

The Effect of Application of Management Accounting To Performance through Strategy

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ABSTRACT

Objective – The context strategy as process and strategy as content have significant impact to the correlation between strategy and management accounting (Muktiyanto, 2016; Parnell, 2010). In the context strategy as process, this paper aims to investigate the role of management accounting to performance through the choice of strategy.

Methodology/Technique – The method by structural equation modeling on 70 (seventy) of undergraduate Accounting Study Program (composition: 70% Private Universities and 30% Public Universities). Opposite with Henry (2006) and Widener (2007) and support with Speklé and Verbeeten (2014) and Acquaah (2013).

Findings – This paper shown that the accounting management directly influence the performance, but not mediated by strategy. The practice of budgetary slack, the implementation of modern accounting such as activity-based costing and target costing, the use of performance measurement techniques such as the balanced scorecard, measurements based performance, and the economic value added, as well as integrated information system is an important factor in improving the performance of Higher Education. Unfortunately, the choice of strategy moderate or "stuck in the middle" has not been able to improve the performance of Higher Education directly nor as a mediating between management accounting and performance. However, in the context strategy as process, management accounting have positive influence to the strategic choice.

Novelty – The effort of Higher Education to improve the performance is choose a single strategy or focus on the prospector's strategy.

Type of Paper: Empirical

Keywords: Management Accounting, Strategy, Performance, Indonesia.

JEL Classification: M40, M41.

1. Introduction

Fit between management accounting, strategy and context has a positive impact on performance (Muktiyanto, 2016). Henri (2006) and Widener (2007) found no direct relationship between management

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accounting and performance. Previously, the study of Moores and Mula (2000) also failed to directly link management accounting indicators to strategy or performance. However Speklé and Verbeeten (2014) and Acquah (2013) show the direct influence of management accounting on performance. Such contradictory results become interesting for review, not for private sector only but also for public sector context, especially on Higher Education (HE). HE is also required to improve its performance through the adoption of modern management and highly developed accounting practices like in the private sector. Through the implementation of the right strategy is expected HE can survive, develop and achieve the main goal of education is to improve the quality of citizens.

Nevertheless, the effectiveness and efficiency of the application of management accounting and strategies to improve HE performance must be demonstrated. In addition to the different contexts, HE is a public sector institution aimed at non-profits. Based on the above thoughts the main problem of this research is whether management accounting directly or indirectly affect the performance of HE. If there is an indirect effect, does the strategy priority choice mediate the effect of management accounting on HE Performance? Thus this study aims to investigate the influence of management accounting on performance directly, and indirectly mediated by priority strategy choices.

This paper contributes to the contradictions between Widener (2007) and Speklé and Verbeeten (2014) and the role of strategic priority choices as mediating fit (Kucukkancabas et al., 2009; Quyen, 2014; Muktiyanto, 2016). The important contribution is in the context strategy as process, strategic priority choices can not mediate management accounting and performance. However, the paper shown to present the fact that management accounting and strategy have a significant role in improving the performance of higher education

2. Literature Review and Hypothesis Development

2.1 Implementation of Management Accounting

Muktiyanto (2016) argued that the budgeting aspect that has always been in the spotlight is the role of management in designing and determining budget formulations that generally appear from the use of budgetary slack for the benefit of management, the activity-based costing (ABC) and the target costing (TC). Meanwhile, performance-based measurement of management accounting leads to performance-based measurement, evaluation of economic value added (EVA) and balanced scorecard (BSC) implementation.

Budgetary slack is a budget that is structured to be easily achieved, by understated revenue and overstated cost. Budgetary slack aim to respond to uncertainties and changes in the internal and external environment (Muktiyanto, 2016). ABC is a modern accounting approach that focuses on activity as a basic point of accumulation of costs for producing products or services (Hongren, et al., 2003; Hilton et al., 2006). While TC is a method of profit planning and cost management that focuses on products by considering manufacturing processes (Kaplan and Atkinson, 1998; Garrison and Noreen, 2000). The application of ABC and TC can be the trigger for choosing the right strategy to achieve the expected performance in a competitive environment.

The performance measurement literature assumes that with the integration of nonfinancial measurements in the performance measurement system managers will better understand the various objectives of the strategy and resource allocation, and a set of priorities for those objectives (Kaplan and Norton, 1996). The latest techniques developed to improve performance measurement are performance based measurement, economic value added (EVA) and Balanced Scorecard (BSC). All three enable a more structured performance management approach and avoid problems associated with more traditional control methods. Performance-based measurement is part of the implementation of new public management, EVA is an overall measure of financial performance that gives attention to increasing shareholder value while BSC approach is emphasis on performance measurement relationship with business unit strategy. BSC focus on developing

relationships between strategic objectives and performance measures, and paying attention to the measurement of strategic planning achievement.

2.2 Strategy Priority Choices

Harmonization of strategy choices with every functional activity in the organization will create a competitive advantage. There is category based on the degree of aggressiveness to the market. Aggressive strategies depend on their marketing, risk management, financial leverage, product innovation, and decision-making speed compared to others. Typology of aggressiveness is classified into four categories: prospectors, defenders, analysers, and reactors, known as Miles and Snow strategy typologies.

The typology of Miles and Snow is generally consistent with Porter's (1985) approach. Prospectors are innovative strategies for creating new products. Defenders are strategies that seek to create the stability and viability of business entities. Analyzers are strategies that use a combination of prospectors and defenders. This means that business entities do not dare to take risks in innovating, but still trying to create excellence in its service to the market. Reactors that always focus on efficiency without considering the environmental changes that occur. Reactors lack the consistency of strategy in adaptability (unstable). According to Smith, et al. (1989), the strategy typology of Miles and Snow can reflect the complexity of the environment facing organizations and organizational processes of various dimensions, such as competition, situation and market response, technology, and organizational structure.

2.3 Higher Education Performance

Performance can be viewed from the perspective of results, processes, or behaviors that lead to the achievement of goals (Bernardin and Russell, 1998; Brumbach, 1988). Muktiyanto (2016) suggests measures of HE performance on students, academic services, research, staff / human resources, and finance. BAN PT (2010) emphasizes the measurement of HE performance on services to students. The performance provides a rating of the type of service to students and its utilization.

Rhodd et al. (2009) correlates students' overall academic success with performance in the study program. Harwati et al. (2015) states that improving student performance can be seen from the cumulative achievement index (GPA) of graduates. Ghignoni and Verashchagina (2014) previously suggested HE performance can be seen from the suitability of graduates with the needs of the labor market. BAN PT (2010) suggests student performance appraisal, among others, by looking at the GPA of Graduates; Student achievements in the areas of reason, talent, and interest; Percentage of graduates on time, services to students, and tracking and recording of graduate data

The research performance can be seen from the research produced by HE and its impact on science and people's welfare. BAN PT (2010) see the research performance on the productivity and quality of lecturer's research results in research activities include the amount of research in accordance with the field of science, the number of scientific articles produced and the work of lecturers or students who have obtained patents or get recognition / award.

Fielden (2008) argued that HR performance can be seen from staff turnover, percentage of permanent contract workers, percentage of foreign staff, and proportion of female staff. The essence of HE's financial performance is in its intellectual capital to generate revenue and improve HE's image. The intellectual asset capital in this case is a permanent lecturer who shows the results of all efforts to implement teaching, learning, researching and community service. This performance is recorded in the academic function of permanent lecturers.

2.4. Contingency Theory

Boezerooj (2006) argued that contingency theory can explain relation between organization and its context. This theory is effective in changing organizations (Battilana and Casciaro, 2012) and be the way to

design organization (Donaldson, 2006). There is no single organizational design and the best managerial method for all contexts (Bae, 2011). Boegzerooj (2006) stated that the best way to manage the organization depend on environment characteristics. There is adoption many variables such as structure, strategy or policy that fit with its contingency.

Contingency theory explained how the organization structure have to align with differences of environment condition. Contingency theory focus on alignment the structure and its environment or context that important for achievement best performance. However, the point is how to enhance alignment and consistency between context and internal factors of organization.

Bisbe and Otley (2004), Henri (2006), and Widener (2007) investigated and proved the existence of contingency in management accounting system, spesific management factors (such as inovation and strategy), and performance. Acquaah (2013) stated that the influence of management accounting system to business strategic depend on its context. Acquaah (2013) shown that the business strategic mediated by correlation between management accounting and performance.

2.5. Theoretical Framework and Hyphotetis

This study is based on contingency theory that there is no single organizational design and the best managerial method for all contexts. Successful organizations, in different industries and structures, are aligned with the environment. This alignment has an important role in the creation of organizational performance (Bae, 2011).

Previous studies have attempted to examine aspects of management accounting, strategic priority choices, and performance (Muktiyanto, 2016). Ganescu (2012) includes contingent variables that affect performance such as business models, HR and organizational culture, leadership, and total quality management. Similarly, Kucukancabas, et al. (2009) that links the orientation of market strategy with performance. Linking management accounting and company-specific factors (such as innovation, strategy, market orientation, and managerial behavioral responses) and performance are performed by Bisbe and Otley (2004), Henri (2006), and Widener (2007), respectively. Meanwhile, specific research that plots business strategy as mediation of management accounting relationship and performance in contingency context is done by Acquaah (2013). In contrast to these earlier studies, this research places the practice of management accounting and strategic priorities as the dimensions of the performance context as a contingency system that is expected to shape fit as mediation. In the context of HE, Muktiyanto (2016) proves the indirect influence of management accounting on performance through strategy, but does not directly test the direct influence of management accounting on performance. Thus the research thinking framework appears in Figure 1.

The alignment between the implementation of management accounting and strategic priorities is expected to improve performance as has been proven by Bergeron et al. (2004), Chan et al. (1997), Croteau et al. (2001), Kearns and Sabherwal (2007), Oh and Pinsonneault (2007), and Muktiyanto (2016). Most researchers examine the direct influence of business strategy on accounting such as Banker et al. (2011) which proves the position of corporate strategy that influences the reporting structure of accounting information. Similarly Ramli and Iskandar (2014) reveal the influence of business strategy on management accounting and its characteristics.

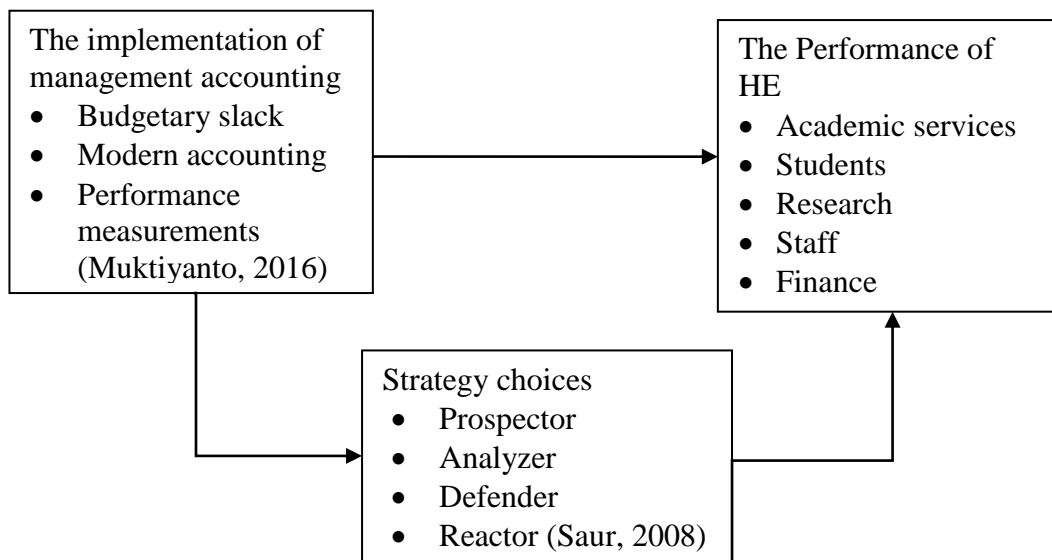


Figure 1.

Theoretical Framework The Effect of Management Accounting on Performance

Differences in strategy outlook as exogenous or endogenous variables can be viewed in the strategy approach as "content", and strategy as "process" (Furrer et al., 2008). Chenhall (2005) defines a content approach relating to the product of the strategy process that is with or what causes optimal organizational performance. Instead, the process approach usually identifies and investigates how strategy is formulated and implemented (Chenhall, 2005). The relationship between how organizations design management accounting and how to formulate a strategy is based on an orthodox view of the strategic process, suggesting that management accounting is the result of strategy (Kober et al., 2007). However Kober et al. (2007) reminded that management accounting is not just a simple outcome of organizational strategy, but has a two-way or reciprocal relationship with strategy, so the strategy starts to be placed as an endogenous variable as well. Epstein and Roy (2001) describe the role of management accounting in providing useful information for defining or modifying strategies because management accounting should provide feedback on potential environmental and social impacts, sustainability performance at all levels, initiatives for sustainability, stakeholder reactions and performance.

Management accounting and strategies reviews evolve to examine the influence of management accounting on business strategy and performance (initiated by Simons, 1990, among others by Marginson, 2002; Chenhall, 2003; Bruining et al., 2004; and Kober et al., 2007; Muktiyanto, 2016). Most studies have found an indirect link between management accounting and performance through business strategy and other strategic variables (Bisbe & Otley, 2004; Henri, 2006; Widener, 2007). Acquaah (2013) asserts that the influence of management accounting on business strategy and performance depends on the context alignment and the variables involved.

In the context of HE, the better the management accounting practice of the study program, the selection of the priority of the study program strategy will be appropriate. Based on the thinking and the empirical findings the overall management accounting role of the strategy can be put forward the following hypothesis:

- H1a: Implementation of management accounting has a direct positive effect on strategy priority choices
- H2a: Strategy priority choices has a direct positive effect on Performance
- H3a: Application of management accounting has a direct positive effect on performance

H4a: the application of management accounting positively affects performance through strategy priority choices.

3. Research Methodology

This study uses an explanatory design. Survey data collection through questionnaires. The study population is 585 Undergraduate Accounting Study Programs. Samples determined by convenience purposive sampling. The distribution of questionnaires was done through research assistants in the cities where HE had been previously determined. The main unit of analysis is the undergraduate Accounting Study Program so that the research respondent is the Chairman or the Secretary of the Study Program. The fit model of management accounting practice and performance can be constructed using strategic priority choices.

Table 1. Research Variables and Indicators

No	Latent Variables	Indicators
1	Exogen Variable: Management Accounting Practice	Budgetary Slack Modern Management Accounting (ABC and TC), Balanced Scorecard Measurement based on performance Economic Valued Added (EVA) Information Communication and Technology (ICT)
2	Endogen Variables: Strategy Priority Choices	Prospector Analyzer Defender Reactor
3	Endogen Variable: Performance	Academic Services, Students, Research, Staff, and Finance

4. Results

Statistical descriptions of management accounting implementation shows that the undergraduate Accounting study program puts the budget slack proportionally, not making it an effort to abandon or simplify the budget for personal gain. Head of undergraduate accounting department utilizes slack budget at any time if deemed necessary. Similarly in the use of modern accounting instruments such as ABC and TC are also moderate depending on the conditions and needs. In performance measurement, Head of undergraduate accounting department tends to adopt and apply performance-based measurement than EVA or BSC. Accounting study program also has begun to show its sincerity in the utilization of Information ICT as part of integrated management information system.

The performance of Undergraduate Accounting Program so far has not been encouraging. Viewed from the financial performance is still low as well as the performance of research. Only student performance seen

from GPA is good enough that is in the range above 3.00. Undergraduate Accounting Programs tend to choose the strategy of "stuck in the middle" or moderate. Prodi has not explicitly chosen the strategy of prospector or defender.

From the results of test goodness of fit indices, the results of model and data suitability tests show good fit. Thus it can be concluded the data show match with this research model. Based on that result, the data can be used to perform a causal relationship analysis of Structural Model. The result of suitability of structural model of all subsamples is presented in Table 2 which is the result of structural model testing.

Table 2. Structural Model Fit Results

Hubungan	Koef	t-value
Management Accounting Practice → Strategy Priority Choices	0.03**	2.17
Strategy Priority Choices → Performance	0.14	0.33
Management Accounting Practice → Performance	0.15**	2.08
Management Accounting Practice → Performance through Strategy Priority Choices	0.00	0.33
Management Accounting Practice, Strategy Priority Choices → Performance	0.15**	2.15
**Significant at level $\alpha=5\%$, t-value>1.960; R ² =0.10		
Management Accounting Practice is a management accounting practice that is considered to play a role in achieving the performance expected directly or through mediation variables. Strategy Priority Choice is a competitive strategy of the Study Program to survive and win the competition. Performance is achievement, output, outcome as result of governance process of study program		

5. Discussion

5.1 The Influence of Implementation of Management Accounting to Strategy Priority Choice

Influence of application of management accounting to strategy priority choices is positive significant at $\alpha = 5\%$ (t-value = 2.17 and estimated coefficient 0.03). The result means that the better the application of good management accounting, the strategy priority choice will focus on a single strategy, especially the prospectors. The better the practice of budgetary slack then the more courageous HE choose aggressive strategy. Budget slack will be maximized to innovate and create, and market penetration. The use of modern accounting techniques such as TC and ABC are increasingly intensive to provide valuable information for management in determining the right strategy choices. Similarly, performance measurement based on BSC, EVA and performance-based assessment will encourage HE to choose the right strategy to compete.

The value of low effect coefficient indicates that the role of management accounting in determining the competing strategy of HE must be continuously improved. This low influence can also be confirmed with statistical description results that are generally in moderate range. Head of study program appears to be cautious in applying management accounting techniques given that Head of study program is not a party who can simply set policy. Generally policies are generated by higher levels such as Universities even Owners (Government for Public Institution or Foundation for Private Institution). Implementation of management accounting is limited informally for the interest of Head of study program in calculating and preparing activity plans and budget and accountability.

The results of this study support Acquaaah (2013), Song et al. (2007), and Muktiyanto (2016) which proves that management accounting with various characteristics (budget, costing, and performance measurement management and ICT-based management information system) influence the choice of competitive strategy of HE. Management accounting provides strategic direction for innovation and efficiency (Simons, 2000; Marginson, 2002). It is evident that one of the functions of management accounting is to support the

implementation of competitive strategies (Bruining et al., 2004; Marginson, 2002; Kober et al., 2007; Merchant & Otley, 2007; Simons, 2000). Thus in the context of HE, management accounting has a positive effect on strategy.

5.2 The Influence of Strategy Priority Choice to Performance

The influence of strategy choice on performance is not significant even with the positive direction (t-value = 0.33, estimated coefficient 0.14). It is clear that HE has not optimized the choice of strategy in achieving optimal performance. A moderate or stuck in the middle strategy proves unable to leverage the expected performance. The statistical description results confirms the results. Low financial and research performance as evidence of the unfocused choice of the HE's strategy. This is where the importance of focusing on a particular strategy or prospector to improve financial performance and research.

When the choice of strategy is not right then the expected performance will not be realized (Porter, 1985). Superior performance can only be achieved when HE focuses on the application of specific strategies, not "stuck in the middle" (Muktiyanto, 2016). Chenhall and Langfield-Smith (1998) mentioned that different strategy choices resulted in different performance. The results of this paper failed to prove that the choice of strategy can be a major factor in achieving the expected organizational performance. Similarly, this paper have not strengthened Muktiyanto's (2016) study that in the context of HE, the strategy directly has a direct impact on performance. Nevertheless this research confirms that strategic business units using a combination of competitive strategies tend to perform poorly (Parnell, 2010).

5.3 The Influence of Implementation of Management Accounting to Performance

The effect of implementation management accounting on performance is positive significant at $\alpha = 5\%$ (t-value = 2.08 and estimated coefficient = 0.15). Budgetary slack practices, modern accounting, performance-based measurement, BSC, EVA, and integrated management information systems can improve the performance of HE. The better the management accounting practices will be the better performance of HE. These results can be confirmed into statistical descriptions indicating that weak management accounting practices have an impact on the low performance of HE especially for financial performance and research performance. There is no other choice for HE if it wants to improve its performance then management accounting must be part of the main instrument of performance.

These results were able to contradict Henri (2006), Widener (2007), and Moores and Mula (2000) who found no direct relationship between management accounting and performance. Instead the results support Speklé and Verbeeten, (2014) that conceptually allow for the direct effect of management accounting on performance. This result refines the review of Muktiyanto (2016) which in the model of management accounting fit and performance through strategy does not directly link management accounting and performance.

5.4 The Influence of Implementation of Management Accounting to Performance through Strategy Priority Choice

The influence of management accounting on performance through strategy is not significant even with a positive direction (t-value = 0.33 and estimated coefficient = 0.00). These results mean that the strategy has not been able to improve the role of management accounting in improving performance. The positive signals signal that if the choice of strategy to focus on a particular strategy or prospector will potentially increase the role of management accounting and will in turn improve performance. Thus the strategy has not been able to act as a contingency variable or act as a mediating fit because the indirect influence is not significant while the direct influence of management accounting on significant performance.

These results are different from Acquaaah (2013), Bae (2011), Ganescu (2012) and Kucukancabas, et al. (2009) that there is an indirect effect of management accounting on performance through strategy. In the context of HE, the results of this study also contradict Simons (1990 and 2000). However, the result is consistent with the study of Muktiyanto (2016) with the Private HE sample. As is known 70% of the sample of this study is Private Universities. Thus it is evident that HE, especially Private Universities has not optimized the strategy in increasing the role of management accounting on performance.

6. Conclusion

Implementation of management accounting has a direct positive effect on the strategy priority choices and the performance of HE. The better the application of management accounting, the more HE chooses strategic priorities on a single strategy or focus on the prospector strategy. The better the implementation of management accounting then the performance of the HE will increase, financial performance and research performance and student performance will improve. The practice of budgetary slack, the implementation of modern accounting such as activity-based costing and target costing, the use of performance measurement techniques such as the balanced scorecard, measurements based by performance, and the economic value added, as well as integrated information system is an important factor in improving the performance of Higher Education. Unfortunately, the choice of strategy "stuck in the middle" has not been able to improve the performance of Higher Education directly nor as a mediating between management accounting and performance. However, in the context strategy as process, management accounting have positive influence to the strategic choice, especially in a single strategy or focus on the prospector strategy.

References

- Acquaah, Moses. (2013). Management control systems, business strategy and performance: A comparative analysis of family and non-family businesses in a transition economy in sub-Saharan Africa. *Journal of Family Business Strategy* 4 131–146
- Badan Akreditasi Nasional Perguruan Tinggi (BAN PT). (2010). Akreditasi Program Studi Sarjana (S1) PTTJJ- Buku VIA: Matriks Penilaian Borang Akreditasi dan Evaluasi Diri Program Studi. Jakarta
- Bae, Hee-Sung. (2011). The relationships between environment, integration and performance in supply chain contexts. *The Asian Journal of Shipping and Logistics*. Vol 27 (1) pages 061-090
- Banker, Rajiv D., Hu, Nan., Paviou, Paul A., Luftman, Jerry. (2011). CIO Reporting Structure, Strategic Positioning, And Firm Performance. *MIS Quarterly* Vol. 35 No. 2 pp. 487-504/June 2011
- Battilana, J., Casciaro T. (2012). Change agent, networks, and institutions: A contingency theory of organizational change. *Academic of Management Journal* 55 (2), pages 381-173
- Bergeron, F., Raymond, L., and Rivard, S. (2004) Ideal Patterns of Strategic Alignment and Business Performance. *Information and Management* (41:8), pp. 1003-1020
- Bernardin, H.J., Russel, J.E.A. (1998). *Human Resource Management: An Experiential Approach*. McGraw-Hill. Boston
- Bisbe, J., and Otley, D. (2004). The effects of the interactive use of management control systems on product innovation. *Accounting, Organizations and Society*, 29, 709–737
- Boozerooj, P. (2006). E-learning Strategies of Higher Education Institution: an Exploraty Study into the Influence of Environmental Contigencies on Strategic Choice of Higher Education Institutions with Respect to Integrating e-learning in their Education Delivery and Support Processes. *Postbus 217. 7500 AE Enshede*
- Bruining, H., Bonnet, M., & Wright, M. (2004). Management control systems and strategy change in buyouts. *Management Accounting Research*, 15, 155–177
- Brumbach, G.B. (1988). Some idea, issues and predictions, about performance management. *Public Personnel Management*, Winter: pages 387-402
- Chan, Y. E., Huff, S. L., Barclay, D. W., and Copeland, D. G. (1997). Business Strategy Orientation, Information Systems Orientation and Strategic Alignment. *Information Systems Research* (8:2), pp. 125-150.

- Chenhall, R.H. (2005). Content and process approaches to studying strategy and management control systems. in Chapman, C.S. (Ed.), *Controlling Strategy: Management, Accounting, and Performance Measurement*, Oxford University Press, Oxford
- Chenhall, R.H., Kim Langfield-Smith. (1998). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. *Accounting, Organizations and Society*. Vol. 23 No. 3 pages 243-264
- Croteau, A., Solomon, S., Raymond, L., and Bergeron, F. (2001). Organizational and Technological Infrastructures Alignment. in *Proceedings of the Proceedings of the Hawaii International Conference on Systems Sciences*, Los Alamitos, CA: IEEE Computer Society Press.
- Donaldson, L. (2006). The Contingency theory of organization design: Challenges and opportunities, in “Organization Design: The evolving State-of State-of-the-Art” R.M. Burton, B. Eriksen, D.D. Hakonson, C.C. Snow. Harardcover, pages 19-40
- Epstein, Mj. and Roy, M. (2001). Sustainability in action: identifying and measuring the key performance drivers. *Long Range Planning*, Vol. 1 No. 34, pp. 585-604.
- Fielden, John. (2008). *Global Trends in University Governance*. Education Working Paper Series. World Bank. Washington, D.C.
- Furrer, O., Sudharshan, D., Thomas, H. and Alexandre, M.T. (2008), “Resource configurations, generic strategies, and firm performance: exploring the parallels between resource-based and competitive strategy theories in a new industry”, *Journal of Strategy and Management*, Vol. 1, pp. 15-40.
- Ganescu, Mariana Cristina. (2012). Assessing corporate social performance from a contingency theory perspective. *Procedia Economics and Finance* 3 pages 999-1004
- Garrison, R.H., dan F.W. Nooren. (2000). *Managerial Accounting*. 9th edition. McGraw-Hill Companies. Inc
- Ghignoni, Emanuela., dan Alina Verashchagina. (2014). Educational qualifications mismatch in Europe. Is it demand or supply driven?. *Journal of Comparative Economics*, Volume 42, Issue 3, August 2014, pages 670-692
- Harwati, Alfiani, Ardita Permata, Wulandari, Febriana Ayu. (2015). Mapping Student's Performance Based on Data Mining Approach (A Case Study). *Agriculture and Agricultural Science Procedia*, Volume 3, 2015, Pages 173-177
- Henri, J.-F. (2006). Management control systems and strategy: A resource-based perspective. *Accounting, Organizations and Society*, 31, 529–558.
- Hilton, Ronald., Maher, Michael, and Salto, Frank. (2006). *Cost Management: Strategies for Business Decisions*. McGraw-Hill Irwin. 3rd edition.
- Hongren, C.T., Datar, S.M., Foster, A. (2003). *Cost Accounting: A Managerial Emphasis*. 11th edition. Upper Saddle River. New Jersey: Prentice Hall.Inc
- Kaplan, Robert S., dan Atkinson, Anthony. (1998). *Advanced Management Accounting*. 3rd edition. Upper Saddle River. New Jersey: Prentice Hall.Inc
- Kaplan, Robert., D. Norton. (1996). *The Balanced Scorecard*, Harvard Business School Press.
- Kearns, G. S., and Sabherwal, R. (2007). Strategic Alignment between Business and Information Technology: A Knowledge-Based View of Behaviors, Outcome, and Consequences. *Journal of Management Information Systems* (23:3), pp. 129-162
- Kober, R., Ng, J., & Paul, B. J. (2007). The interrelationship between management control mechanisms and strategy. *Management Accounting Research*, 18, 425–452
- Kucukkancabas, S., Ayse Akyol, Mehmed Berk Ataman. (2009). Examination of the effects of the relationship marketing orientation on the company performance. Erasmus Research Institute of Management, Erasmus University
- Langfield-Smith, K. (1997). Management control systems and strategy: A criticalreview. *Accounting, Organizations and Society*, 22(2), 207–232.
- Marginson, D. E. (2002). Management control systems and their effects on strategy formation at the middle-management levels: Evidence from a UK organization. *Strategic Management Journal*, 23, 1019–1031.
- Merchant, K. A., & Otley, D. T. (2007). A review of the literature on control and accountability. In C. Chapman, A. Hopwood, & M. Shield (Eds.), *The handbook of management accounting research* (pp. 785–804). Oxford, UK: Elsevier Press.
- Moores, K., & Mula, J. (2000). The salience of market, bureaucratic and clan controls in the management of family firm transitions: Some tentative Australian Evidence. *Family Business Review*, 13(2), 91–106.
- Muktiyanto, Ali. (2016). *Good University Governance dan Kinerja Program Studi: Pengaruh Penerapan Akuntansi Manajemen, Teknik Manajemen, dan Pilihan Prioritas Strategi sebagai Model Mediasi Fit*. Disertasi PPIA-UI

- Oh, W., and Pinsonneault, A. (2007). On the Assessment of the Strategic Value of Information Technologies: Conceptual and Analytical Approaches. *MIS Quarterly* (31:2), pp. 239-265
- Parnell, John A. (2010). Strategic clarity, business strategy and performance. *Journal of Strategy and Management*, Vol. 3 Iss 4 pp. 304 – 324
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York, NY: Free Press
- Quyen, Do Thi Ngoc. (2014). Developing university governance indicators and their weighting system using a modified delphi method. *Procedia-Socia and Behavioral Sciences* 141, pp 828-833
- Ramli, Ishak., Iskandar, Denny. (2014). Control authority, business strategy, and the characteristics of management accounting information systems. *Procedia - Social and Behavioral Sciences* 164 (2014) 384 – 390
- Rhodd, Rupert G., Schrouder, Sandra M., Allen Marcus T. (2009). Does the Performance on Principles of Economics Courses Affect the Overall Academic Success of Undergraduate Business Majors?. *International Review of Economics Education*, Volume 8, Issue 1, 2009, Pages 48-63
- Simons, R. (1990). The role of management control systems in creating competitive advantage: New perspectives. *Accounting, Organizations and Society*, 15(1–2), 127–143.
- Simons, R. (2000). *Performance measurement and control systems for implementing strategy*. Upper Saddle River, NJ: Prentice-Hall.
- Smith, C., C. Reilly, K. Midkiff. 1989. Evaluation of three circadian rhythm questionnaires with suggestions for an improved measure of morningness. *Journal of Applied Psychology*, 74, pages 728-738
- Song, Michael., Di Benedetto, C. Anthony., Nason, Robert W. (2007). Capabilities and financial performance: the moderating effect of strategic type. *Journal of the Academic. Mark. Sci.* 35:18–34
- Speklé, Roland F., Verbeeten, Frank H.M. (2014). The use of performance measurement systems in the public sector: Effects on performance. *Management Accounting Research*, Volume 25, Issue 2, June 2014, Pages 131-146
- Widener, S. K. (2007). An empirical analysis of the levers of control framework. *Accounting, Organizations and Society*, 32, 757–788.