unsatisfactory” to 7 ‘very satisfying’.

Management style

Management style is classified as proactive or reactive. The proactive leadership style is defined as a democratic style that is participatory oriented towards the future and the external environment, including broad planning, with managers looking for possibilities for coordination and synergy between departments and re-evaluating organizational goals. However, the reactive management style is more autocratic, focuses more on individual goals and expectations rather than organizational goals, and focuses more on controlling measurable quantitative events within the organization [16]. The instrument indicates how the Management style, on a Seven-point scale (Seven Point Scale) from 1 “strongly disagree” to 7 "strongly agree”.

E. Analysis Techniques

To test the hypotheses, this study use Partial Least Square (PLS). This study uses path analysis (path analysis) which is Structural Equation Modeling (SEM). Structural equation modeling (SEM) generally has two characteristics SEM. First, estimates of relationships are diverse and equally related. Second, Estimates of relationships are diverse and interrelated. The third is the capacity to illustrate concepts that can not be considered in the framework of this relation or relationship. Furthermore, his analysis will examine error measurement in the estimation process [20].

Analysis Model

The analysis model use in this study is

\[ \text{SAM} = \alpha + \beta_1 \text{X1} + \varepsilon. \]

\[ \text{Y} = \alpha + \beta_1 \text{X1} + \beta_2 \text{X2} + \varepsilon. \]

Notes:

Y = Managerial Performance

SAM = Management Accounting Systems

X1 = Management Style

X2 = Management Accounting Systems

\( \alpha \) = Constant
\( \beta_1 \) = Regression Coefficient  
\( \epsilon \) = Standard Error.

IV. RESULTS AND DISCUSSION

A. Results

TABLE I. THE RESULT OF HYPOTHESIS

| Hypothesis | Coefficient | p value | Result |
|------------|-------------|---------|--------|
| GM → KM (H1) | 0.01 | 0.43 | Rejected |
| GM → SAM (H2) | 0.47 | 0.01 | Supported |
| SAM → KM (H3) | 0.87 | 0.01 | Supported |

Notes: (KM = Management Style; SAM = Management Accounting Systems; KM = Managerial Performance).

Fig 2. The Result Research

B. Discussion

Hypothesis 1 stated that management style has a positive influence on managerial performance. The path coefficients from the hypothesis 1 are not significant (the significant value at \( p = 0.05 \)). From the result research, the value coefficient (\( \beta \)) for the relationship between GM → MP is 0.01 with the p value > 0.01. This meant that this hypothesis (H1) is rejected. These result is not support the previous research [1]; [2]; [3]; [4].

Furthermore, hypothesis 2 stated that management style has a positive influence on management accounting systems. This result shows that coefficient (\( \beta \)) for the relationship GM → MP is 0.47 with a p-value < 0.01. This means that hypothesis 2 (H1) is supported. These results support those of previous studies [6]. If the better the management style, the better the management accounting system.

Additionally, hypothesis 3 stated that management accounting systems has a positive influence on managerial performance. It can be seen that the value of coefficient (\( \beta \)) for the relationship SAM → MP is 0.87 with a p-value < 0.01. This means that hypotheses 3 is fully supported. The result research shows that the management accounting system as a mediator between management style and managerial performance. These results support those of previous studies [7]; [8]; [9]; [10]; [25]. If the management accounting system has improved, the more managerial performance will also increase.

Hypothesis 1 states that management style positively influences manager performance. Empirical evidence from the results of this study can be concluded that H1 was rejected. The results of this study do not support previous research [1]; [2]; [3]; [4]. which states that management styles that influence managerial performance.

Hypothesis 2 states that management style influences management accounting systems. Empirical evidence from the results of this study can be concluded that H2 was accepted. Leadership style is a contingency variable that shows a lot about the degree of organizational formality, the management process of management, and the precise motivational process, the degree of participation, and the level at which decisions are made [24]. Management style influences the achievement of organizational goals through organizing, leading, and controlling organizational resources. An important issue related to management style is the extent to which managers are involved with the collection of relevant information to optimize their decision. Management style influences the achievement of organizational goals through organizing, leading, and controlling organizational resources [24]. Thus the results of hypothesis testing indicate that the higher the management style, the more likely companies are to implement a Management Accounting System.

Hypothesis 3 states that the Management Accounting System has a positive effect on managerial performance. The results of this research with empirical evidence indicate that H3 is accepted. This means that the management accounting system is high, so the manager's performance has also increased. This study also supports previous research [7]; [8]; [9]; [10]; [25].

Thus, the direct effect of management style on managerial performance showed insignificant results. However, management style on managerial performance through a management accounting system shows positive and significant results.

V. CONCLUSION

This research examines management style, management accounting systems and managerial performance at hospitals in Palembang. The result of this study indicates that management style has a positive and significant effect on management accounting systems. This is also for management accounting systems that have a positive and significant effect on managerial performance. However,
management style on managerial performance shows not significant results.

This study has several limitations. The first limitation of this study is it cannot be generalized to all type of companies, due to the sample in this research is hospitals in Palembang. Another limitation is this study focus and investigates management style, management accounting systems and managerial performance. Several Suggestions for future research. The future research should do the research for the specific sector for instance the financial sector, manufacturing sector and others, only focus on the type sector. The last suggestion is to examine other variables related to factors with management accounting systems and managerial performance, for technology, competition and so on.

ACKNOWLEDGMENT

The grant Research from Competitive Superior Research "Penelitian Unggulan Kompetitif" 2019 Universitas Sriwijaya.

REFERENCES

[1] S. L. Ramsey, C. G. Lord, D. S. Wallace, and M. A. Pugh, "The role of subtypes in attitudes towards superordinate social categories," Br. Journal Social Psychology, vol. 33, no. 4, pp. 387–403, 1994.
[2] E. Ogbonna and L. C. Harris, "Leadership style, organizational culture and performance: Empirical evidence from UK companies," International Journal Human Resources Management, vol. 11, no. 4, pp. 766–788, 2000.
[3] D. A. Youssef, "Organizational commitment: A mediator of the relationships of leadership behavior with job satisfaction and performance in a non-western country," Journal Management Psychology, vol. 15, no. 1, pp. 6–24, 2000.
[4] D. S. Elenkov, "Effects of leadership on organizational performance in Russian companies," Journal Business Research, vol. 55, no. 6, pp. 467–480, 2002.
[5] J. Rowold, "Relationship between leadership behaviors and performance: The moderating role of a work team’s level of age, gender, and cultural heterogeneity," Leadersh. Organ. Dev. J., vol. 32, no. 6, pp. 628–647, 2011.
[6] D. Naranjo-Gil and M. Van Rinsum, "The Effect of Management Style and Management Accounting System Design on Performance," Journal of Management Accounting Research, vol. 4, no. 1, 2006.
[7] F. Gul, "The Effects of Management Accounting Systems and Environmental Uncertainty on Small Business Managers’ Performance," Accounting Business Research, vol. 22, no. 85, pp. 57–61, 1991.
[8] L. Mia and B. Clarke, "Market competition, management accounting systems and business unit performance," Management Accounting Research, vol. 10, pp. 137–158, 1999.
[9] M. Eker, "Management Accounting Systems On Performance Of Turkish Middle Level Managers," Akdeniz, no. 17, pp. 105–126, 2009.
[10] J. S. L. Tsui, “The impact of culture on the relationship between budgetary participation, management accounting systems, and managerial performance: An analysis of Chinese and Western managers,” International Journal Accounting Business Social, vol. 36, pp. 125–146, 2001.
[11] R. Simons, “The role of management control systems in creating competitive advantage: New perspectives,” Accounting, Organizations Society, vol. 15, no. 1–2, pp. 119–143, 1990.
[12] R. H. Chenhall, “Management control systems design within its organizational context: findings from contingency based research and directions for the future,” Accounting, Organization Society, vol. 28, pp. 127–168, 2003.
[13] V. K. Chong and I. R. C. Eggleton, “The decision-facilitating role of management accounting systems on managerial performance: The influence of locus of control and task uncertainty accounting,” Advanced Accounting, vol. 20, no. 03, pp. 165–197, 2003.
[14] L. Mia, “The Role of MAS information in Organisations: an empirical study,” Br. Accounting Review, vol. 25, pp. 269–285, 1993.
[15] L. Mia, “Managerial attitude, motivation and the effectiveness of budget participation,” Accounting, Organization Society, vol. 13, no. 5, pp. 465–475, 1988.
[16] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, Multivariate Data Analysis. 2010.
[17] A. Rante, Rosidi, and A. Djahnuri, “Sistem Akuntansi Manajemen sebagai Pemediasi Pengaruh Gaya Kepemimpinan dan Desentralisasi terhadap Kinerja Manajerial (Studi pada Satuan Kerja Perangkat Daerah Kota Jayapura ),” Jurnal Akuntansi Multiparadigma, vol. 12 No.3, no. April, pp. 464–477, 2014.
[18] R. H. Chenhall and D. Morris, “Organic Decision and Communication Processes and Management Accounting Systems in Entrepreneurial and Conservative Business Organizations,” Omega International Journal Management Science, vol. 23, no. 5, pp. 485–497, 1995.
[19] T. A. Mahoney, T. H. Jerdee, and A. N. D. S. J. Carroll, 1965 “The Job ( s ) of Management,” Journal Management., pp. 97–110, 1964.
[20] S. Cadez and C. Guilding, “An exploratory investigation of an integrated contingency model of strategic management accounting,” Accounting, Organization Society., vol. 33, no. 7–8, pp. 836–863, 2008.
[21] L. L. Larson, R. S. Bussum, W. Vigars, and L. Jauch, “Proactive Versus Reactive Manager: Is the Dichotomy Realistic?,” Journal Management. Stay., vol. 23, no. 4, pp. 385–400, 1986.
[22] Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. Accounting, Organizations and Society, 5(4), 413–428. https://doi.org/10.1016/0361-3682(80)90040-9
[23] Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. Accounting, Organizations and Society, 33(7–8), 836–863. https://doi.org/10.1016/j.aos.2008.01.003
[24] Larson, L. L., Bussum, R. S., Vigars, W., & Jauch, L. (1986). Proactive Versus Reactive Manager: Is the Dichotomy Realistic? Journal of Management Studies, 23(4), 385–400.
[25] Fuadah, L.L., 2017, Analysis Factors Related to Management Accounting and Control Systems changes and organizational performance at Banking Sector in Palembang, Advance Science Letter, Vol. 23, No. 8, pp.7062-7065.