STUDYING THE DIALECTICS BETWEEN AND WITHIN MANAGEMENT PHILOSOPHY AND MANAGEMENT ACCOUNTING

Norio Sawabe Graduate School of Economics, Kyoto University

Sumitaka Ushio Graduate School of Economics, Kyoto University

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Norio Sawabe
Graduate School of Economics,
Kyoto University,
Kyoto, Japan
Email: sawabe@econ.kyoto-u.ac.jp

Sumitaka Ushio
Graduate School of Economics,
Kyoto University,
Kyoto, Japan
Email: Sumitaka-ushio@e01.mbox.media.kyoto-u.ac.jp

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Abstract

This paper examines how management philosophy and management accounting are linked to each other through practice. We argue in this paper that management philosophy and management accounting are mutually constitutive to each other in a dialectic manner. We base these findings on a detailed field study of management accounting practices in a research site, a consulting arm offshoot of the planning office in a manufacturing company, that is staffed by highly reflexive practitioners. Drawing upon Giddens' structuration theory and new institutional theory, we analyzed the way that intrinsic contradictions at the institutional realm are reflected upon and handled in practice. This in turn creates routines that mediate the fundamental contradictions. In particular, we examined the impacts of two fundamental contradictions that exist at the level of management philosophy; romanticism vs realism, and familism vs marketism.

These contradictory philosophies influence the way in which formal management accounting systems (hereafter FMAS) are designed. These contradictions result in the structures of responsibility and accountability being fused with a seemingly incompatible mix of management philosophy. Even with these inconsistencies the FMAS is a part of the taken-for-granted reality of management accounting practice. At the practice level the conflicts and tensions within management accounting practice are coped with and in turn become routines when they are replicated over time and space. Our study suggests that dialectic tensions are ubiquitous in organizations. This gives an organization many opportunities to evolve their own sets of coping mechanisms that in turn result in the organization having a unique character. Thus no one organization will conform to a prescribed set of characteristics..

INTRODUCTION

Management accounting researchers have long been interested in the relationship between organizational culture and management accounting practices (Bhimani, 1999, 2003, 2007, Ahrens, 1996, 1997, 1999). Existing literature on management accounting and organizational culture suggest that success or failure of a management accounting system is influenced by the cultural values held by the users of that management accounting system. (Bhimani, 2003; Dent 1987).

One potential weakness of the existing literature is that it treats culture at a level or domain where it is considered to be internally consistent throughout an organisation. Even where the literature acknowledges that an organization is comprised of culturally heterogeneous groups, groups that exhibit similar cultural orientations are analysed collectively as a much larger group. Within the literature, it seems to be assumed that culture is coherent within the chosen

unit of analysis, and that consistency exists between culture and management accounting practices.

In recent years, institutional theory has embraced culture as an integral part of institutions (DiMaggio, 1997). Barley & Tolbert (1997, p. 93) posits that institutional theory highlights cultural influences on decision making and formal structures. The cultural elements of the institutional environment help to define the way the world is and should be for an organization and the individuals within it.

Institutional theory has contributed to accounting research by fostering understandings of the role of institutional environments, along with technical environments, upon the formal structure and decision making processes of management accounting (Powell & DiMaggio, 1991). Institutional theory has been successful in developing insights into how dominant institutions are recreated over time through various types of isomorphism. However, researchers using institutional theory have had little success in explaining how and why institutions change (Baxter & Chua, 2003).

Burns & Scapense (2000) suggest that an evolutionary perspective can be utilised in order to understand institutional change. Their model is based on a sequential model of institutionalization that was originally developed by Barley & Tolbert (1997). In developing their sequential model of institutionalization, Barley & Tolbert (1997) drew upon institutional theory and Giddens' structuration theory.

Some researchers who have built upon Giddens' structuration theory suggest that the emergence of and changes to management accounting practices result not from consistency but from conflicts in practice. For example, Barret et al. (2005) utilized Giddens' structuration theory

to analyze the effect of globalization upon the coordinating of work in multinational audits and focused upon the resulting "global – local dialectics".

In this paper we utilize a simple evolutionary institutional model (SEIM hereafter), that has been developed by drawing upon Giddens' structuration theory, new institutional theory and evolutionary economis. We use the SEIM to describe institutionalization processes and in particular focus on inconsistencies and conflicts between and within various levels of an organization¹. This paper examines how management philosophy and management accounting are linked to each other through practice. We define management philosophy as norms, values, credos and other fundamental policies and biases that are centered around the notion of management at the level of collectivities². This paper utilises a detailed field study of management accounting practices at an organisation that is a consulting arm of a manufacturing company. This site was chosen as it is staffed by highly reflexive practitioners of management accounting. Based on our findings at this site we argue that management philosophy and management accounting are mutually constitutive to each other in a dialectic manner.

Utilizing the SEIM, we analyzed the way in which intrinsic contradictions at the level of management philosophy, which corresponds to the institutional realm at our case site, are reflected upon and handled in practice. This in turn creates routines that mediate the fundamental contradictions. In particular, we examined the impacts of two fundamental contradictions that exist at the level of management philosophy: romanticism vs realism, and familism vs marketism.

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¹ Drawing upon Giddens' structuration theory, new institutional perspectives on organizational studies, and evolutionary economics, Sawabe (2006, 2007) developed an evolutionary institutional model (EIM). As it will be shown briefly, the model used in this paper is a simplified version of the EIM.

² Some management philosophy are formalized as documents and statements, and others are not. As it will discussed in the research method section, we initially focus more upon inscribed management philosophy of various sorts, as anchors to tie abstract ideas with concrete activities that are not time endurable, in operationlising our field research.

The presence of contradictory philosophies influences the way in which the FMAS is designed. In turn the complexity of the FMAS enables these contradictions to remain unresolved.. Thus as responsibility and accountability are formally determined by the FMAS, they are also fused with the management philosophies that are not naturally compatible to each other.

The FMAS is a prerequisite for management accounting in practice. Further the FMAS provides an infrastructure around which the organizational activities function. In this way the FMAS becomes a part of the taken-for-granted reality for management accounting practice. This paper demonstrates, using the illustration of the case site, that management accounting practices cope with these conflicts and tensions at the practice level to the extent that they become part of the normal routines when they are replicated over time and space.

The rest of the paper is structured as follows. The next section outlines our research methods. In that section we outline how we have utilised an empirical study based upon detailed field research at a manufacturing firm. The firm, examined in this research, has been the subject of management accounting research since the 1990s, as a part of the Japanese management accounting research bandwagon, due to its unique and sophisticated management style. In the following section we review existing literature on the relationship between management philosophy and management accounting, and on the management accounting system of the firm. In the next section we discuss Giddens' structuration theory and new institutional theory, and develop a simplified model of evolutionary institutional processes that has a focus on the inconsistencies and conflicts in an organization. We then proceed to discuss the findings from the case site and analyse how management philosophy and management accounting constitute each other in a dialectic manner at the case site. We conclude by highlighting the usefulness of

our theoretical approach in providing insights to the dynamics of dialectic institutionalization in a seemingly steady sate, and discuss the implications of our findings both for researchers and practitioners.

RESEARCH METHODS

The case site for this research is a manufacturing company in Japan that we call KC-Manufacturing ltd. (KCM, hereafter) in this paper. KCM's consolidated revenue for the year ending in March 2007 was approximately JPY 1300 billion or US \$12 billion.

We have conducted in-depth and longitudinal field research since May 2004 based upon semi-structured interviews and on-site observation at the consulting arm of KCM (we call this KC-Consulting ltd or KCC, hereafter, in this paper). The field research also included access to the other subsidiaries of KCM and external companies that were consulted by KCC during the introduction of KCC's FMAS. We were allowed wide and extensive access to the internal documents of all the companies involved in this research.

The consulting arm (KCC) originated as an offshoot from the management planning division and is now a subsidiary of the manufacturing company (KCM). The management planning division is in charge of designing, establishing, maintaining, and providing consultation about the management accounting system of KCM. The current CEO of KCC is the former head of the management planning division and it was under their leadership that KCM's management accounting system (we call Autonomous Management System: AMS, hereafter) and its management information system were developed. As discussed later in the paper, it was the very notion of the AMS that enabled or forced the core of the management planning division to split off in 1995 to form what is now KCC. The core competence of the KCC is the ability to design,

implement and maintain management information system that is specifically adjusted to the AMS.

This longitudinal case study is multi-reflective in the sense that KCC is a reflection of the management planning division's experiences within KCM. Where the inductively developed AMS is repeatedly applied and tested and modified it can be seen that the consulting practices become highly reflective. Our case study demonstrates that this is the case at KCC where the AMS is being implemented. That is, even though KCC is an off-shoot of KCM, many differences exist between the two organisations. Thus as these differences become apparent the former KCM consultants are bound to question taken-for-granted properties associated with the AMS at KCC and hence resulting in a highly reflective process.

The prior history and the current nature of daily practices have resulted in an accumulation of multi-layered reflexivity at KCC where the AMS in practice and the AMS for consultations are intertwined. Up until recently the majority of consultants at KCC had previous experiences as managers at KCM, rather than experience as consultants. Those that used to be practitioner consultants describe how they are now forced to acknowledge the nature of what they sell (the, AMS) more than compared to when they were members of the management planning division at KCM. This means they have to explain the virtues of the AMS to clients from organisations with a different contextual setting than KCM.

An obvious danger associated with accessing the field from, and being guided by, members of the consulting arm is that our perceptions are inevitably influenced by the cognitive framework that has been developed by the consultants. There is also a danger, albeit more easily avoided than the previous cognitive danger, that we may also be influenced by the normative framework of the consulting arm and thus develop a biased view in favour of their consulting

practices. We are very aware of these dangers and take a cautious reflexive approach in order to validate and interpret the findings. As will be discussed later, the theoretical approach we have employed is the single most important reflexive tool for dealing with these dangers.

Contrasted with the dangers associated with this type of research, mentioned above, are the advantages to and opportunities provided by intense interaction with the consulting staff at KCC. They have an intense wealth of reflexive knowledge about the practices employed at KCC, and they are eager to not only share this knowledge but also to solidify their own understanding of it. (Cooper & Morgan, 2008; Kaplan, 1986). In that sense our presence at the research site provided the practitioners at KCC the opportunity to reflect upon their current practices. Nevertheless, the aim of this research is not to report the practical knowledge of the KCC consultants, nor is the aim to be merely advocates of the services provided by KCC. On the contrary, we are aiming to use their knowledge in practice to provide some theoretical generalisations, and also to add new insights that were not previously held by the practitioners. Thus the value of this research can partly be evaluated by to what extent this paper provides new insights about the AMS that the consulting practitioners are not currently aware of.

LITERATURE REVIEW

Literature on the relationship between management philosophy and management accounting

Within the extant literature, management accounting systems (MAS, hereafter) tended to be viewed as a diagnostic tool for monitoring and measuring individual performance (Abernethy and Chua, 1997; Davila, 2005). Its purpose was to reduce variety and implement standardization as portrayed in the cybernetic model (Ashby, 1960; Anthony, 1965). Recently, there has been

renewed interest in extending our knowledge of the alternative uses of MAS as well as the role of management accounting vis-a-vis other formal and informal mechanisms (Simons, 1990, 1991, 1995; Abernethy & Stoelwinder, 1995; Abernethy & Lillis, 1995; Abernethy & Chua, 1997).

Simons (1990, 1991) observed that top management use control systems differently depending upon the decision context. Drawing from the evidence he had gathered from the field, Simons (1995) in his later work developed a typology of formal control systems that he referred to as the four levers of control to implement a firm's strategy. The four levers of control are the belief systems; boundary systems; diagnostic control systems; and interactive control systems.

Beliefs systems are "the explicit set of organizational definitions that senior managers communicate formally and reinforce systematically to provide basic values, purpose, and direction for the organization." (Simons, 1995, p. 34). As Simons (1995) states "The primary purpose of a beliefs system is to inspire and guide organizational search and discovery." (p. 36).

Boundary systems "delineate the acceptable domain of activity for organizational participants. Unlike beliefs systems, boundary systems do not specify positive ideals. Instead, they establish limits, based on defined business risks." (Simons, 1995, p. 39).

In contrast with these two levers, diagnostic and interactive systems are rather information based. "Diagnostic control systems are the formal information systems that managers use to monitor organizational outcomes and correct deviations from preset standards of performance" (Simons, 1995, p. 59), while interactive control systems are defined as the "formal information systems managers use to involve themselves regularly and personally in the decision activities of subordinates." (Simons, 1995, p. 95)

Simons insists that "selecting these levers---and using them properly---is a crucial decision for managers." (Simons, 1995, p. 8). Further he states that managers pick and choose among the levers of control in order to implement their strategic agendas (Simons, 1995, p. 127).

From our perspective, what is peculiar with Simons' framework is the way that he separates the four levers of control. Belief and Boundary systems, which are related to management philosophy (credo, ethics, code of conduct, etc)., are apparently independent from diagnostic systems and interactive systems. This separation suggests that Simons view is that instrumentally diagnostic systems and interactive systems are free from any particular management philosophy. However, Simons does not deny that there may be a different level of fit between diagnostic and interactive systems vis a vis belief and boundary systems. Rather the way that Simons separates the belief and boundary systems from the diagnostic and interactive systems fundamentally pre-empts any possibilities for management accounting system to internalize management philosophy. We will argue that the KCM's case demonstrates the way in which management philosophy is incorporated in to the management accounting system.

Literature on the Autonomous Management System

Hamada & Monden (1989) and Cooper (1994): initial observations of the AMS

The initial descriptive case studies of the AMS were provided by Hamada & Mondern (1989) and Cooper (1994). The findings provided by these case studies formed the basis for the future research on the AMS.

Hamada & Monden $(1989)^3$

³ Hamada & Monden (1989) does not explain how they obtained data for their description of the AMS at KCM.

Hamada & Monden (1989) provide the initial descriptive case study of the AMS at KCM and is noted for the way they regard the AMS as a system to implement cost reductions (p. 198). Of note from their case study are the following three points.

(1) Organizational features of the AMS at KCM.

The smallest units of management in the AMS are called "unit". A unit is usually composed of three to fifty members, and adopts an independent profit system. In the manufacturing area, the units are divided according to each process of the production line. In the sales area, they are allotted to each section of a particular product according to region (However, the latter description in the literature only focuses on manufacturing units). KCM has 400 units, each controlled by a supervisory division (pp. 198-199).

Competition among units is keen. A manufacturing unit is allowed to negotiate its trade with multiple units or even outside companies, to sell its intermediate products on favourable terms. Transfer prices are also set through negotiation between the units concerned, usually based upon market prices, full cost plus profit, and so on (pp. 200-201).

Another feature is member trading. Heads of units can lend and borrow members, and even combine, disband or form new units, thereby eliminating losses caused by surplus labour (pp. 201-202).

(2) The performance evaluation method of the units

A unit is evaluated by two criteria, the first one being added value per hour. It is computed daily, and a monthly summary of daily results of each unit is announced to all employees. The disclosure of their results to others raises overall employee morale and promotes competition among units (pp. 203-204).

⁴ This is a pseudonym used in this paper to provide confidentiality. We also substitute this word for the original in making citations from other paper in order to retain confidentiality.

The second criterion is the achievement rate of monthly and yearly sales targets. These targets are set by each unit after considering past results and future economic possibilities. The rate of the unit's progress toward the target is announced every day (p. 204).

As the results of the performance evaluations are used to improve future performance. they are carefully reviewed by management. This review includes discussing and deciding upon what policies to set for improving future performance (p. 205).

(3) Standardizing the operation and cost reduction system

To reduce costs in each unit's operation, standards are set to meet the highest, not the average, requirements, for each type of intermediate products. In addition, quality inspections are built into the final stage of each process as well as into each unit, to eliminate substandard products that may result in increased costs for the subsequent processes. Since KCM stresses quality improvement, quality inspection operations are also standardized to achieve total quality control (p. 205).

Hamada & Monden (1989) concludes that "every unit has different features and develops different activities, but they all share the same purpose – cost reduction.....To make it work more effectively, KCM developed the performance evaluation method in terms of added value, and has attempted to instill in every employee the idea of 'cost consciousness.'" (p. 209).

Cooper (1994)⁵

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The major descriptions of the AMS provided by Cooper (1994) are of: (a) The Autonomous Management System; (b) The Structure of Units; (c) Evaluating Units' Performance; (d) Cost

⁵ In Cooper (1994), there is no explicit explanation about the way in which he collected data. In Cooper (1995), it is shown that the descriptions of cases were "based upon a five-year, in-depth study of twenty Japanese manufacturing firms". The interviews were held with three to twelve individuals in each firm, including managers, design and manufacturing engineers, and blue-collar workers." (Cooper, 1995: x)

Systems; (e) Managing the Units; (f) Periodic Meetings; and (g) Providing Strategic Guidance. These descriptions are summarized in (1) organizational structure, (2) performance measurement (PDCA cycles), and (3) interactive use of the AMS in hierarchical/vertical relations. As Coopers (1994) descriptions of the (1) organization structure are largely the same as in Hamada & Monden (1989), we will rely on the outline we provided above and only provide a review of the other two areas as follows.

(2) Performance measurement (Plan-Do-Check-Action cycle)

There are two planning horizons at KCM, the first for a year and the second for a month. Each unit's performance is monitored against the annual or master plan on a monthly basis and performance against the monthly plan is monitored on a daily basis (p. 7).

Unit performance is measured in quantitative terms. The basic evaluation system relies primarily upon two central measures. The first capture how well the unit is performing according to the plan and the second captures how much it has improved over the previous six months. The monthly plan evaluation mainly looks at orders received, shipments made, and value-added per labour hour for a sales unit. For a manufacturing unit, the monthly plan evaluation mainly look at total production, production per labour hour, and value-added per labour hour. The evaluation of unit improvement is based upon the increase in added value per hour achieved by the unit (pp. 7-8).

The monthly results for each unit are either announced by management or posted in a way that all employees within the organisation have access to the information. This sharing of information between units is designed to allow units to compare their performance with others and where possible to learn from other unit's results (p. 8)

(3) Interactive use of the AMS in vertical relations

The interactions between unit heads and the section leaders and division managers to whom they report are expected to be supportive and flexible. The various levels of management are meant to provide each other with advice rather than to give orders of actions to be taken. In addition, whenever a manager is dissatisfied with the advice they receive from their direct superiors, they are encouraged to go to that person's superior to discuss the problem (p. 6).

The long-term objectives of the units are set by the division managers and the identification of short-term objectives is the responsibility of the unit heads. Division managers are responsible for ensuring that the units receive the personnel and material that they require to achieve their master plans. They are expected to maintain both formal and informal communication links with the units in their division. The means by which divisional managers achieve this include frequent visits to the factories with some even organising informal parties for unit members. Section managers play a similar role on a smaller scale, but are more deeply involved in managing the operations of the units in their section (p. 9).

At KCM, a variety of formal meetings play an important role in the way units communicate among different levels of management. Meetings are held periodically at the global (i.e., KCM group-wide), corporate, product group, division, and unit levels. Through these periodic meetings, messages are communicated to and from all levels and eventually to all members of the units (p. 9).

In an addition, management philosophy has the role of ensuring that all the units are "pulled in the same direction", which is considered important to ensure that the AMS is operated successfully. At KCM the particular management philosophy is that individuals are most satisfied when their abilities, talents, and efforts are dedicated to the betterment of the entire organization to which they belong rather than to their own individual interest. This philosophy

motivates employees to search for the best solutions to problems. It places heavy emphasis on individual initiative and stresses the need to maintain creativity even in mundane and trivial tasks, claiming that "improving on these tasks and changing the way one does things is creativity." Under this philosophy, all employees, including those from production, sales, and administration, are expected not only to perform rotating tasks but also to devise creative innovations in every aspect of their jobs, no matter how small, to improve the contribution of their efforts to the company and to society as a whole (pp. 9-10).

Cooper (1995): initial theorization of the AMS as a Micro-profit Center

On a basis of the descriptions of the AMS in Cooper (1994) and four other cases observed in Japan, Cooper (1995) introduced the notion of the Micro-profit center (MPC hereafter)⁶, of which the AMS is regarded as a variant.

MPC is defined as a small profit center created by breaking the firm into numerous and highly autonomous units (Cooper, 1995: p. 279). The concept of MPC is derived from that of a profit center, which is conventionally defined as a type of responsibility center in which "managers and other employees control both the revenues and the costs of the products or services they deliver" (Atkinson et al., 2007: p. 586). The distinction between MPC and other profit centers is that the former is a much smaller unit of performance measurement within a firm than the latter. This breaking up of a firm in to smaller units of analysis is "the creation of profit centers, in innovative ways" according to Cooper (1995: p. 279).

⁶ Although Cooper (1995) proposes two types of MPC: pseudo MPC and real MPC, this paper only refers to real MPCs. Pseudo MPCs are distinct from real ones because the firm cannot establish market prices for the groups' outputs (p. 300). Since creating pseudo MPCs is considered a preliminary step to creating real MPCs (p. 280), their features are embraced in those of real MPCs.

Cooper (1995) argues the objective of MPCs is to reduce costs. While other techniques of cost reduction, such as target costing and kaizen costing, focus on the product or production process, MPC system focuses on group leaders. Its effectiveness is "the result of the increased pressure placed on the leaders of the self-directed teams to perform." (p. 279)

Cooper clarifies two techniques and advantages of creating MPCs: (1) the conversion of cost centers into profit centers; and (2) reducing the firm size by breaking the firm into numerous and highly autonomous profit centers (p. 279).

- (1) "The advantages associated with making cost centers into profit centers derive from the creation of increased responsibility and the awareness this brings to group members of the effect of their actions on the profitability of the firm. This awareness causes group leaders to try to improve group performance in ways that increase profits." (p. 279)
- (2) The creation of small profit centers reduces the growth of organizational bureaucracy yet allows the firm to respond quickly to changes in its environment. In the case of the AMS, the organisation is broken down so that each unit with profit responsibility is a firm's fundamental unit of operation. Within the AMS all units "are encouraged to sell their outputs both internally and externally. To be successful, each unit must know the markets in which it sells its products. As a result virtually everyone at KCM is highly sensitive to competitive condition." (p. 325) "By keeping the effective firm size small,a firm can maintain its ability to adapt quickly to changes in competitive conditions." (p. 280)

Cooper adds that "each technique relies on individuals taking an entrepreneurial stance. In this discussion, entrepreneurial spirit is used to mean self-motivated and directed workers." (p. 281). He concludes that MPCs "are able to harness the entrepreneurial spirit of their employees and to use firm size as a mechanism to increase efficiency and cut bureaucracy" (p. 326)

He also argues that a possible disadvantage of MPCs is that there may be a risk of increased negotiations and conflict among the profit centers. He states that organizational philosophy and strong communications among both profit centers and upper management were used to reduce these problems in the AMS (pp. 281-282).

Miya (2003): bringing Simons' framework into the MPC

Miya (2003) contributed to the extant literature by bringing Simons' framework into the MPCs setting. Following on from the analysis in Cooper (1995), Miya (2003) added a theoretical perspective to the study of the AMS as a typical form of MPCs, by outlining the following three points

(1) Miya contrasts the structure of the AMS with the one of an investment center (IC hereafter) and a conventional profit center (PC hereafter). He argues that both the AMS and ICs are developed from more conventional PCs. ICs are distinguished from the conventional PCs in terms of the type of power that is delegated to lower ranks. In contrast the AMS is distinguished in terms of the number of profit centers (called "units" in the AMS) that are delegated power. ICs are delegated not only the right to exercise operational decisions but also the right to make investment decisions whose effects last more than an accounting period. Thus they are responsible not only for Profit and Loss but also Balance Sheet items. Compared to conventional PCs, profit centers in the AMS are smaller in size, thus the number of profit centers (or units) is larger when the size of organization is the same. This results in a larger number of managers being delegated power and responsible for profits in the AMS. To summarise, PCs and ICs are different qualitatively while PCs and the profit centers in the AMS are different quantitatively (Miya, 2003: pp. 125-127).

The analysis makes it clear that the advantages and disadvantages of the AMS are derived from the fact that there are more profit centers than if using conventional PCs techniques when the size of a company is identical.

- (2) Miya insists the advantages of the AMS as a typical form of MPCs are derived from the enhanced motivation of group leaders and the resulting feeling of encouragement. Since units are encouraged to sell their outputs both internally and externally, leaders are always under a pressure to reduce costs. In addition, each of the group leaders are treated as a "feudal lord" and expected to manage his or her unit in his or her own way. Their superiors are expected to respect the opinions of the leaders of the units in the lower ranks. Miya insists that the delegation in the AMS setting is "empowerment" rather than simply giving power to lower ranks, in the sense that it motivates and encourages the workers.
- (3) Miya examines what enables the AMS to empower its lower ranks, introducing the framework of Simons (1995), clarifying how the four levers operate in the AMS setting. One of the diagnostic management controls utilised is a systematic measurement of profit per labour hour (called "value-added per labour hour" by Hamada & Monden and Cooper). Also an interactive management control system that is utilised is the set of meetings held occasionally at the different levels of the organisation that enables effective communication between the various levels of the organisation. Belief and boundary systems are also present as the management philosophy that gives the workers a criterion of how to manage their units and what they shouldn't do (pp. 141-143).

The monitoring system and the intensive communication provide an after-the-fact role in controlling performance whilst the management philosophy provides a before-the-fact guide to performance control. These four levers enable the AMS to not only create numerous profit

centers but they also help keep their leaders encouraged and motivated, or in the words of Miya, "empowered" (pp. 144-145).

Miya also identifies two disadvantages of the AMS. The first is the increased costs of structuring an organisation in this way. An obvious example is the increased costs incurred in monitoring and reporting the performance of each unit in the AMS on a daily basis. The second is the increased risk of information leaks. Since the accounting information is delivered to all employees, there are the risks of the information to be leaked to other companies. These risks can never be completely avoided but the AMS brings substantial benefits that more than outweigh these potential costs. (p. 141).

Limitations of the current literature on MPC

Based upon descriptions of the AMS provided by Hamada & Monden (1989) and Cooper (1994), Cooper (1995) introduced the notion of MPC. Miya (2003) extended Cooper's theorization by combining the notion of MPC with Simons' framework (1995) and in particular with the notion of interactive control systems. Current literature frames the AMS with the notion of MPC that in turn is actually just a derivative of conventional profit centres.

Although the existing literature provides some insightful descriptions and understandings of the AMS, it also has some limitations. These limitations are due to the way in which the literature provides the basic framing of the issues.

We find that the very starting point where AMS is identified as a variant of PC is misleading due to not having an adequate theoretical basis. Conventional understandings of PC are associated with various assumptions such as the controllability principle and independence of individual PC. Contrary to this, our findings suggest that units in the AMS are highly

interdependent and controllability is not of paramount concern. What is of importance is the ability to influence and obtain support from other units and as such are common practices in the AMS.

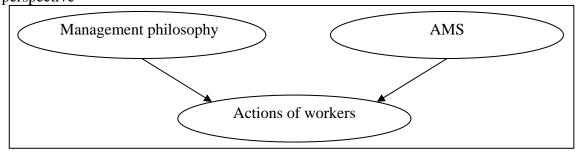
One of the limitations of the existing literature is caused by the fact that the AMS is theorized in an individualistic manner, as is the case for the concept of PC. As a result, theoretically we cannot appreciate the qualitative properties of the AMS and how they are different from PC. Indeed, most of the qualitative features that are attributed to MPC are almost identical to those of PC. For example bringing awareness of profitability, motivating, encouraging, empowering middle or lower managers, and conflicts between profit centers are functions and disfunctions of both the PC and MPC.

The way in which the AMS is understood in an individualistic manner impacts upon the perception of the role of management philosophy and gives an impression that it has a functionalistic relationship with the MPC. As we have shown above, the perceived role of management philosophy is to mitigate the potential conflicts among MPCs. The distinctive feature of the existing theoretical framing is that both the management philosophy and the AMS are independent of each other and provide complementary affects on the functioning of corporate activities. Management philosophy is understood as a type of instrument that may help MPC to function better. Theoretically speaking, within this framework any particular set of management philosophies are substitutable for another.

Figure 1 shows the basic relationship between the AMS and management philosophy within the extant literature. Management philosophy and AMS are independent of each other as is shown in Figure 1. Whilst they both affect workers' actions independently it is argued that there will be favourable outcomes when their effects are complementary to each other.

Of note is that the effects of both occur only in one direction. Management philosophy and AMS affect workers' actions, but the latter will not affects the former. The reflexive relationship, that our findings suggest, is not apparent in the figure 1.

Figure 1: relationship among management philosophy, AMS and actions of workers under the MPC perspective



Based on qualitative empirical materials, we will show that they are mutually constructive and have an inseparable relationship to each other.

THEORETICAL APPROACH

We draw on Giddens' structuration theory (Giddens, 1976, 1979, 1984) and new institutional perspectives (Meyer & Rowan, 1977, Powell & DiMaggio, 1991) to analyse the institutional – agency dynamics of our empirical framework⁷.

Giddens' structuration theory reflects the duality of structure and action. Structure is both a product of and a constraint or enabler on human action. Thus structuration theory tries to bridge the gap between objective and static notions of structure, and subjective and dynamic

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⁷ Sawabe (2006, 2007) developed an evolutionary institutional model (EIM) by bringing insights from evolutionary economics and new institutional perspectives on structuration theory. The EIM is aimed at understanding evolutionary processes of institutionalization by developing evolutionary concepts such as replication, variation, retention, and selection. Ontologically it posits the existence of "interactors" and "replicators". The theoretical perspective deployed in this paper is a simplified version of the EIM in a sense that the simplified version is limited to single location, i.e., limited to spatially local, and steady condition, i.e., limited to temporally local. In other words, full EIM is expanded to include multiple locations and changing stability conditions. Having said that SEIM is limited to temporally and spatially local, it is not a static model. On the contrary, we will demonstrate that SEIM is capable of unveiling internal dynamics that are operating in a seemingly steady state.

notions of actions, by bringing moderating notions between the two. What Giddens calls "modalities" intermediates between the realm of structure and the realm of action.

New institutional theory posits that organizations and individuals within them are suspended in a web of values, norms, rules, beliefs, and taken-for-granted assumptions (Barley & Tolbert, 1997: p. 93). Bhimani (1999: pp. 425-427) argues that the structure of management accounting is sometimes heavily influenced by culture and institutional environments in which organizations operate. The socially constructed nature of reality is captured in the way environments, actors, and the structure of management accounting is characterized in the new institutional theory.

New institutional theory acknowledges the multiplicity of environments, that is both technical and institutional environments (Meyer & Rowan, 1977; DiMaggio & Powell, 1983), and multiplicity of logic of action, that is both logic of consequences and logic of appropriateness (March & Olsen, 1989). Within the institutional perspective, organizations respond to pressures from both technical and institutional environments. Organizations tend to adapt to technical environments in a rationalistic manner, while they tend to adapt to institutional environments in a ritualistic manner. In the former circumstances, organizational actions are driven by the logic of consequences in which alternatives are assessed in terms of expected future consequences of that action, or in other words the use of a rational choice decision process model. In the latter circumstances, organizations adopt rules, such as formal structures and procedures, which are socially accepted as being appropriate for the organization. Logic of appropriateness is where actors seek to fulfil social images of themselves by matching actions to situation in ways that are appropriate for the image that the actors find acceptable. Within technical environments, means and ends relationships are technically defined and probabilities of

outcomes can be estimated, however stochastic they may be. The logic of appropriateness is most likely to govern behaviour where there is uncertainty, ambiguity about preferred outcomes, or calculative behaviours violate core beliefs (March & Olsen, 1989; March, 1999).

The relationships between the technical environments and institutional environments, as well as between the logic of consequences and the logic of appropriateness, are intertwined. In many cases there are complex reflexive relationships between the environments that make it difficult to clearly distinguish one from the other. The dichotomy is neither so apparent nor consistent over time. The static nature of new institutional theory makes it difficult to analyse the interaction between the institutions and agency, even though the original theoretical development acknowledged such interactions. Actors create institutions through ongoing interactions, which in turn become a taken-for-granted reality that designates appropriate roles and behaviours for actors.

Instead of statically juxtaposing the technical environments that are tied to the logic of consequences, and institutional environments to the logic of appropriateness, a dynamic theory is needed to be able to analyze the intertwined relationship between the various types of environment and logic of actions.

Giddens' structuration theory treats structure as both a product of and a constraint or enabler to human action⁸. The structuration theory is a product of an effort to bridge the gap between static and objective notions of structure that governs agency, and dynamic and subjective notions of agency, by positing two realms of social order. These are,the realm of structure where institutions define identity and appropriate behavior and relationships between

local context.

⁸ Takatera & Sawabe (2000) draws on Giddens' structuration theory to analyze historical development of income accounting. Takatera & Sawabe (2000) interpreted income accounting as an abstract system that moderates interaction over time and space. Income accounting as an abstract system facilitates the separation and reintegration of time and space by de-contextualizing actions at the local context requires re-contextualizing at another

actors, and the realm of agency where actors interact with each other. The structuration theory focuses upon the area of intersection between the two realms, which Giddens calls modalities. The role of the modalities is to mediate between the realm of structure and the realm of agency. Giddens' model of structuration is shown in Figure 2 below.

Figure 2. Structuration theory (Giddens, 1986)

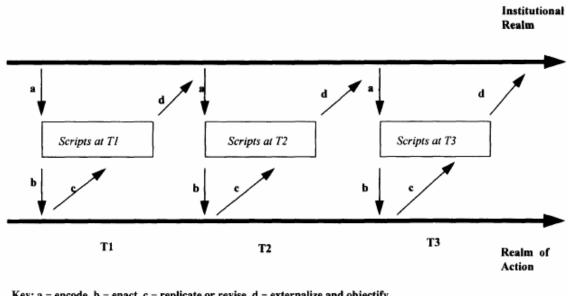
Structure	Signification	Dominition	Legitimation
Modalities	Interpretative schemes	Facilities	Norms
Agency	Communication	Power	Sanction

Barley & Tolbert (1997) developed a diachronic model of institutionalization as a structuration process. The definition of institutions used by these authors, the shared rules and typifications that identify categories of social actors and their appropriate activities or relationships, closely resembles Giddens' (1984: 2 377) notion of structure.

Barley & Tolbert (1997) introduces the notion of script to substitute for Giddens' notion of modalities in order to operationalize the structuration theory for empirical research. They define scripts as the behavioural regularities, that are observable, recurrent activities and patterns of interaction, characteristic of a particular setting (p. 98). Scripts encode general rules defined at the institutional realm and thereby become resources that are utilized by actors to engage in ongoing interactions. Social actions may vary in their particulars, but to be interpretable, their patterns must generally conform to a certain set of rules that outline the activities and interactions appropriate for different classes of actors (pp. 96-97). Thus the scripts are the necessary resource to enable actors to engage in and interpret interactions.

Figure 3, below, shows the Barley & Tolbert diachronic recursive model of institutionalization/structuration. Institutions are encoded by scripts (arrow a), and the scripts are enacted in action (arrow b), then the action fosters replication of scripts (arrow c), and then scripts are objectified as institution over time.

Figure 3. A Sequential Model of Institutionalization (Barley & Tolbert, 1997)



Key: a = encode, b = enact, c = replicate or revise, d = externalize and objectify

To the degree that institutions are encoded in actor's stocks of practical knowledge (in the form of interpretive schemes, resources, and norms adapted to a particular settings which Giddens calls 'modalities'), they influence how people communicate, enact power, and determine what behaviours to sanction and reward. (p. 98)

Drawing on Barley & Tolbert's (1997) model of institutionlization, Burns & Scapens (2000) developed a modified version of diachronic recursive model of institutionalization appropriate for management accounting research. Figure 4, below, shows Burns & Scapens' (2000) modified diachronic recursive model of institutionalization. The modification is

illustrated in Figure 4 by scripts being replaced by rules and routines. Rules and routines also interact as shown by the internal arrow in the box. By placing routines in the upper part of the box, Burns & Scapens (2000) seems to be suggesting that routines are closer to the institutional realm whereas rules, as they are placed in the lower part of the box, are closer to the realm of action.

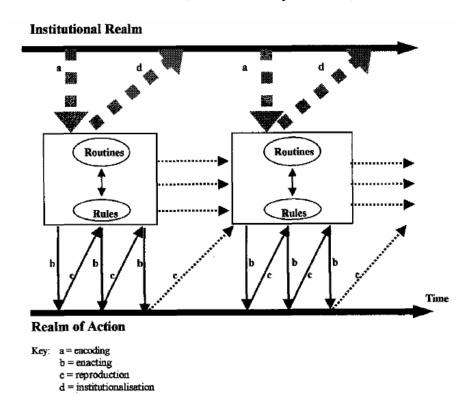


Figure 4. The process of institutionalization (Burns and Scapens, 2000)

Rules in Burns & Scapens' model comprise the FMASs, as they set out in the procedure manuals; whereas routines in Burns & Scapens are the accounting practices actually in use.

Rules and routines are closely related, but "it is important not to confuse the two" concepts (Burns & Scapens 2000: 7). Management accounting practices in use, the routines, may not actually replicate the systems set out in the procedure manuals, the rules.

The separation of rules and routines fosters management accounting researchers to apply the model of institutionalization as it clearly captures a peculiar feature of management accounting phenomena. This phenomenon is the prominence of formalized management accounting procedures and the management accounting practices that are related to but quite often autonomous from the formalization.

However, the locations that the rules are routines are assigned in Figure 4 hinder the model's potential to be fully deployed in management accounting research. We will scrutinize the differing conceptualization of rules in Burns & Scapens (2000) and Barley & Tolbert (1997) to develop an understanding of why it has become the cause of hindrance⁹.

Burns & Scapens (2000: 7) posits that rules and routines are grounded in their specific historical context. However, institutions are disassociated from their particular historical circumstances and they exist only in the actors' understandings and stocks of knowledge¹⁰.

Barley & Tolbert (2000) conceptualizes rules as analogous to taken-for-granted assumptions about the activities and interactions appropriate for different classes of actors. In Barley & Tolbert (1997) rules clearly reside in the realm of institutions.

Burns & Scapens (2000) use the term rules to describe formalized statement of management accounting procedures. Rules in Burns & Scapens (2000) are analogous to modalities in Giddens (1984) and scripts in Barley & Tolbert (1997) ¹¹.

¹⁰ Burns & Scapens (2000: p. 8) define institutions as "the shared taken-for-granted assumptions which identify categories of human actors and their appropriate activities and relationships". This definition is slightly different from Barley & Tolbert (1997) as acknowledged by Burns & Scapens. The difference, however, is negligible in regards to our discussion here.

⁹ When it comes to the notion of routines, Burns & Scapens (2000) and Barley & Tolbert (1997) have no conceptual differences. Routines are shared only among those who have immediate interaction with each other, i.e., local and historically bounded

¹¹ For Barley & Tolbert, institution is shared rules and typification (1997: p. 96) that defines appropriate identity, relationships and actions of actors, while it is formally recognized way in which 'things should be done' for Burns & Scapens (2000: p. 6). Burns & Scapens have more normatively defined the concept whereas Barley & Tolbert's definition is more cognitive.

There are two separate dimensions involved in the different conceptualization of "rules" in Barley & Tolbert (1997) and Burns & Scapens (2000). On the one hand they differ to the extent that rules are explicit and formalized. Burns & Scapens' (2000) usage of rules in the context of management accounting is a very formal one, whilst Barley & Tolbert (1997) includes both formal and informal rules.

The other dimension is the extent or span to which rules are shared. Burns & Scapens argue that rules are grounded on the specific historical context both spatially and temporally; Barley & Tolbert's (1997) notion of rules as shared assumption is globally temporal in the sense that they persists over time. That is in relation to the actors, rules in Barley & Tolbert (1997) are shared among actors over time. In Burns & Scapens (2000) rules are locally temporal in that they are shared only among those who have immediate interactions with each other,.

The latter conceptualization of rules as locally temporal is not well aligned with the way in which rules are operationally defined in Burns & Scapens (2000). Rules are formalized management accounting procedures, which may or may not be bounded by a particular historical setting. A formalized management accounting procedures may be temporally and spatially transplanted to a totally different historical context¹².

We utilise a part of the operational conceptualization of rules in the management accounting context from Burns & Scapens (2000), but at the same time, we do not confine it to a particular historical context as they did in Figure 4. Ontologically, we assume that formalized management accounting procedures exist independently from human agency once they are

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¹² In Sawabe's (2006, 2007) evolutionary institutional model (EIM), this ability to be replicated in different context is the defining feature for replicators, while the ability to interact with other entity defines interactors. In the management accounting context, formalized management accounting techniques and procedures are examples of replicators, while organizations and individuals within them are example of interactors.

formalized¹³. Figure 5, below, shows our modified recursive model of institutionalization that we have called a simplified evolutionary institutional model (SEIM).

Figure 5, below, shows that at the institutional realm, there reside institutions or globally shared rules, some of which are formalized rules. The FMAS is an example of such formalized rules given that it is shared globally ¹⁴. Formalized management philosophy (FMP) is another type of residence in the institutional realm, as institutions defines appropriate identity, relationship and behavior of actors. FMP often shows general rules about the way in which organizations and individuals within it should aim to behave. Although FMAS and FMP may have a mutually constitutive relationship, we take a rationalistic approach where management philosophy provides the grounds for management accounting system design in the first instance (arrow a), as the span of our case study in this paper is limited to the extent where FMP is constant ¹⁵. Institutions are embedded in routines (arrow b), and routines are enacted in action (arrow c).

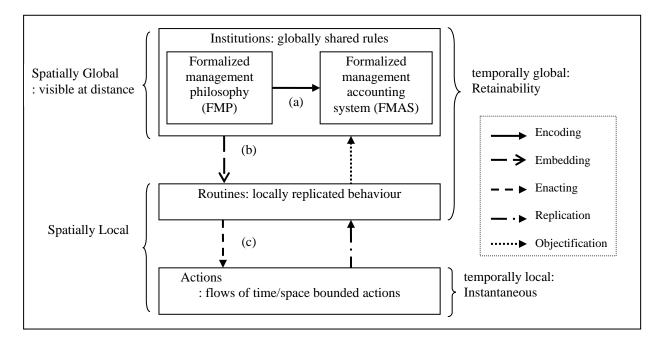
Note that there are two dimensions of the global – local dichotomies. One dimension is spatial local – global, and the other dimension is temporal local – global. From the spatial dimension, the institutional realm is global, but routine and actions are both local phenomena. From the temporal dimension, both institutions and routines are global in a sense that they are capable of retaining themselves over time, whereas actions are instantaneous and bounded locally in one time dimension.

¹³ The same argument is applied to the notion of scripts in Barley & Tolbert (1997). Formalized scripts travel over time and space, while implicit scripts are shared only among those who maintain immediate interaction with each other.

¹⁴ The model is applicable regardless of the actual size of the object of study as is mentioned in Barley & Tolbert (1997: pp. 98-99). Global may mean the whole company and local means subunits in the company, or global may mean large number of companies across time, and local means individual corporations.

¹⁵ Theoretically, arrow a does not have to be unidirectional as it si in Figure 5. But for simplicity, we put unidirectional arrow for this paper.

Figure 5. A simplified evolutionary institutional model (SEIM)



For management accounting, this distinction about the spatial dimension and the temporal dimension is critical as management accounting dis-embeds and re-embeds time and space bounded phenomena from local contexts (Takatera & Sawabe, 2000). For example, FMASs, such as ABC or BSC, are retainable over time as well as transferable to other locations (Jones & Dugdale, 2002). Management accounting routines are, however, not easily transferable to other locations, even though they may be replicated over time in the same locality. Management accounting actions, by definition, are bounded by local time and space.

The two dimensions of local – global dichotomy requires separate ontological status of FMASs and management accounting routines. The former should reside in the realm of

institutions as it is global in terms of both time and space. The latter is located at the intermediate level as it is temporally global but spatially local 16.

Routines in the management accounting context is how management accounting is actually used in practice along with other repeated practices. In steady condition where routines are replicated in action they retain the status of the current routines. This is because routines are not easily distinguishable from normalized action in practice when observed from a distance. It is more likely that there is a large diversity and deviation from the normalized actions in each individual case. However, those individual variations are not easily observable from a distance because the individual deviations from the norm are often cancelling each other out. In such circumstances, routines are replicated through action, which then objectify the formalized rules.

The stability is only at a superficial level, though. As is mentioned above, there are constant variations at the individual action level. The variation may sometimes cause revision of routines that may consequently destabilize the formalized rules ¹⁷.

We focus upon intrinsic dialectics within and between institutions and actions. Barret, et al (2005) draws on Giddens' (1990, 1991, 2000) structuration theory in analyzing local – global dialectic of the globalizing auditing profession. They focused upon dialectic tensions between and within local activities and global management control. In this paper, we focus upon dialectic tensions within and between formalized management philosophy, formalized management accounting systems, and management accounting practice actually in use.

See Discussions and concluding sections in this paper.).

¹⁶ The distinction between FMAS and management accounting routines in terms of their ontological status in the model become even more critical when the model is fully developed as full evolutionary institutional model (FEIM).

¹⁷ Formalized rules are subject to intentional change. The modified version of the recursive institutionalization model is capable of analyzing the complexity of the process involving intentional change at the institutional level.

FINDINGS

In this section, findings are illustrated in accordance with the modified recursive model of institutionalization described above. Firstly, the institutions, routines and actions of KCM are briefly described. At the institutional realm, features of the firm are the prevalence of the FMP and the thoroughness of the FMAS. Both the FMP and the FMAS are globally shared in the firm not only to the extent that formal knowledge about them is high among members of the corporation but also to the extent that the interpretations of them are highly homogeneous. Then we move on to illustrate the routines and actions of the firm.

After the descriptions of the institutions, routines and actions, we move on to document the interactions between them. The strategy employed here is to focus upon dialectic tensions. Routines and actions in steady conditions are difficult to distinguish as mentioned above.

Because of this, we will focus, in the latter part of this section, on the intrinsic dialectics within routines from an actor's point of view. Routines comprise several sub-routines that may or may not be consistent with each other. When sub-routines are not mutually aligned, it is likely that the actors should devise something that may alleviate the tensions caused by the misalignment. Likewise, intrinsic tensions within and between the FMP and the FMAS are scrutinized to document how dialectic dynamics develop.

Management Philosophy at KC Manufacturing ltd.

KCM advocates "to provide opportunities for the material and intellectual growth of all our employees, and through our joint effort, contribute to the advancement of society and humankind" as an official corporate rationale in external documents such as its annual report.

In the second year of the firm's existence, teenage workers nearly conducted a strike, out of anxiety about the future, to demand annual wage increases and bonuses be guaranteed for life,. The negotiation lasted for several days until the firm's founder persuaded them to withdraw their claims by promising that he would give his own life to maintain the firm. From this experience, the founder noted that if he should give this level of commitment then this may inspire the employees to devote their lives and dreams to the company. He therefore promised himself that he would manage the firm in such a way as to allow employees to maintain their lives and families and accomplish their dreams. Since then the firm has been modelled on the traditional style of the "family", where grand-parents, parents and their kids live together and work hard for the entire family. According to Inamori (2006: pp. 24-26, pp. 52-53), the founder of KCM, this is how the corporate rationale was established.

In addition to the corporate rationale, all workers, including top management, are required to follow several principles that are called the "twelve principles for management".

These principles are documented and distributed to all workers and are as follows:

-Twelve Principles for Management-

- 1. You need to understand the significance of the business and to have a clear goal for the business,
- 2. You need to set a concrete target,
- 3. You should hold a strong desire in your mind,
- 4. You need to make more effort than anybody else (self respect comes when you stand on your own feet),
- 5. Maximize sales, and minimize costs,
- 6. Pricing is management,
- 7. Strong will delivers management result,
- 8. Ardent fighting spirits,
- 9. Move ahead with courage.
- 10. Be creative.
- 11. Be honest with compassion,
- 12. Be cheerful and positive with dreams, hopes, and a good heart.

Most of these principles aim at raising leaders' consciousness of *managing* a unit as a head of an independent organization, and bringing market mechanism in to the interactions between units in the firm. This is shown in such sentences as "make more effort than anybody else" and "maximize sales, and minimize costs". At the same time, some of the principles ask the leaders to be a collective or familistic, having compassion and mercy to other workers as a member of the firm. This is shown in the last two principles: "Be honest with compassion" and "Be cheerful and positive with dreams, hopes, and a good heart", as well as in the corporate rationale above.

The firm stresses the role and importance of these management philosophies for the management and daily operations of workers. The firm systematically educates all workers, including top management, in these philosophies. The rationale and principles are documented in many forms including internal pocketbooks, textbooks and published books. These documents are distributed to each employee, and recited in daily meetings. Periodic training programs are also held to learn the management philosophy, which all workers including top management join, and discuss how they behave in daily situations according to the philosophy.

Accountability, responsibility and controllability in the AMS: formal features of the system

Each unit is designed to be autonomous, and the size of a unit is kept small so the leader can supervise to an incredible level of detail. Each leader of a unit is expected to improve his or her level of management abilities. As a *manager*, each leader has discretions over pricing their unit's products for both internal and external transactions.

Each unit is formed by functions, so that the structure of the units is based upon the functionalized structure of the organization. Manufacturing and sales functions are divided into

different units. Even in a manufacturing function, several units are formed for every operation, such as welding, moulding, cutting, and finishing.

Performance of each unit is measured by two unique performance measures, one is analogues of profit and the other is its derivative. The first performance measure which we call "workers profit" (WP hereafter) is profit minus capital interest plus workers wage. This is akin to an equity attributed to workers, including mangers, with the result that the claims by capital providers are deduced from the value-added by the workers. In other words, WP can be regarded as the value which managers, leaders and other workers have created, or a portion to be shared between them as fruits of their management activities.

The second performance measure, which is actually a primary performance measure in usual units, is WP divided by total labour hour devoted to earn the WP of the unit. We call this performance measure as Hourly Workers Profit (HWP hereafter)¹⁸.

There are three points to note with regard to these measures. The first point is that the labour expenditure is not included in costs. According to an interview with a vice president of KCC (KC Consulting ltd.), the AMS aims to bring out and maximize employees' abilities, rather than to exploit them by cutting off these expenditure to improve the performance of the firm. In other words, expenditure to employees is to be maximized, rather than being seen as a cost to be minimized.

The second point is that sales of products are not booked at sales units, but rather at manufacturing units. This is intended to make manufacturing units more conscious of the external market and therefore to set adequate prices for their products. According to the interview mentioned above, there is a belief that "Profit is generated in manufacturing" behind

¹⁸ Hamada & Monden (1989) and Cooper (1994) called this primary performance measure as "value-added per hour". The naming is misleading as explained above.

the way that the AMS is structured. Sales units are mainly in charge of *supporting* manufacturing units to sell their products to other units or external organizations. The sales units receive commission from the manufacturing units in recognition of their support.

The third point is that capital interest is included in the costs, as is stated above. Each asset in the firm is assigned to a particular unit and they are charged six percent of the asset's value. This aims at encouraging an efficient use of assets in each unit.

Management cycle in the firm consists of two time horizons, the first being for a year; and the second being for a month, as also stated in Cooper (1994). A plan developed for the firm on a yearly basis is called the master plan. It is set by repeated discussions at each layer of the firm, from the president of the firm to the units at the very lowest levels. Monthly meetings are held between all layers to set the monthly plans. Each unit's performance is monitored against the master plan on a monthly basis, and its performance against the monthly plan is monitored on a daily basis. The results are reported to each member in a daily meeting, and disclosed and reported to the other units.

Dialectic tensions at AMS in use

In practicing the AMS, we observed several routines persistent in various situations. It is not necessarily the case that all units share the same routines at the same level of detail. There are minute variances in routines in the differing units. Nevertheless we could observe repeated patterns of behavior and reflections made by actors about these routines.

One of the most commonly held beliefs, arising from the use of the AMS is that it is not ethically correct to lay off any member of the unit. Even though there are some local variations,

such as the treatment of part-time workers, the general assumption held when making decisions at the units is that all members of the unit are like members of a family.

At the same time, there is a generally observed routine where each unit is expected to maximize its HWP. It is also expected to achieve a HWP that is higher than the average salary of its members. The leader will be harshly criticised if this is not achieved, and he or she may be replaced by another leader if the situation continues. According the interview we conducted with the vice president of KCC, it is a minimum requirement for each unit to "make their own bread".

There is an obvious tension between the assumption about membership and the responsibility that each unit leader bears. Ultimately there are only two ways for a unit leader to increase HWP. These are either to increase WP, and/or to decrease the number of labour hours. The former option is obviously difficult to accomplish, whereas there will always be a temptation for the leader to take the second option. However, this option is actually not an available option because you cannot cut your family member. We will detail how this dialectic tension between family kinship and performance-based commitment is handled in practice, which then become a part of routine, later in this paper.

Another tension exists between the expectation for unit leaders to set high targets and to design a feasible plan. Leaders are expected to set their own target as high as possible. They are required to go beyond what they have previously achieved. This is obviously a vicious circle for each individual leader. As they succeed in achieving one target they are trapped in the infinite cycle of higher targets to accomplish. For the corporation, this is a way to make leaders work as hard as possible, for as long as the leaders can endure.

Meanwhile, leaders are expected to design a highly detailed plan with reasonable feasibility, covering various contingent situations at the planning stage. They need to persuade

their supervisors of the feasibility of their plans by explaining what action will be needed to reduce costs or increase sales. Again, there is a dialectic tension between the high target setting for each unit and the need for the leaders to propose a detailed and realistic plan. We will examine below how this tension is handled in practice.

Dialectic dynamics in practice

We focus on intrinsic dialectics within and between institutions, routines and actions in this section. They all affect the dialectic tensions seen in practice. Potential inconsistencies and conflicts at the realm of institutions may remain undetected as there is no direct interaction taking place at that level. However, these tensions are more immediate at the realm of action and can affect the way in which activities are reproduced and consequently the daily life of people. In other words, conflicts and tensions are realized at the realm of action, and the means, including being patient and obedient, should be taken at this level to mitigate them.

One of these tensions in practice is caused by the dialectic relationship between family kinship and principles of quasi-market competition at the level of FMP. Both the family kinship and quasi market principles are embodied within the structure of accountability in the AMS.

The family kinship, or familism as we call it here, is outlined by the corporate rationale and some of the management principles of the firm are behind the calculation structure of HWP (Hourly Workers Profit), the performance measure used in the firm. Specifically, to provide *family members* with an opportunity to work for their material and intellectual growth, labour expenditure is not booked as "costs" in the calculation of HWP. To be consistent with the corporate rationale, it is commonly perceived within the firm that *family members* should not be targeted in the attempts to improve the performance of the units.

On the other hand, competition among units is enhanced by the use of quasi market principles, or marketism as we call it here, and other formal systems. Numerous units are formed and the size of each is kept small so that each leader can manage as a feudal lord. Each of the units is treated as an independent firm by giving the leaders discretions over the pricing of the products. The performance of each unit is reported on a daily basis to all members including those in other units.

Each unit leader is confronted by this contradictory reality in daily practice. The more efficient a unit is, the fewer workers that is needed by the unit. However, the unit cannot improve its performance by simply laying off the redundant members since this action is not allowed in the firm.

To cope with this conflict, several routines have evolved out of the experimental actions in practice. A representative routine of what has evolved is the temporal movement of members between units. Those units with worker shortages negotiate with other units for workers, and vice versa. When the shortage is persistent and the HWP remains high, there will be a transfer of workers from one unit to another. This process of allocating workers at the level of units is called "autonomous labours accommodation" due to the allocation of workers being autonomously decided by negotiation with each unit's having the discretion of whether to be involved in the practice of worker transfer.

Another routine, more accurately described as an assumed attitude, evolved as this dialectic tension exerts pressure upon units to increase business volume to and from successful units. The dialectic tension between the marketism driven culture and familism tends to create de facto over capacity. As each unit becomes more efficient, current capacity becomes underutilized unless the business volume expands. For example, if a unit in a production line

becomes more efficient than before, neighbouring units become bottle necks for the more efficient unit, and thus the capacity of the efficient unit is underutilized. In the case where all manufacturing units become equally efficient, unless the sales units can expand the sales volume accordingly, the entire manufacturing capacity becomes underutilized. In the situation where efficiency creates over capacity, there is pressure exerted from the efficient units on the less efficient units to be more efficient. This pressure is enhanced by the daily meetings where the situation is reported to each unit. Capacity is understood as an ability to produce output in a given time period, thus efficiency can be translated into speed or output per hour. Therefore, this effect is named the "speed linkage effect" as the more efficient units pull the less efficient units to increase their outputs.

Another source of tensions in practice originates from the dialectic relationship between romanticism and realism at the level of the FMP. Romanticism in the FMP is clearly demonstrated in the twelve principles by such phrases as "strong desire", "strong will delivers management result", "ardent fighting spirits", "move ahead with courage", and "be cheerful and positive with dreams, hopes, and a good heart". At the same time, there is apparent realism in the FMP. Phrases such as "One needs to clarify goals for the business" and "set concrete targets" show realism at an abstract level, while "maximize sales and minimize cost" and "pricing is management" illustrate that the FMP is grounded upon the business reality at a more concrete level.

Romanticism in the FMP is clearly reflected in certain elements of the AMS in practice.

An example of such routines in the AMS is the setting of aggressive targets by unit leaders. The supervisors have an expectation that each unit leader will set his or her target as high as possible.

Realism is also clearly reflected in the way planning is executed by unit leaders.

Planning is expected to be highly detailed covering various contingent situations. In order to devise a convincing plan, unit leaders must be very realistic.

To handle this conflict several routines have evolved out of the experimental actions in practice. A representative routine of what has evolved is the wide and frequent interactive discussions that are held with the various other unit leaders and supervisors. Linking the high target with a feasible plan is not an easy task. Unit leaders have to explore various possibilities in order to devise an acceptable plan that will convince their supervisor.

This exploration intensifies both the horizontal and vertical interactions of the AMS.

Unit leaders and their members regularly discuss their own planning as well as that of other units.

In these discussions, the feasibility and validity of the different unit's plans are scrutinized by various parties.

A unit leader is expected to persuade their supervisors of the feasibility and validity of their unit's plan. One of the precondition for a supervisor to be convinced is that the plan is based upon the leader's will to achieve high targets, while another condition is that the feasibility of achievement is reasonably well thought out in the plan. The feasibility of and the contingency held within the plan require the leader to obtain large amounts of related information. This is why interactions and discussions over planning has become a shared norm in the usual practice of the AMS.

As part of this research we conducted an interview of a manufacturing manager at an external company that has introduced AMS under consultation of KCC in 2002. He stated that after the introduction of the AMS he has communicated much more often with leaders at the sales divisions and at the development division. He commented that this tendency is more

prominent among young workers and part-timers. He noted that during the plan setting they were more likely to contact and communicate with workers in other units. He also commented that "a problematic situation emerged once." However, it had already been resolved by part-times by the time he noticed it. Thus the young workers and part-timers had even become problem-solvers after the introduction of AMS.

Although the detailed planning and intensive discussion may improve the likelihood of achieving the set target, the fundamental reality is that the high target remains difficult to achieve. There is still a potential conflict in that unit leaders may be accused of failing to achieve the target, and thus they are discouraged to set high targets in the first place. A very peculiar routine has evolved to resolve this tension. The result is still analyzed and discussed with supervisors and the members of the unit. However, the focus of the discussion is on the reasons why the unit has or has not achieved the target, rather than on the target figure itself. Unit leaders are forced to be reflective on their planning, but the result is understood as probabilistic. Unit leaders can expect that they will not be accused of failing to achieve the target, unless their planning is found to be insufficient ex post. This assumed attitude is to emphasize planning, rather than results, is quite common in the practice of AMS. We refer to this attitude as "biased towards future".

By allowing unit leaders to repeatedly reflect upon their experiences this biased towards future may sacrifice immediate result for the sake of improving the ability of future planning. However this also relies on the leaders not being severely criticised for not achieving their targets. This forward looking management improves the abilities of the firm members to communicate with each other throughout the various different layers of the organisation and to also search for ways to achieve their goals.

However according to the interviews we conducted at KCC, a downside can be that the supervisors and top management feel stressed, pressured or even threatened by their lower workers,. They need to understand these detailed plans to evaluate and give advice. Since daily accounting information and management philosophy are shared among all workers, upper workers can only advise according to their own knowledge, experiences and skills.

DISCUSSION AND CONCLUSIONS

Mutually constructive relationship within and between FMP, FMAS and management accounting in practice

Using the theoretical elements identified previously, our findings are summarized in Figure 6 and 7. Both Figure 6 and 7 show recursive relationships between formal management systems, such as FMP and FMAS, and management accounting in practice.

In figure 6, there is an inherent conflict within FMP at the institutional realm that is familism against marketism. The familism is encoded in the calculation structure of performance measures, WP and HWP, within the FMAS, while marketism is encoded in mechanisms to enhance competition among units (arrow a). As stated previously, the FMAS resides in institutional realm since it is a globally accepted norm to be followed by all units. Under the FMAS, all units are subject to the same set of rules, such as the evaluation criteria.

The institution is embedded in the routines of the units (arrow b). The potential conflict still remains since each unit is not fundamentally allowed to lay off its members that are a result of increasing efficiency. However each unit is still expected to increase efficiency to improve its HPW.

These routines are enacted in actions (arrow c). The potential conflict is realized and handled in this realm. The increased efficiency may just result in abundance of labour if these

conflicting routines are practiced without modification. To prevent this, units transfer members to where they are needed as well as placing pressure on each other so that their capacities are fully utilized. Replication of these actions results in the autonomous labour accommodation and brought speed linkage effect among units (arrow d).

Another recursive relationship is illustrated in Figure 7. The FMP residing in institutions has another inherent conflict that is romanticism and realism. The institution is embedded in a routine of setting aggressive targets accompanied by detailed plans with specific actions (arrow A).

Under this routine, the better result a unit achieved in the previous term, the harder it is to set a feasible plan for the current term, since it is the norm to go beyond the past result.

To cope with this conflict, each unit member expands their vertical and horizontal, and internal and external interaction within and outside of the firm (arrow B). These actions are repeatedly replicated in a mental posture that we call "biased towards future" (arrow C). By "biased towards future" we mean management attention is leaning towards the future to the extent that forward looking attitudes enable unit leaders and their supervisors to focus their attention and efforts on scrutinizing the details of plans for the future, at the expense of retrospective analysis and evaluation of the past results.

Figure 6. Recursive model of management philosophy and management accounting: case 1

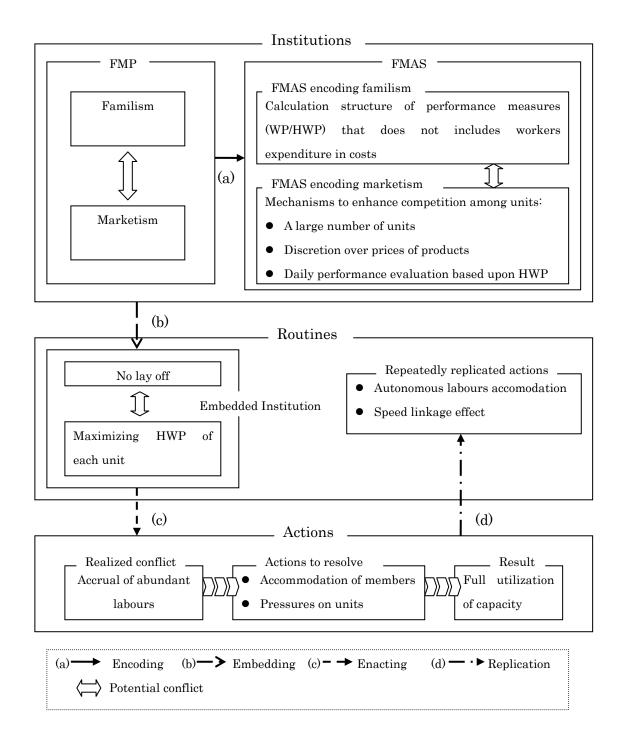
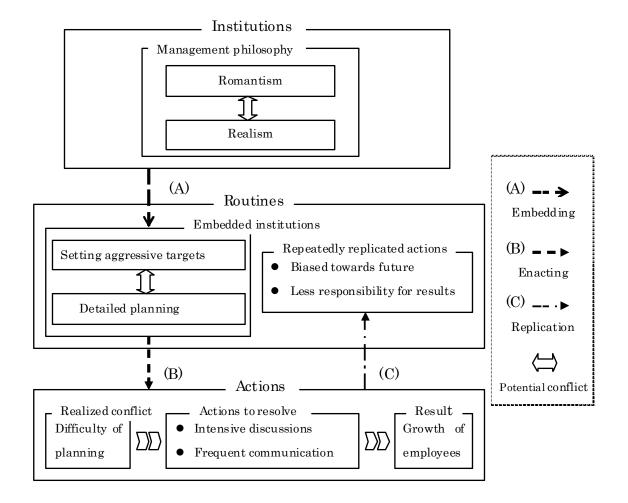


Figure 7. Recursive model of management philosophy and management accounting: case 2



With our case being recursive situations in steady conditions, we have not directly observed the actual processes of objectification. Nevertheless, we have explained that in the history of the company there are several instances where such objectifications resulted out of chaotic conflicts. An example of this is found in the main part of the management philosophy. Familism emerged after the serious confrontation between the founder and the youthful employees at a very early stage of the history of the company, as mentioned previously. In a sense, the familism spelled out at that time could have been just a formalization that did not have any impact upon practices. The subsequent history of the company demonstrates that this turned

out not to be the case. The result of compromise between management and workers at the time is seemingly embedded in the routines of everyday practices at the company.

Willmott (1993) forcefully argues that the there is a dark side of the self-disciplining form of employee subjectivity by asserting that practical autonomy is conditional upon the development of a strong corporate culture. The results of our case study shows a certain potential danger of this sort is inevitably a part of reflective practices. Nevertheless, we illustrated that the strong corporate culture does not necessarily mean mono-cultural. On the contrary the management philosophy of the case site contains intrinsic dialectic tensions within it and is a source of the variations seen in the daily practices of the firm. The intrinsic dialectic tensions are both the source of conflicts and the opportunities to demonstrate free will, not in a heroic manner but as a part of mundane practices. Because the intrinsic tensions are fundamentally impossible to resolve, it becomes a fact of life that has to be somehow coped with. There is no universal answer available for those fundamental questions. Therefore, each individual has ironically opportunities to creatively cope with the un-resolvable tensions. At the meta-level, this is still a total subjugation as each individual is forced to cope with the tensions that they would not want for themselves.

The benefits of applying the SEIM

Our study suggests that dialectic tensions are ubiquitous in organizations, and they endow organizations, and individuals within, opportunities to create their own ways of coping that may evolve to routines at the locality which gives the organisation a kind of character that are not prescribed *a priori*.

The simplified EIM (SEIM) utilized in this paper posits that intrinsic dialectic tensions at the realm of institutions are globally shared (shared company-wide in our case). The way in which the globally shared sources of problems may be influenced by the mediating mechanisms in turn link the abstract notions with concrete actions in practice. In our case, shown in Figure 6, the FMAS reflects some aspects of the FMP. The design of the FMAS becomes both the constraint to and enabler for management accounting routines and practices. The SEIM suggests that the way in which the same problem is dealt with at different localities may differ because there is no universally "right" answer for the problem. In the first place, there are varieties of possible interpretations of the problem. The varieties of possible interpretations may in fact be greater than the available responses to the problem. As a heuristic device, the SEIM assists researchers to explore the potential conflicts that are present underneath a seemingly steady state, when viewed from a distance,, and to scrutinize variations in practice that have emerged to cope with the localised conflicts.

Furthermore, the SEIM guides researchers to see if individual actions are replicated over time, and become routines at the locality, and then if routines are globally legitimized to obtain an institutional status. One way of such legitimization is company-wide formalization of routines.

The strength of the SEIM is seen when a seemingly consistent system in a steady condition turns out to be an open system where unnatural human efforts are exerted to maintain the order. Without the practical necessity and resulting efforts to cope with the unsolvable conflicts, the order observable at distance may not be able to reproduce itself.

The use of the SEIM in this paper is limited to a single field and a steady condition. The Simplified EIM can be extended to the full EIM (FEIM) to encompass its applicability to global

phenomena both in terms of time and space. Diachronically, it will be a modified Burns & Scapens (2000) process model of institutionalization. This modification will basically result in the same SEIM utilised in this paper. However, spatially, it will be a mutli-SEIM that has a number of SEIM to comprise the FEIM. With this spatially extended model, we may observe that the FMAS at the institutional level may travel across space and even between entities that do not have direct interaction with each other.

REFERENCES

- Abernethy, M. A. & Chua, F.W. (1997). A Field Study of Control System "Redesign": The Impact of Institutional Processes on Strategic Choice. *Contemporary Accounting Research*, 13(2), 569-606.
- Abernethy, M. A. & Lillis, A. M. (1995). The Impact of Manufacturing Flexibility on Management Control System Design. *Accounting, Organization and Society*, 241-258.
- Abernethy, M. A. & Stoelwinder, J. U. (1995). The Role of Professional Control in the Management of Complex Organizations. *Accounting, Organizations and Society*, 1-17.
- Ahrens, T. (1996). Styles of accountability: An ethnography of management knowledge in British and German brewers. *Accounting, Organizations and Society, 21*(1), 139–174.
- Ahrens, T. (1997). Talking accounting: an ethnography of management knowledge in British and German brewers. *Accounting, Organizations and Society*, 22(4), 617–637.
- Ahrens, T. (1999). Contrasting involvements: a study of management accounting practices in Britain and Germany. Amsterdam: Harwood Academic.
- Anthony, R. N. (1965). The Management Control Function. Boston, MA: Harvard Business School Press.
- Ashby, W. R. (1960). Design for a Brain: The Origin of Adaptive Behavior. New York: John Wiley.
- Atkinson, A., Kaplan, R. S., Young, S. M. (2007). Management Accounting, Prentice Hall.
- Barley, S. R. & Tolbert, P. S. (1997). *Institutionalization and structuration: studying the links between action and institution, Organization Studies*, 18(1), 93-117.
- Barrett, M., Cooper, D. J., & Jamal, K. (2005). Globalization and the coordinating of work in multinational audits. *Accounting, Organizations and Society*, 30, 1–24.
- Baxter. J & Chua, W., F. (2003). Alternative management accounting research: whence and whither. *Accounting, Organizations and Society*, 28, 97–126.
- Bhimani, A. (1999). Mapping Methodological Frontiers in Cross-national Management Control Research, Accounting, *Organizations, and Society*, 24, 413-440.
- Bhimani, A. (2003). A Study of the Emergence of Management Accounting System Ethos and its Influence on Perceived System Success. *Accounting, Organizations, and Society*, 23, 523-548.
- Bhimani, A. (2007). Comparative Management Accounting Research: Past Forays and Emerging Frontiers, In C. Chapman, A G. Hopwood and M. Shields (eds) *Handbook of Management Accounting Research*, vol. 1. Oxford: Elsevier, 343-363.
- Burns, J. & Scapens, W. (2000). Conceptualizing Management Accounting Change: an Institutional Framework. *Management Accounting Research*, 11, 3-25.
- Cooper, R. (1994). *Kyocera Corporation: The Amoeba Management System*, Boston, Massachusetts: Harvard Business School.

- Cooper, R. (1995) When lean enterprises collide: competing through confrontation, Boston, Massachusetts: Harvard Business School press.
- Cooper, D. J. & Morgan, W. (2008). Case Study Research in Accounting, forthcoming
- Davila, T. (2005). The Promise of Management Control Systems for Innovation and Strategic Change. In Chapman C. S. (ed.) *Controlling Strategy: Management, Accounting, and Performance Measurement*. New York: Oxford University Press.
- Dent, J. F. (1987). Tensions in the design of formal control systems: a field study in a computer company. In W. J. Bruns, & R. S. Kaplan (Eds.), *Accounting and management: fieldstudy perspectives* (pp. 119–145). Boston, MA: Harvard Business School Press.
- DiMaggio, P. (1997). Culture & Cognition. Annual Review of Sociology, 23, 263-287
- DiMaggio, P. & Powell, W., W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 147-160.
- Flamholtz, E. G., Das, T.K., Tsui, T. K. (1985). Toward an Integrative Framework of Organizational Control. *Accounting, Organisations, and Society*, 30-50.
- Giddens, A. (1976). *New rules of sociological method : a positive critique of interpretative sociologies*. New York: Basic Books
- Giddens, A. (1979). Central Problems in Social Theory. London: Macmillan,
- Giddens, A. (1984). The constitution of society. Oxford: Polity Press.
- Giddens, A. (1986). *The Constitution of Society: Outline of Theory of Structuration*, University of California Press.
- Giddens, A. (1990). The consequences of modernity. Stanford, CA: Stanford University Press.
- Giddens, A. (1991). *Modernity and self-identity: self and society in the late modern age*. Cambridge: Polity Press.
- Giddens, A. (2000). Runaway world: how globalization is reshaping our lives. New York: Routledge.
- Hamada, K. & Monden, Y. (1989). Profit Management at Kyocera Corporation; The Amoeba System. In Monden, Y. & Sakurai, M. (ed.), *Japanese Management Accounting: A World Class Approach to Profit Management*, Massachusetts: Productivity Press, 197-210.
- Inamori, K. (2006). *The Amoeba Management: every worker is a central player*. Tokyo, Japan: Nikkei Inc. (in Japanese)
- Jones, C., & Dugdale, D. (2002). The ABC bandwagon and the juggernaut of modernity. *Accounting, Organizations and Society*, 27(1–2), 121–163.
- Kaplan, R. (1986). The Role for Empirical Research in Management Accounting. *Accounting, Organisations, and Society, 11*(4), 429-452.
- March, J. G., & Olsen, J. (1989). *Rediscovering Institutions: the organizational basis of politics*. New York: Free Press.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Miya, H. (2003). *The Amoeba Management Theory: the Mechanism and Introduction of Mini Profit Center*. Tokyo: Toyo Keizai Shinposha Press. (In Japanese)
- Otley, D. T. & Berry, A. J. (1980). Control, Organisation and Accounting, *Accounting Organizations and Society*, 231-244.
- Powell, W. W., & DiMaggio, P. J. (1991). *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press.
- Sawabe, N. (2006). Publicity of Management Accounting: external reporting and management accounting techniques, *Kaikei*, 169(2), 16-35. (in Japanese)
- Sawabe, N. (2007). Application of Evolutionary Concepts in Management Accounting Research: Synthesis of Technical Research and applied research Using Evolutionary Institutionary Model. In Special committee of Japanese Association of Management Accounting (ed.), *Research on Organization Structures and Management Accounting: the Final Report*, 387-414. (in Japanese)
- Simons, R. (1990). The Role of Management Control Systems in Creating Competitive Advantage: New Perspectives. *Accounting, Organizations and Society*, 127-143.

- Simons, R. (1991). Strategic Orientation and Top Management Attention to Control Systems. *Strategic Management Journal* (1991), 49-62.
- Simons, R. (1995). Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal, Harvard Business School Press.
- Takatera, S. & Sawabe, N. (2000). Time and Space in Income Accounting, *Accounting, Organisation, and Society*, 25, 787-798.
- Willmott, H (1993). Strength is Ignorance; Slavery is Freedom: Managing Culture in Modern Organisations. *Journal of Management Studies* 30(4), 515-552.