

Corporate Governance and Strategic Management Accounting: a Grounded Theory

Teerachai Arunruangsirilert

Lecturer of Department of Accounting,

Thammasat Business School, Thammasat University

ABSTRACT

A lot of corporate governance studies are vague in whether it can improve firm performance. This study provides a new grounded theory on a relationship between corporate governance and strategic management accounting which is a promising theory bridging the gap between corporate governance and firm performance. This study finds out factors in the context of corporate governance influencing usage of strategic management accounting. This study collects information by interviewing management level in information technology firms. The result shows significant factors and behavior of strategic management accounting application relating to corporate governance.

Keywords: Corporate Governance, Strategic Management Accounting, Grounded Theory

การกำกับดูแลกิจการและการบัญชีบริหารเชิงกลยุทธ์ : ทฤษฎีรากฐาน

ธีรชัย อรุณเรืองศิริเลิศ

อาจารย์ประจำภาควิชาการบัญชี

คณะพาณิชยศาสตร์และการบัญชี มหาวิทยาลัยธรรมศาสตร์

บทคัดย่อ

การศึกษามากมายเกี่ยวกับการกำกับดูแลกิจการยังคลุมเครือว่าการกำกับดูแลกิจการสามารถสนับสนุนผลงานของกิจการได้หรือไม่ การศึกษานี้แสดงทฤษฎีรากฐานใหม่ในเรื่องความสัมพันธ์ระหว่างการกำกับดูแลกิจการและการบัญชีบริหารเชิงกลยุทธ์ที่เป็นความสิ่งที่สามารถเชื่อมโยงระหว่างระหว่างการกำกับดูแลกิจการและผลงานของกิจการได้ การศึกษานี้พบปัจจัยที่ทำให้การกำกับดูแลกิจการมีผลต่อการใช้การบัญชีบริหารเชิงกลยุทธ์ การศึกษานี้เก็บข้อมูลโดยการสัมภาษณ์กับผู้บริหารในบริษัทที่ดำเนินธุรกิจเกี่ยวเทคโนโลยีสารสนเทศ ผลการศึกษาแสดงถึงปัจจัยที่สำคัญและแสดงถึงพฤติกรรมของการใช้การบัญชีบริหารเชิงกลยุทธ์ที่เกี่ยวข้องกับการกำกับดูแลกิจการ

คำสำคัญ: การกำกับดูแลกิจการ การบัญชีบริหารเชิงกลยุทธ์ ทฤษฎีรากฐาน

Introduction

The matter of corporate governance has gained worldwide recognition from recent corporate collapses such as Enron and WorldCom in the United States and HIH Insurance in Australia (Monks & Minow, 2004) and it seems that all the executives will certainly agree to put every effort to prevent type of corporate governance disasters that brought about those collapses (International Federation of Accountants, 2004).

Particularly, corporate governance consists of the set of institutional and market-based mechanisms which control managers to optimize the firm value in lieu of the owners (Durukan, Ozkan, & Dalkilic, 2012; Macey, 1997; Peck & Ruigrok, 2000). Research trend of corporate governance is generally to identify both the strengths and the weaknesses of different corporate governance systems that utilize mechanisms in different ways (Durukan et al., 2012). However, Shleifer and Vishny (1997) state that, there is no theory or body of evidence which points to one particular system as being more effective than the others.

In fact, corporate governance itself cannot generate firm value because main duty of the mechanism of corporate governance is to provide assurance of the business operation, but it does not provide profitability. Although conventional theories including agency theory (Jensen & Meckling, 1976) and wisdom suggest that greater independent board lead to better performance, there is evidence pointing that the relationship between corporate governance and firm performance is still vague. For instances, Fosberg (1989) finds a

insignificant relationship between proportion of outside directors (independent directors) and firm performance. Hermalin and Weisbach (1991) find no evidence that board composition is significantly related to performance such as Tobin's Q and earnings, as well as, Bhagat and Black (2002) report that firms with greater independent boards do not perform better than others. Mak and Kusnadi (2005) also demonstrate statistically insignificant relationship between independent directors and firm value (Tobin's Q).

Recently, International Federation of Accountants (2004) presents enterprise governance framework which tries to bridge the gap between corporate governance and firm performance by applying business governance model. The framework shows that corporate governance provides accountability and assurance of an organization while business governance creates value and effective resource utilization (International Federation of Accountants, 2004). The major devices in business governance are strategic governance and strategic information system, which provide effective and valuable information in decision making (for business governance aspect) and enhance control systems (for corporate governance aspect). The strategic management accounting can suitably support this function because it provides not only the strategic management accounting techniques, but also provides directly strategic management supports (Cadez & Guilding, 2008).

The strategic management accounting concept starts from need to provide supportive information

to an organization. Accounting information mainly consists of financial accounting and management accounting. The financial accounting provides prominently information for external users, while the management accounting supports mainly information for management. In the operation aspect, the predominantly useful information is from management accounting because it plays an major role as a supportive device in planning, controlling, communicating, monitoring, and linking together the various sections and divisions in an organization (Atkinson, Banker, Kaplan, & Young, 2001; Siti Zaleha Abdul, Abdul Rahim Abdul, & Wan Khairuzzaman Wan, 2011).

Generally, management accounting systems (MASs) are used to serve two broad objectives: enhance decision making and improve controls (Indjejikian & Matejka, 2006). Siti Zaleha Abdul et al. (2011) also supports that management accounting provides information for planning and control in any organization. However, in the prior study, management accounting systems are frequently studied in two approaches: strategic management accounting (SMA) (Cadez & Guilding, 2008, 2012; Siti Zaleha Abdul et al., 2011) and management accounting and controls (MACs) (Tuomela, 2005). Especially, academics and practitioners are interested in strategic management accounting because of widely published criticisms of conventional management accounting practice (Ashton, Hopper, & Scapens, 1995; Bhimani & Bromwich, 1992; Cadez & Guilding, 2008; Harrison & Kaplan, 1987; Kaplan, 1984). In addition, a study trend of management accounting

emphasizes in business value creation as seen in International Federation of Accountants (1998) framework that management accounting develops from cost controlling to value adding (from stage 1 to stage 4 between 1950 and 1995). Therefore, the study of strategic management accounting, which is one of the contemporary management accounting approaches, deserves dominance in enterprise governance framework.

Notwithstanding the linkage between strategic management accounting and corporate governance has been rarely studied before. In stead, there are several studies related to financial accounting information and corporate governance, such as the role of financial accounting information in controlling mechanisms to promote the efficient governance of corporations (Bushman & Smith, 2001) and the role of financial accounting in providing the necessary information for most of the governance mechanisms (Sloan, 2001).

Prominently, some studies try to link management accounting with various factors—such as management accounting studies within contingency framework (Chenhall, 2003; Chenhall & Langfield-Smith, 1998; Fisher, 1995)—but the study on relationship between corporate governance and strategic management accounting is still nebulous. Thus, this study has an objective to explore the linkage between corporate governance and strategic management accounting application so as to gain more understanding and to support the relationship in the light of the strategic management accounting application in corporate governance influence.

Main Research Questions

To accomplish the objective of the study, the questions to be answered would be demonstrated as followed : 1) *what are the main governance factors having an impact on strategic management accounting* and 2) *how do those factors affect strategic management accounting in the organization*. In consequence, the answers of the main questions could completely fill in the grounded theory model in corporate governance and strategic management accounting, which brings about additional information to gain more understanding and supporting the relationship between them.

Research Method

Because of no any previous model between strategic management accounting and corporate governance and no available information to explain such process, the qualitative research method in grounded theory approach is suitable

(Creswell, 2007). In addition, the study aims to discover preliminary model of a process, action, or interaction shaped by participants, the study applies the systematic procedure of Strauss and Corbin (1998).

Procedure

Following to the systematic procedure of Strauss and Corbin (1998), in grounded theory approach, the study starts at open coding by assigning the data into major categories. The information or data from informants is categorized into each component and relationship. The interview is employed and the time is consumed around one hour and a half per person.

The open coding, then, is constructed in the way of relationship by using axial coding. In this step, a coding paradigm or logic diagram is applied: causal conditions, phenomena, context and intervening conditions, strategies, and consequences (Creswell, 2007). In the last, the

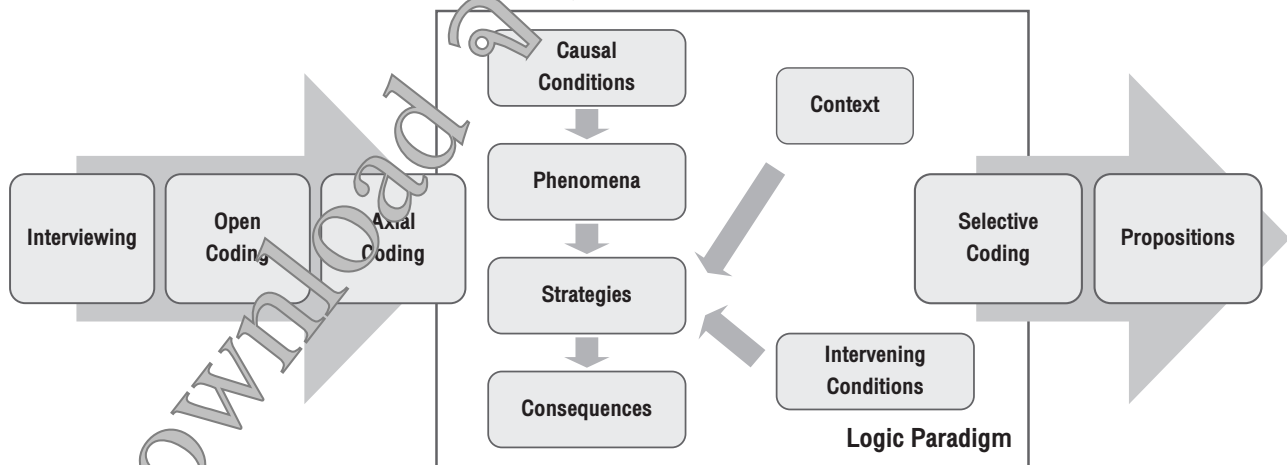


Figure 1 Overall procedures of the grounded theory for the study

propositions are raised by using selective coding procedure. Figure 1 represents overall process of the study.

Participants

This study applies theoretical sampling (Creswell, 2007) in order to best form the theory. The informants are management level in management accounting or related functions because they have to be persons who could deliver related information and contribute to the generating of the theory (Strauss & Corbin, 1998; Wooldridge & Floyd, 1990).

The study selects five management-level informants of management accounting or related functions to collect the information about the corporate governance components affecting strategic management accounting and their relationships in order to cope with the grounded theory study's procedure (Creswell, 2007).

For approaching participants, the author directly contacts to the firms via letters and, later, followed up by using telephone to discuss and confirm appointments for the in-depth interview session. Finally, the informants confirm the date and time for the meetings.

The informants consist of an accounting manager, a business process analyst manager, an accounting director, and a financial and administration director. The participants are the management level of the companies in information technology consulting business, telecommunication network engineering services and maintenance support business, and integrated solutions for

both fixed and wireless communications business. The meeting session operates in their premises and the time is consumed around one hour and a half per person. The questions are open-ended questions via open-ended interviews. Only one participant is involved in each session.

The interview operation starts at the information providing of the research's objectives and, then, the definitions of the jargon or technical terms were delivered to the participant. The main questions are "What are corporate governance components affect strategic management accounting?" and "How would they affect the company's strategic management accounting?", and "What do any moderators leading such components affect the decision of strategic management accounting?" The interviewer responds the participants' information by active listening, empathic responding, and open minding.

Data Collection and Analysis

The data from the interview is composed of transcriptions of the interview, over twelve hours, and information from the websites and other companies' related topic documents between 19 November 2012 and 30 November 2012. The interview is conducted in Thai language and, later, the information of the interview is translated into English language after performing the coding procedures. In this study, the author purposively selects participants from the businesses which are rather the same nature as information technology business because, according to Creswell (2007), for the development of the preliminary model,

the gathering information process should start with selecting and understanding a homogeneous sample and, then, after initial developing the theory, selecting and studying a heterogeneous sample is performed in order to confirm or disconfirm the theory.

The researcher does the rigor analysis by doing reflexivity that the analytic and self-reflective memos are performed during the analysis period to explicit the implication of the information. The memos document the author reflection and thinking to the participants' information and situations. Open coding is performed to capture the same words and meanings of each participant. Then, the occurred components are grouped together in new structure by making connections among categories (Creswell, 2007; Strauss & Corbin, 1990). Codes and categories are synthesized by sorting, comparing, and contrasting to produce the core categories of the framework model. The model is sent to the participants for cross checking and to gain more validity of the model explored.

Validation Strategies

The researcher applies validation strategies of qualitative research from Creswell (2007). Triangulation and participants' review are the main validation strategies for this study. In triangulation, the information is cross checked by using multiple and different sources (Creswell, 2007) such as information from the website of the firms, annual reports, and personal documents as well as the analytic information also is checked and reviewed by these participants (Creswell, 2007). If there are

some mistakes or misunderstanding, the re-session of information gathering interview (if significant), correcting process, or further investigation would be raised to articulate the information and enhance accuracy of the study's results.

Findings and Discussion

The findings of this study explores the preliminary model framework for strategic management accounting and behavior influenced by corporate governance which is developed from the framework of Strauss and Corbin (1998). The model is demonstrated in Figure 2. The model explores the influence processes between corporate governance and strategic management accounting. The processes comprise causal conditions, phenomena, strategies, and consequences against strategic management accounting application.

1. Causal Conditions of Phenomena Related to Corporate Governance Coped by Strategic Management Accounting

From axial coding, the two types of causal conditions affecting situations of management's behavior, in a way of strategic management accounting decision, consist of high governance and low governance by corporate governance system. The high governance occurs when the company's board of directors sets strict financial targets and the overall internal control system is effective. On the other hand, the low governance arises when slack financial targets are allowed by the company's governance team and the organization

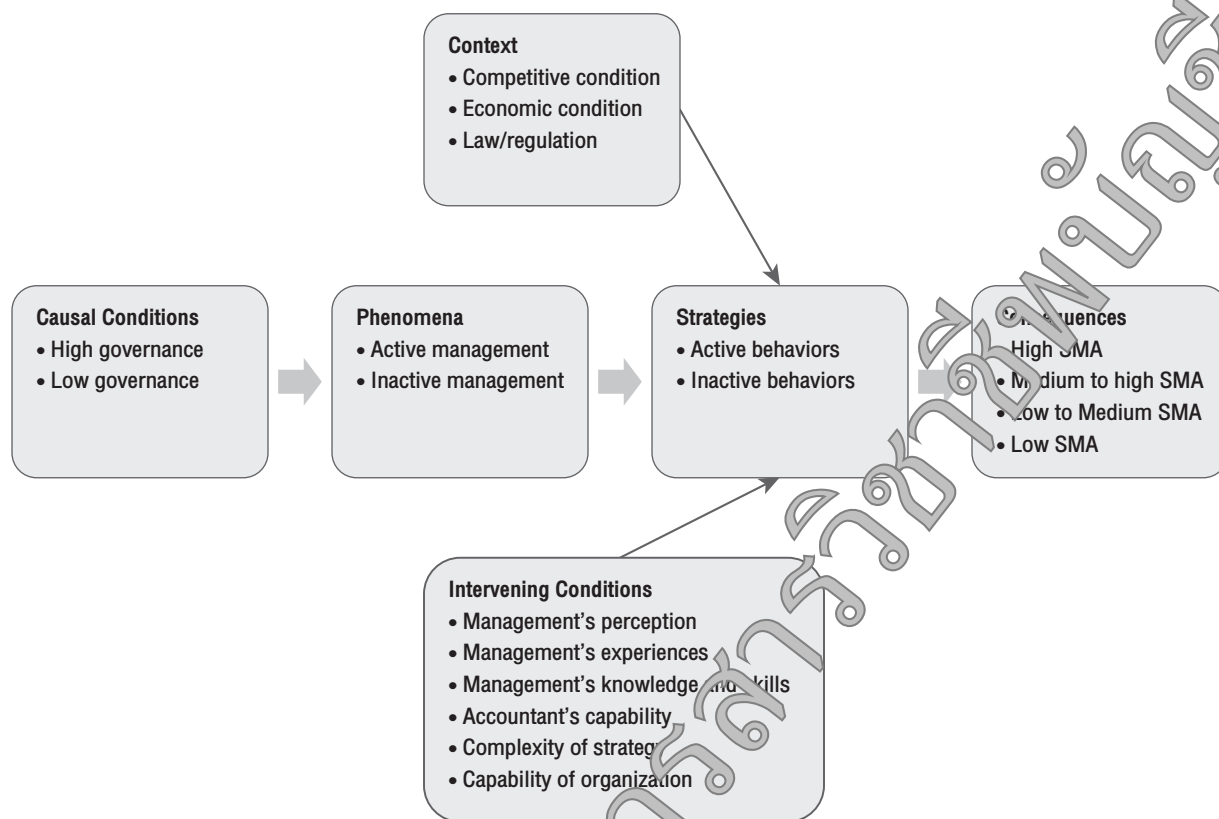


Figure 2 The preliminary model for corporate governance influencing strategic management accounting application and behavior

has a loosely internal control system. The vivid information from one of the participants confirms on these conditions that *“the internal control system would highly affect to the effectiveness of SMA because it has an impact on management’s decision and manners. Moreover, management style which has an effect on SMA is dominated by pressure from governance system...”*

From the response of the informant, the levels of the governance system (high and low governance) are clearly represented as root cause of the strategic management accounting application

within an organization. In addition, another informant gives important information about the cause of the phenomena that *“earning before tax (EBT) is very importance to set everything related to management in the firm, so if the company is very strict on that figure, it will certainly affect to management behavior.”* Moreover, the last participant’s response is very interesting that *“it’s up to the expectation of the board. If it is high expectation, it will surely be that manager of the firm will perform actively.”*

2. Phenomena from High and Low Governance

The causal conditions as above mentioned originate situations of management manners which are composed of two categories: 1) active management and 2) inactive management. The high governance is prone to have active management including power-acquiring management and prospector-typed management while the low governance is inclined to have inactive management which demonstrates via collective management and defender-typed management.

The participants' information supporting on these categories is that *"if the company has high control, managements will normally need gaining more information to support their decision. The more information manager gathers the higher power manager gains"* and *"when the company has strictly control on financial figures, it rather assures that management need obtaining more trust from the board in order to perform any decision effectively."* As the responses from the informants, it is obvious that manager tries to obtain the decision power in high governance circumstance. However, if the firm is low governance, managers would prefer to employ collective management; performing any decision by more depending on others.

Prospector-typed management appears in the high governance condition because the governance body is tough in the financial figures as a result that management is likely to be a prospector or a risk-taking manager in order to meet those monetary figures and vice versa, in the case of the low governance condition.

3. Context in the Performing of the Management Behavior

The finding shows that the management behavior is influenced by contextual conditions including competitive condition, economic condition, and law and regulation. For all of these contexts, if they are risky, the behavior of the management is likely to be an active style. For example, in high competitive condition and in economic downturn, management faces difficult situation to meet goals of the company, thus an active management behavior will play an important role to survive in these situations. However, law and regulation are significant factors, but it affects to the management behavior conversely. If the regulation is too complex and risky, the management is prone to be inactive style because of avoiding a probability of loss.

4. Intervening Conditions Moderating Management Behavior toward Strategic Management Accounting

The study finds moderating factors adjusting management behavior in strategic management accounting application. The moderators comprise management's perception of accountants, management's experiences from using strategic management accounting, management's knowledge and skills, accountants' capability, complexity of strategy, and capability of organization.

The perception in the accountant, management's experiences in the use of strategic management accounting, and characters of accountants are concerned by management when it does decision in relation with strategic

management accounting. For instance, although the management is active and anticipates using strategic management accounting, the use of strategic management accounting may be dropped when they have bad perception in accountants and experience of incapability of accountants. Furthermore, management's knowledge and skills also have a vital effect on strategic management accounting if management has financial and accounting background. The management will prefer to use strategic management accounting techniques, but if management has a quantitative skill, they would prefer not to use any accountant in their strategic decision.

Complexity of strategy and capability of organization has a positive relationship to strategic management accounting implementation. If an organization's strategy which management decides to apply is rather complex, management is prone to use strategic management accounting. However, if the company has low capability in information system, the management is likely to miss use of strategic management accounting as mentioned by one of the informants that *"to be implementation of SMA, the important factors to be concerned are whether information technology system of the organization supports and ability to obtain information for the strategies is available."*

5. Strategies by Management Behaviors

Starting from the causal conditions and phenomena of the conditions to influencing context and influencing factors, this section discusses on management strategies demonstrated by their

behaviors. The classification of the management behaviors' strategies is separated into two groups: 1) active behaviors and 2) inactive behaviors. The active behavioral strategies comprise tricky management, risk-taking management, strict management style, and intensive strategy's fine-tuning. On the other hand, the inactive behavioral strategies include frank management, risk-averse management, loose management style, and soft strategy's fine-tuning.

On the one hand, the informants will be active behaviors' strategies when the organizations have high governance, whereas they will be inactive behaviors' strategies when the organizations have low governance. For example, *"if the firm has high governance, the circumstance will be active management conditions such as prospector management conditions and, then, the management will also have active behaviors including risk-taking management behavior and elaborately adjusting strategies so as to meet goals of the organization"* said by one of the informants.

On the other hand, the inactive behaviors' manners will be employed in the low governance conditions. For instance, tricky manner will be conveniently performed to survive and take some benefits to the management themselves because of low governance such as ineffective internal control system. *"Because the distance or asymmetry of the information between superior and me, I could choose performing in the way that I do not effort so much on the job if the internal*

control of the firm isn't effective to investigate my behavior" responded by one of the participants.

6. Strategic Management Accounting Consequences of Corporate Governance and Management Strategic Behaviors

The last part of the preliminary model is strategic management accounting consequences. The effects of corporate governance and management strategic behaviors affecting strategic management accounting implementation are represented in Figure 3.

Figure 3 shows the relationship as a matrix that strategic management accounting can be affected by the two main factors: 1) corporate governance level and management's strategic behavior. These

factors have a significant impact on strategic management accounting in two manners. The first manner is the level of strategic management accounting techniques' usage (Usage) and the latter manner is the frequency of accountants' participation in strategic decision making processes (Part) (Cadez & Guilding, 2008).

The finding from the main demonstrates four propositions which, consequently, brings about four characters of strategic management accounting application: 1) high strategic management accounting application (H-SMA), medium to high strategic management accounting application (MH-SMA), low to medium strategic management accounting application (LM-SMA), and low strategic management accounting application (Low).

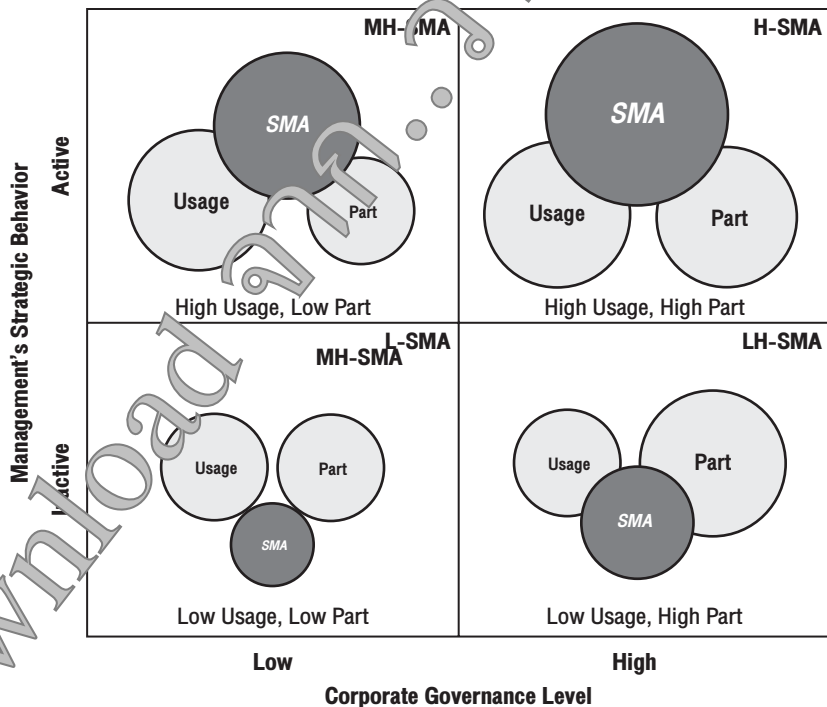


Figure 3 Strategic management accounting structural relationship matrix of corporate governance and management's strategic behavior

H-SMA is high level of strategic management accounting techniques' usage and more frequency of accountant participation in strategic processes (High Usage, High Part). MH-SMA is high level of strategic management accounting techniques' usage, but it is less frequency of accountant participation in the strategic processes (High Usage, Low Part). On the other hand, LM-SMA is low level of strategic management accounting techniques' usage, but it is more frequency of accountant participation in the strategic processes (Low Usage, High Part). Finally, L-SMA is low level in both of the strategic management accounting techniques' usage and accountant's participation in the strategic decision making processes.

This matrix derives from the preliminary model and information from participants. The model generates more comprehensive view of corporate governance and strategic management accounting application. The factors affecting the use of strategic management accounting in an organization are the level of corporate governance and the level of management's strategic behavior. In a low level of corporate governance and inactive management's strategic behavior arise, an organization will apply strategic management accounting at lowest level (L-SMA) while if a high level of corporate governance and active management's strategic behavior exist, an organization will apply strategic management accounting at highest level (H-SMA)

in both techniques' usage and participation of strategic management accounting application. However, although an organization has a high level of corporate governance, the low application of strategic management accounting can appear if management has inactive behavior—this situation leads to less use of strategic management accounting techniques but still has high level of participant of accountant, this can be demonstrated in the matrix as low to medium strategic management accounting application (LM SMA). Finally, although the low level of corporate governance exists, the strategic management accounting application appears extensive use of techniques of strategic management accounting. This situation demonstrates medium to high strategic management accounting application (MH-SMA).

Conclusion

This study provides significant benefit to the area of corporate governance and strategic management accounting. The results of this study can generate comprehensive knowledge of the influence and an impact of corporate governance on strategic management accounting application which can be an additional bridge of the gap between them. Furthermore, the information from this study can be a foundation for further research in the future.

References

English

- Ashton, D., Hopper, T., & Scapens, R. (1995). *Issues in Management Accounting*: Prentice Hall PTR.
- Atkinson, A. A., Banker, R. D., Kaplan, R. S., & Young, S. M. (2001). *Management accounting* (3 ed.). Upper Saddle River, N.J.: Prentice Hall.
- Bhagat, S., & Black, B. (2002). The Non-Correlation Between Board Independence and Long-Term Firm Performance. *Journal of Corporation Law*, 27(2), 231.
- Bhimani, A., & Bromwich, M. (1992). Management accounting: evolution in progress. In C. Drury (Ed.), *Management accounting handbook*. Oxford: Wiley.
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32(1-3), 237-333. doi: [http://dx.doi.org/10.1016/S0165-4101\(01\)00027-1](http://dx.doi.org/10.1016/S0165-4101(01)00027-1)
- 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. doi: 10.1016/j.aos.2008.01.003
- Cadez, S., & Guilding, C. (2012). Strategy, strategic management accounting and performance: a configurational analysis. *Industrial Management & Data Systems*, 112(3), 484-501. doi: <http://dx.doi.org/10.1108/02635571211210086>
- 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. doi: [http://dx.doi.org/10.1016/S0361-3682\(01\)00027-7](http://dx.doi.org/10.1016/S0361-3682(01)00027-7)
- Chenhall, R. H., & Langfield-Smith, K. (1998). The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach. *Accounting, Organizations and Society*, 23(3), 253-264. doi: [http://dx.doi.org/10.1016/S0361-3682\(97\)00024-X](http://dx.doi.org/10.1016/S0361-3682(97)00024-X)
- Creswell, J. W. (2007). *Qualitative inquiry and research design: choosing among five approaches* (2 ed.). London: Sage Publications, Inc.
- Durukan, B., Ozkan, S., & Dalkilic, F. (2012). CEO Turnover and Corporate Performance Relationship in Pre- and Post-IFRS Period: Evidence from Turkey. *Journal of Business Economics and Management*, 13(3), 421-442. doi: <http://www.tandfonline.com/loi/tbem20>
- Fisher, J. (1995). Contingency-based research on management control systems: Categorization by level of complexity. *Journal of Accounting Literature*, 14, 24-53.
- Fosberg, R. H. (1989). Outside directors and managerial monitoring. *Akron Business and Economic Review*, 20(2), 24.
- Hermalin, B. E., & Weisbach, M. S. (1991). The effects of board composition and direct incentives on firm performance. *Financial Management*, 20(4), 101-112. doi: <http://www3.interscience.wiley.com/journal/118902563/home>

- Indjejikian, R. J., & Matejka, M. (2006). Organizational Slack in Decentralized Firms: The Role of Business Unit Controllers. *Accounting Review*, 81(4), 849–872.
- International Federation of Accountants. (1998). International management accounting practice statement: management account concepts. NY: International Federation of Accountants.
- International Federation of Accountants. (2004). Enterprise Governance: getting the balance right (pp. 58): International Federation of Accountants.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Johnson, H. T., & Kaplan, R. S. (1987). *Relevance lost: the rise and fall of management accounting*. Boston: Harvard Business School Press.
- Kaplan, R. S. (1984). The evolution of management accounting. *Accounting Review*, 59, 390–418.
- Macey, J. R. (1997). Institutional investors and corporate monitoring: a demand-side perspective. *Managerial & Decision Economics*, (7–8), 601.
- Mak, Y. T., & Kusnadi, Y. (2005). Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, 13(3), 301–318. doi: <http://dx.doi.org/10.1016/j.pacfin.2004.09.002>
- Monks, R. A. G., & Minow, N. (2004). *Corporate Governance*: Wiley.
- Peck, S. I., & Ruigrok, W. (2000). Hiding behind the flag?: Prospects for change in German corporate governance. *European Management Journal*, 18(4), 420–430.
- Shleifer, A., & Vishny, R. W. (1997). A Survey of Corporate Governance. *Journal of Finance*, 52(2), 737–783.
- Siti Zaleha Abdul, R., Ahmad Bahim Abdul, R., & Wan Khairuzzaman Wan, M. (2011). Management accounting and risk management in Malaysian financial institution. *Managerial Auditing Journal*, 26(7), 565–585.
- Sloan, R. G. (2001). Financial accounting and corporate governance: a discussion. *Journal of Accounting and Economics*, 32(1–3), 335–347. doi: [http://dx.doi.org/10.1016/S0165-4101\(01\)00039-8](http://dx.doi.org/10.1016/S0165-4101(01)00039-8)
- Strauss, A. L., & Corbin, J. M. (1990). Basics of qualitative research: grounded theory procedures and techniques.
- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: grounded theory procedures and techniques* (2 ed.). Newbury Park: Sage Publication, Inc.
- Tuomela, T.-S. (2005). The interplay of different levers of control: A case study of introducing a new performance measurement system. *Management Accounting Research*, 16(3), 293–320. doi: [10.1016/j.mar.2005.06.003](http://dx.doi.org/10.1016/j.mar.2005.06.003)
- Wooldridge, B., & Floyd, S. W. (1990). The strategy process, middle management involvement, and organizational performance. *Strategic Management Journal*, 11(3), 231–241.