

# THEORETICAL FRAMEWORK ON MANAGEMENT ACCOUNTING AND ORGANISATIONAL CHANGE

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## ABSTRACT

Prior research in management accounting examined various relationships between organisational change and management accounting system (MAS). The purpose of this paper is to provide a theoretical framework by using contingency theory and institutional perspective about how organisational and MAS changes take place. This paper contributes to theoretical argumentation on the interrelationship between management accounting and organisational change and how such changes might help in achieving overall success of the organisation.

**Keywords:** Contingency theory, old institutional economic theory, management accounting system and organisation.

## INTRODUCTION

Researchers increasingly focus on competitive environments and advanced technologies to understand management accounting and organisational change, especially in the manufacturing environment (e.g., Baines & Langfield-Smith, 2003; Chenhall & Morris, 1986; Chong & Chong, 1997; Libby & Waterhouse, 1996; Luther & Longden, 2001; Mia & Clarke, 1999; Pratt, 2004; Waweru et al., 2004). Business environments exhibit a variety of structures and processes, including flat and horizontal organisational forms, multidimensional matrix structures, networks of “virtual organisations,” and self-directed work teams. Business organisations are confronted with

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### ARTICLE INFO

**Article History :**

*Received : 8 April 2014*

*Accepted : 6 October 2014*

*Published : 30 December 2014*

several options as to which management method, technique, and system would be most effective in responding to challenges in change management (Waldron, 2005).

Every organisation is located within a particular configuration of contingencies. It is dependent on the market and technological environment, such as scale and diversity of operations, technology applied to its work, and type of personnel it employs. An appropriate design for achieving congruence is one which best suits its contextual and operational contingencies. According to Moores and Yuen (2001, p.352), *“to be internally consistent, organisations must have tightly independent and mutually supportive parts in terms of strategies, structures and process.”* One challenge in organisational management is reinforcing management accounting system (MAS), strategies, and structures to achieve competitive advantage and enhance performance. Thus, research is necessary to help management make appropriate decisions and achieve this congruence.

Globalisation has increased uncertainty, intensified industry competition, and advanced technology, thereby changing the environment in which organisations in developing countries operate. According to Kassim, Md-Mansur, and Idris (2003), globalisation brings in new technology and exposes developing countries to great competition; these changes may affect an organisation's choice of management accounting practice (MAP) and may also result in the firm's reconsideration of existing organisational design and strategies to fit into the changing environment. This argument is supported by Burns and Scapens (2000) and Shields (1997), who suggested that environmental changes cause organisational changes that, in turn, cause MAP changes. As the firm strives to achieve an improved fit with its environment and become increasingly successful, sustaining and improving current performance become critical.

## **MANAGEMENT ACCOUNTING CHANGE**

The basic purpose of accounting information is to help users make decisions. Management accounting is the branch of accounting that produces information for managers and forms an important integral part of the strategic process within an organisation. It involves the process of

identifying, measuring, accumulating, analysing, preparing, interpreting, and communicating information that helps managers fulfil organisational objectives (Horngren, Sundem, Stratton, Burgstahler, & Schatzberg, 2007). The Chartered Institute of Management Accountants in the United Kingdom views management accounting as an integral part of management which requires the identification, generation, presentation, interpretation, and use of information relevant to the following:

1. Formulating business strategy;
2. Planning and controlling activities;
3. Decision-making;
4. Efficient resource usage; and
5. Performance improvement and value enhancement

Johnson and Kaplan (1987) argued for “relevance lost” in management accounting. They pointed to the issue of inappropriateness of conventional management accounting techniques, which exhibit low capacity to provide useful and timely information necessary in improving decision and control in contemporary environment characterized by rapid technological change and vigorous competition. Management accounting techniques thus rapidly develop to enhance decision making and management control.

The International Federation of Accountants (1998) provided a framework that explains the development of management accounting to promote an improved understanding of changes in MAP. This framework explains the evolution in management accounting through four recognizable stages. As explained by Omar et al. (2004, p. 27), the primary focus of each stage is as follows:

### **Stage 1 (prior to 1950)**

During this period, most companies focused on cost determination, which was related to stock valuation and allocation of overheads. Management accounting techniques developed for cost estimation included *Last In, First Out* and *First In, First Out*. Cost estimation was justifiably emphasized because managers were able to control their financial position by estimating the cost.

## **Stage 2 (1965–1985)**

By 1965, companies had moved into generating information for management planning and control. This was important because only valuable information could induce managers to make correct decisions. Management accounting techniques, such as marginal costing and responsibility accounting, were introduced during this stage to help managers choose the correct course of action or create strategic business units.

## **Stage 3 (1985–1995)**

Increased global competition, accompanied by rapid technological development, in the early 1980s affected many aspects of the industrial sector. During this stage, management focus remained on cost reduction, but additional process analysis was made possible by cost management technologies to reduce waste during product processing, reduce expenses, and increase expected profit. Techniques commonly practiced by companies at this stage included *Just in Time* (JIT) and *Activity-Based Costing* (ABC).

## **Stage 4 (1995 onward)**

In the 1990s, industries worldwide continued to face considerable uncertainty and unprecedented advances in manufacturing technologies, which further increased and emphasised the challenge of global competition (Abdel-Kader & Luther, 2008). In this stage, companies focused on enhancing value creation through effective use of resources. Managers identified driver factors that could potentially increase shareholder value. Thus, non-value added activities were deliberately eliminated. Among the popular techniques introduced during this stage were *Total Quality Management* (TQM), *Activity-Based Management* (ABM), and *Benchmarking and Reengineering*.

Although the evolution of management accounting can be distinguished into four stages, the techniques used in previous phases continued to be used in subsequent stages. Traditional and advanced MAPs tend to complement each other (Chenhall & Langfield-Smith, 1998b).

## **MANAGEMENT ACCOUNTING AND ORGANISATIONAL CHANGE**

Management accounting change is not a uniform phenomenon. Causal factors of change vary, as confirmed by management accounting researchers. External (environmental) and internal factors (relating to the organisation concerned) influenced the recent development of new management accounting systems and techniques. According to Shields (1997), the potential change drivers are competition, technologies, organisational design and strategies. These drivers of change also indicate the differing roles which causal factors can have in the process of change.

Change in environment also implies uncertainty and risk, which create a demand for further management accounting change in the form of “non-financial” measures (Vaivio, 1999). Researchers gave limited attention to management accounting change process. Burns and Scapens (2000, p. 4) observed that “little research attention has been given to understanding the processes through which new management accounting systems and practices have emerged (or failed to merge) through time.”

Change can be addressed in various dimensions. According to the American Heritage Dictionary, 4th Edition, change includes the following aspects: becoming different or undergoing alteration; transformation or transition; movement from one phase to another; exchanging; modifying; substituting; giving and receiving; replacing with another; and abandoning. This definition illustrates different types of change and shows that, in general, change is not a uniform phenomenon. Wickramasinghe and Alawattage (2007) suggested that change in management accounting is a learning methodology for understanding how environmental factors shape internal processes within the organisation. According to them, the process of change is reflected on how management accounting techniques emerged, evolved, and were transformed when new demands from the changing environment are in place.

From the perspective of management accounting, different types of change can be studied. For example, Sisaye (2003) investigated change with regard to the integration of ABC into strategy to manage the organisation’s operating activities. ABC can help improve organisational performance if implemented

as part of the overall organisational change strategy. Perera, McKinnon and Harrison (2003) examined change in terms of introduction, abandonment, and reintroduction of transfer pricing in government trading enterprise as it moved from protected monopolistic status to commercialisation.

Many researchers showed interest in understanding management accounting change (Baines & Langfield-Smith, 2003; Chenhall & Langfield-Smith, 1998b; Innes & Mitchell, 1990; Libby & Waterhouse, 1996). For example, Chenhall and Langfield-Smith (1998b) explored the benefit of management accounting change. However, little is known about the forces that induce this change (Laitinen, 2006). The reasons behind management accounting to change are referred to as “motivational factors” (Laitinen, 2006). Many researchers suggested a substantial list of motivational factors (Baines & Langfield-Smith, 2003; Laitinen, 2001; Libby & Waterhouse, 1996). Innes and Mitchell (1990) found a different set of circumstances linked with management accounting change, which they termed as follows:

1. Motivators (e.g., competitive market, organisational structure and product technology)
2. Catalyst (e.g., poor financial performance, loss of market share, and organisational change)
3. Facilitators (e.g., accounting staff resources, degree of autonomy, and accounting requirements)

The interaction between these variables promotes change not only in management accounting but also in other related disciplines<sup>1</sup> (Innes & Mitchell, 1990; Laitinen, 2006). Laitinen (2001) classified these factors into six groups, namely, information needs, changes in technology and environment, willingness to change, resources for change, objectives for change, and external requirements. In a later work, Laitinen (2006) used four factor categories to explain management accounting change: organisational factors, financial factors, motivational factors, and management tools.

This paper discusses motivational, organisational, and financial factors. Changes in environment and technology are used as motivational factors

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<sup>1</sup> For example in organisational study related to structure and strategy.

to explain changes in management accounting and in organisational factors (i.e., structure and strategy). Organisational structure and strategy (organisational factors) are considered as contextual factors that may be connected to change in management accounting (Moore & Yuen, 2001). Financial factors are used as outcomes of management accounting and organisational change. Grandlund (2001) suggested that low financial performance may place economic pressure on the firm to change its MAS to increase performance. Baines and Langfield-Smith (2003) suggested that management accounting change accompanied by great reliance on accounting information may result in improved performance. Thus, financial performance may be an antecedent or an outcome of management accounting change.

Given the advances in information technology, highly competitive environments, new management strategies, and enhanced focus on quality and customer services, many firms experienced significant changes in their respective business environments. Many relevant management accounting studies highlighted the significant changes in these operating environments (e.g., Burns & Vaivio, 2001; Choe, 2004; Gomes, Yasin, & Lisboa, 2007; Haldma & Laats, 2002; Hopwood, 1990; Hussain & Hoque, 2002; Innes & Mitchell, 1995; Kaplan & Norton, 1996; Libby & Waterhouse, 1996; Scapens, 1999; Vamosi, 2003) that influenced the choice of effective management accounting systems and techniques (Waldron, 2005) and engendered the organisation to reconsider its design and strategy (Baines & Langfield-Smith, 2003) in maintaining and/or improving performance (Chenhall & Langfield-Smith, 1998a; Choe, 2004).

Organisational change is a central issue in organisational theory, management, and accounting. Hopwood (1987, p. 207) claimed that “very little is known of the processes of accounting change,” thus provoking the controversy over the theory of why and how change occurs. As argued by Quattrone and Hopper (2001, p. 404), “what the concept of change means, whether it can be conceptualized independently from its process and how these factors relate to the practice of accounting, is taken for granted and is poorly understood.” Researchers used various theoretical frameworks that explain these accounting changes. Gordon and Miller (1976) used contingency theory and Burns and Scapens (2000) used old institutional economic theory (OIE). Contingency theory explain show

changes in an organisation's environment cause changes in organisational factors, accounting practice, and decision-making process, and OIE theory suggests how accounting and organisation can change through the process of institutionalization.

Management accounting research used a variety of theoretical frameworks to explain the changes. This paper focuses on both contingency and institutional theories to explain the need for a good fit between the MAS, external environment, and organisational aspects to improve performance. Many studies on management accounting and organisational change used contingency theory (for example, Baines & Langfield-Smith, 2003; Haldma & Laats, 2002; Hyvönen, 2007). The following sub-sections summarize the process of management accounting change from each perspective.

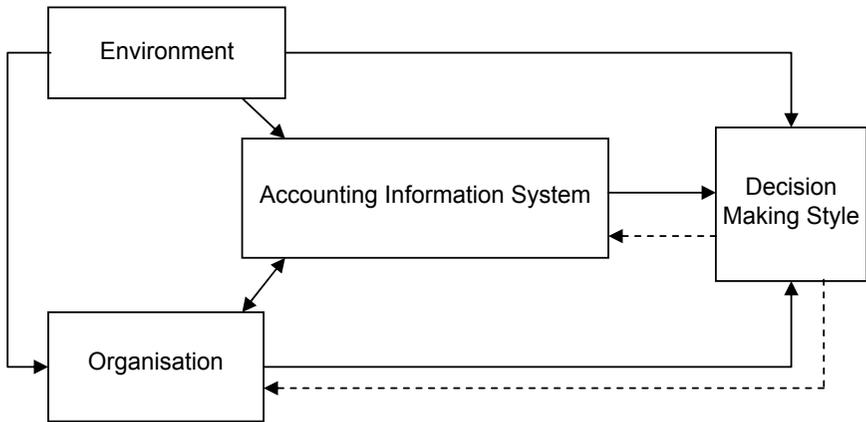
## **CONTINGENCY THEORY**

Contingency theory is paramount to explaining how accounting systems might be affected by the fit between environmental and organisational factors. Central to the contingency approach in examining these relationships is the notion of fitness. Contingency is defined by the Oxford dictionary as:

*“The relationship between behaviour and the consequences that is dependent on that behaviour.”*

Contingency theory posits that an appropriate match between organisational characteristics and contingencies will improve organisational effectiveness (Morton & Hu, 2008). Donaldson (2001, p. 7) defined “contingency” as “any variable that moderates the effect of organisational characteristics on organisational performance.”

In the contingency theory of organisations, no universally acceptable model of the organisation exists to explain the diversity of organisational system design. Gordon and Miller (1976) suggested the usefulness of contingency theory in developing effective MAS. They proposed that the design of accounting information systems should be dependent on firm-specific contingencies where environmental, organisational, and decision style variables can contribute to understanding such systems (see Figure 1).



**Figure 1: Gordon and Miller's Framework**

Gordon and Miller (1976) also suggested operational measures for each component of the model. Environmental measures include dynamism, heterogeneity and degree of differentiation, bureaucratisation, available resources, and integration through committees, rules, or policies.

A contingency perspective suggests that effective MAS should align with both internal and external factors. Depending on the match between MAS characteristics and these various factors that affect the organisation, different levels of effectiveness might be apparent. Waterhouse and Tiessen (1978) expanded the organisational context to include both environmental and technological factors, whereas Simons (1987) incorporated business strategy into these measures.

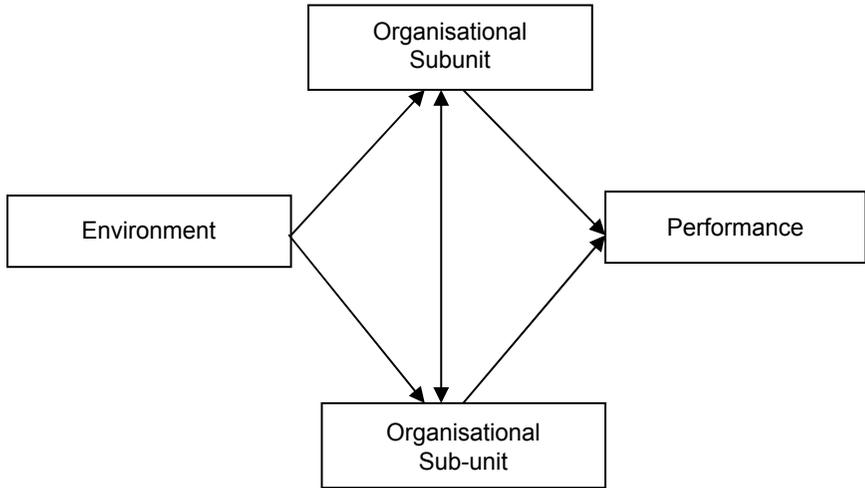
The identification of contextual variables in this study is traced from the original structural contingency frameworks developed within organisational theory. Early accounting researchers focused on the influence of environment and technology on organisational structure (Otley, 1980; Waterhouse & Tiessen, 1978). According to Chenhall (2007), a new research stream is related to the role of strategy, which has been incorporated in the traditional organisational model that suggests important links with environment, technology, organisational structure, and Management Control System (MCS).

A number of innovative management accounting techniques were developed in the last few decades. This innovation is necessary to support modern technologies and new management process. Abdel-Kader and Luther (2008, p. 3) noted that “the new techniques have affected the whole process of management accounting (planning, controlling, decision making, and communication) and have shifted its focus from a ‘simple’ role of cost determination and financial control, to a ‘sophisticated’ role of creating value through the deployment of resources.” These ‘new’ accounting techniques are said to be important in the search for a competitive advantage to meet the challenge of global competition. Thus, firms must design a MAS that is congruent with the new requirements to adapt to these technological development and competitive environment (Gerdin, 2005). However, few organisations adopted these new techniques. As cited by Abdel-Kader and Luther (2008), Tillema (2005) explained that the appropriateness of using advanced techniques is dependent on the circumstances in which these techniques are being used, hence the need for a contingency theory perspective.

Many researchers suggested that an appropriate accounting system depends upon organisational contextual variables (Gordon & Miller, 1976; Otley, 1980; Waterhouse & Tiessen, 1978). For example, Otley (1980) proposed the need to identify specific aspects of an accounting system associated with certain defined circumstances and demonstrated an appropriate matching. The contingency approach to management accounting is based on the premise that no universally appropriate MAS applies equally to all organisations in all circumstances (Waterhouse & Tiessen, 1978). Thus, the complex relationship among MAS, its contextual variables, and its effect on organisational performance attracted considerable research attention (Baines & Langfield-Smith, 2003; Jermias & Gani, 2002; Laitinen, 2006). Figure 2 shows a simplified contingency model by Weill and Olson (1989), which can be used to explain this contingent relationship.

Drawing upon a structural contingency theory of management accounting, this study examines how technology and environmental factors determine the degree of changes in MAS and organisational factors (strategy and structure). Furthermore, using institutional perspectives, this research determines whether firm performance is contingent on the alignment

of management accounting change with the organisational factor in technological development and competitive environment, and in what directions the change should take place.



**Figure 2: Simplified Model of Contingency Theory in Organisational Research**

## **INSTITUTIONAL PERSPECTIVES**

Institutional theory is an adaptive change process framework. It examines the influence of external environment factors and market conditions on organisational change and development (Barnett & Caroll, 1995). Burns and Scapens (2000) conceptualized management accounting change as change in organisational rules and routines by using institutional theory. Under OIE theory, management accounting is conceived as a routine and a potentially institutionalized, organisational practice. By being institutionalized, MAPs can both shape and be shaped by institutions which govern organisational activity. Within OIE theory, institution is defined as:

*“a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people” (Burns & Scapens, 2000, p.5).*

In OIE, three dichotomies offer insights into the process of management accounting change: (1) formal versus informal change; (2) revolutionary versus evolutionary change; and (3) regressive versus progressive change (Burns & Scapens, 2000). The formal versus informal change dichotomy is discussed in this paper because it is the most appropriate of the three in explaining the reciprocal relationship between management accounting and organisational change. Formal and informal management accounting change is used to imply that change is not specifically directed (formal change) but may evolve out of the intended actions of the individuals who are enacting and reproducing organisational routines (informal change).

Organisational routines are referred to as organisational structure and strategy. The other two dichotomies, i.e., revolutionary versus evolutionary change and regressive versus progressive change, involve a disruption to existing routines and institutions. They focus on a value system in management accounting change process, which is not a focus in this paper.

Formal change occurs through introducing new management accounting systems and techniques, which engender the organisation to change. By contrast, informal change occurs when change in an organisation's operational condition (i.e., organisational activity, such as ownership structure or production technology) creates the need for change in MAP. Hassan (2005) provided evidence on formal change by showing how management accounting is acted upon to disrupt hospital's micro institutions and routines, challenge physicians' professional and bureaucratic power, and therefore bring change to a public hospital. Smith, Morris, and Ezzamel (2005) showed the occurrence of informal change where organisational change, as affected by the use of outsourcing, causes specific changes to exist in the organisations' MAS. Both findings provide evidence of a reciprocal relationship between management accounting and organisational change, where change in MAP can influence the organisation to change (formal change) and where change in organisational activity can influence MAP to change (informal change). This theory is consistent with the characteristics of management accounting change history, which is driven either by the evolution of organisations and their strategic imperatives or the management accounting innovation developed by managers to address their own decision-making needs.

Management of change suggests how management accounting change is intertwined with a changing organisational design and strategy, the most consistently used organisational characteristic and variable in past research (e.g., Chenhall, 2003; Lapsley & Pallot, 2000). According to Sisaye (2003), the institutional approach to organisational change, which suggests that organisational structures affect an organisation's learning strategy and ability to adapt to changes in the external environment, provide the context for at least two types of organisational change strategies, namely, gradual/incremental and revolutionary/radical. In this case, the institutional framework maintains that organisations, regardless of their structural arrangements, can successfully change if they implement adaptive strategies of either incremental or radical change to bring about process innovation changes. Ma and Tayles (2009) studied the emergence of strategic management accounting and used institutional framework to interpret external and internal influences on the change in management accounting techniques in their studied organisation.

## **CONCLUSION**

The pressure of management accounting and organisational change may come from the environment of the firm. The most evident environmental factor is market competition (Hoque, Mia & Alam, 2001; Libby & Waterhouse, 1996; Mia & Clarke, 1999). The literature showed that organisations operating in a competitive business environment tend to change their MAPs, organisational structures, and strategy to succeed (e.g., Baines & Langfield-Smith, 2003; Chenhall & Morris, 1986; Chong & Chong, 1997; Libby & Waterhouse, 1996; Luther & Longden, 2001; Mia & Clarke, 1999; Pratt, 2004; Waweru, Hoque and Uliana., 2004). For example, Luther and Longden (2001) found evidence that an organisation's ability to sell abroad and to compete against imports changes managerial and business practices, thereby forcing change in management accounting.

Technology also becomes an important aspect of management accounting and organisational research that draws on the manufacturing sector. Issues on the role of MAS within advanced manufacturing settings, such as JIT, TQM, and *Flexible Manufacturing*, were previously explored. According to Emmanuel, Otley, and Merchant (1990), technological contingency factors

include the nature of the production process, its degree of routine, how well means–end relationships are understood, and the amount of task variety.

New technology evidently leads to change in cost structure (Haldma & Laats, 2002). As manufacturing technology advances, MAS also becomes increasingly complex and sophisticated to precisely cope with the manufacturing process. Tight global competition associated with advanced manufacturing technologies prompted the need for improved cost management, which can be achieved by adopting appropriate MAS. However, adopting appropriate MAS alone is insufficient for a firm to remain competitive; manufacturing technologies should also be consistent with business strategy and organisational structure. Thus, an appropriate fit between technologies, MAS, strategy, and structure helps build a competitive advantage, thereby enhancing organisational performance (Hyvönen, 2007).

An organisation is often interpreted as a configuration of different characteristics. Numerous dimensions of external context (such as environments, industries, and technologies) and internal organisational characteristics (such as strategies, structures, cultures, processes, practices, and outcomes) cluster into configurations. According to Moores and Yuen (2001), organisational configurations are sets of organisations that share a common profile in terms of key characteristics, such as strategy, structure, and decision-making process. In most configurationally research, the focus is on the link between organisational configuration and performance (Cadez & Guilding, 2008).

Theorists of revolutionary change advocated that all organisational elements, such as strategy, structures, people, systems, and culture, should be simultaneously changed to achieve maximum organisational alignment and effectiveness (Huy, 2001). This perspective suggests that an organisation's structural arrangement can successfully change with the implementation of either incremental or radical adaptive strategic change (Sisaye, 2003). This paper shows that contingency-based studies have examined MAS as both dependent and independent variables. Good fit among the variables indicates enhanced performance, whereas poor fit implies diminished performance (Chenhall, 2007). The institutional approach to organisational change suggests that organisational structures affect an organisation's learning

strategy and ability to adapt to changes in the external environment. These theories explained the possibility of reverse causation relationship between organisational and management accounting change (known as formal and informal changes).

## **REFERENCES**

- Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *The British Accounting Review*, 40(1), 2-27.
- Baines, A., & Langfield-Smith, K. (2003). Antecedents to management accounting change: a structural equation approach. *Accounting, Organizations and Society*, 28(7,8), 675-698.
- Barnett, W. P., & Carroll, G. R. (1995). Modeling internal organizational change. *Annual Review of Sociology*, 21, 217-236.
- Burns, J., & Scapens, R. W. (2000). Conceptualizing management accounting change: An institutional framework. *Management Accounting Research*, 11(1), 3-25.
- Burns, J., & Vaivio, J. (2001). Management accounting change. *Management Accounting Research*, 12(4), 389-402.
- 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.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2,3), 127-168.
- Chenhall, R. H. (2007). Theorizing contingencies in management control systems research. *Handbook of Management Accounting Research*, 1, 163-205.

- Chenhall, R. H., & Langfield-Smith, K. (1998a). Factors influencing the role of management accounting in the development of performance measures within organizational change programs. *Management Accounting Research, 9*(4), 361-386.
- Chenhall, R. H., & Langfield-Smith, K. (1998b). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. *Accounting, Organizations and Society, 23*(3), 243-264.
- Choe, J. (2004). Impact of management accounting information and AMT on organizational performance. *Journal of Information Technology, 19*, 203-214.
- Chong, V. K., & Chong, K. M. (1997). Strategic choices, environmental uncertainty and SBU performance: A note on the intervening role of management accounting systems. *Accounting and Business Research, 27*(4), 268-276.
- Donaldson, L. (2001). *The contingency theory of organizations*. Thousand Oaks, CA: Sage Publications.
- Emmanuel, C., Otley, D., & Merchant, K. (1990). *Accounting for management control*. (2nd ed.). London: Chapman & Hall.
- Gerdin, J. (2005). Management accounting system design in manufacturing departments: an empirical investigation using a multiple contingencies approach. *Accounting, Organizations and Society, 30*(2), 99-126.
- Gomes, C. F., Yasin, M. M., & Lisboa, J. V. (2007). The dimensionality and utilization of performance measures in a manufacturing operational context: Organizational change implications. *Cross Cultural Management: An International Journal, 14*(4), 286-306.
- Gordon, L. A., & Miller, D. (1976). A contingency framework for the design of accounting information systems. *Accounting, Organizations and Society, 1*(1), 59-69.

- Granlund, M. (2001). Towards explaining stability in and around management accounting systems. *Management Accounting Research*, 12, 141-166.
- Haldma, T., & Laats, K. (2002). Contingencies influencing the management accounting practices of Estonian manufacturing companies. *Management Accounting Research*, 13(4), 379-400.
- Hassan, M. K. (2005). Management accounting and organizational change: An institutional perspective. *Accounting & Organizational Change*, 1(2), 125-140.
- Hopwood, A. G. (1987). The archeology of accounting systems. *Accounting, Organizations and Society*, 12(3), 207-234.
- Hopwood, A. G. (1990). Accounting and organization change. *Accounting, Auditing & Accountability Journal*, 3(1), 7-17.
- Hoque, Z., Mia, L., & Alam, M. (2001). Market competition, computer-aided manufacturing and use of multiple performance measures: An empirical study. *The British Accounting Review*, 33(1), 23-45.
- Horngren, C., Sundem, G., Stratton, W., Burgstahler, D., & Schatzberg, J. (2007). *Introduction to management accounting*. (14th ed.). New Jersey: Pearson Prentice Hall.
- Hussain, M., & Hoque, Z. (2002). Understanding non-financial performance measurement practices in Japanese banks: A new institutional sociology perspective. *Accounting, Auditing & Accountability Journal*, 15(2), 162-183.
- Huy, Q. N. (2001). Time, temporal capability, and planned change. *Academy of Management. The Academy of Management Review*, 26(4), 601-623.
- Hyvönen, J. (2007). Strategy, performance measurement techniques and information technology of the firm and their links to organizational performance. *Management Accounting Research*, 18(3), 343-366.

- IFAC. (1998). *International Management Accounting Practice Statement: Management Accounting Concepts*, New York.
- Innes, J., & Mitchell, F. (1990). The process of change in management accounting: Some field study evidence. *Management Accounting Research*, 1, 3-19.
- Innes, J., & Mitchell, F. (1995). A survey of activity based costing in the UK's large companies. *Management Accounting Research*, 6(2), 137-153.
- Jermias, J., & Gani, L. (2002, 27-29 Oct 2002). *Linking strategic priorities, organizational configurations and management accounting systems with business unit effectiveness: Experience from Indonesian publicly held companies*. Paper presented at the 3rd Conference AAA, Nagoya, Japan.
- Johnson, H. T., & Kaplan, R. S. (1987). *Relevance lost: the rise and fall of management accounting*. Harvard Business School Press, Cambridge, MA.
- Kaplan, R. S., & Norton, D. P. (1996). *The balance scorecard: Translating strategy into action*. Boston, MA: Harvard Business School Publishing.
- Kassim, M. Y., Md-Mansur, K., & Idris, S. (2003). Globalisation and its impact on Malaysia economy. *Reinventing Sabah: Global Challenges and Policy Responses*, 95-111.
- Laitinen, E. K. (2001). Management accounting change in small technology companies: Towards a mathematical model of the technology firm. *Management Accounting Research*, 12(4), 507-541.
- Laitinen, E. K. (2006). Explaining management accounting change: Evidence from Finland. *International Journal Accounting, Auditing and Performance Evaluation*, 3(2), 252-281.
- Lapsley, I., & Pallot, J. (2000). Accounting management and organizational change: A comparative study of local government. *Management Accounting Research*, 11(2), 213-229.

- Libby, T., & Waterhouse, J. H. (1996). Predicting change in management accounting systems. *Journal of Management Accounting Research*, 8, 137-150.
- Luther, R., & Longden, S. (2001). Management accounting in companies adapting structural change and volatility in transition economies: A South African study. *Management Accounting Research*, 12, 299-320.
- Ma, Y., & Tayles, M. (2009). On the emergence of strategic management accounting: an institutional perspective. *Accounting and Business Research*, 39(5), 473-495.
- Mia, L., & Clarke, B. (1999). Market competition, management accounting systems and business unit performance. *Management Accounting Research*, 10, 137-158.
- Moores, K., & Yuen, S. (2001). Management accounting systems and organization configuration: A life-cycle perspective. *Accounting, Organizations and Society*, 26, 351-389.
- Morton, N. A., & Hu, Q. (2008). Implications of the fit between organizational structure and ERP: A structural contingency theory perspective. *International Journal of Information Management*, 28, 391-402.
- Omar, N., Abd-Rahman, I. K., & Sulaiman, S. (2004). Management accounting in Malaysia - Has relevance been lost? *Accountants Today*, November, 26-28.
- Otley, D. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, 5(4), 413-428.
- Perera, S., McKinnon, J. L., & Harrison, G. L. (2003). Diffusion of transfer pricing innovation in the context of commercialization-A longitudinal case study of a government trading enterprise. *Management Accounting Research*, 14(2), 140-164.

- Pratt, Z. L. (2004). *An investigation of the relationships between external environment, mission and strategy, leadership, organizational culture, and performance*. Unpublished Ph.D., Michigan State University, United States -- Michigan.
- Quattrone, P., & Hopper, T. (2001). What does organizational change mean? Speculations on a taken for granted category. *Management Accounting Research, 12*(4), 403-435.
- Scapens, R. W. (1999). Broadening the Scope of Management Accounting: From a Micro-economic to a Broader Business Perspective. Unpublished Working Paper. Working Paper, University of Manchester, Manchester, September.
- Shields, M. D. (1997). Research in management accounting by North Americans in the 1990s. *Journal of Management Accounting Research, 9*, 3-61.
- Simons, R. (1987). Accounting control systems and business strategy: An empirical analysis. *Accounting, Organizations and Society, 12*, 357-374.
- Sisaye, S. (2003). Process innovation and adaptive institutional change strategies in management control systems: Activity based costing as administrative innovation. *Advances in Management Accounting, 11*, 251-285.
- Smith, J. A., Morris, J., & Ezzamel, M. (2005). Organisational change, outsourcing and the impact on management accounting. *The British Accounting Review, 37*(4), 415-441.
- The American Heritage Dictionary (2000). *The American Heritage Dictionary of the English Language* (4<sup>th</sup> ed.). Harcourt: Houghton Mifflin.
- Vaivio, J. (1999). Exploring a 'non-financial' management change. *Management Accounting Research, 10*, 409-437.

- Vamosi, T. (2003). The role of management in a company transition from command to market economy *Small Business and Enterprise Development*, 10(2), 194-209.
- Waldron, M. (2005). Overcoming barriers to change in management accounting systems. *The Journal of American Academy of Business, Cambridge*(2), 244-249.
- Waterhouse, J. H., & Tiessen, P. (1978). A contingency framework for management accounting system research. *Accounting, Organizations and Society*, 3, 65-76.
- Waweru, N. M., Hoque, Z., & Uliana, E. (2004). Management accounting change in South Africa. *Accounting, Auditing & Accountability Journal*, 17(5), 675-704.
- Weill, P., & Olson, M. H. (1989). An assessment of the contingency theory of management information system. *The Journal of Management Information System*, 6(1), 59-85.
- Wickramasinghe, D., & Alawattage, C. (2007). *Management accounting change: approaches and perspectives*. London and New York: Routledge, Taylor & Francis Group.