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The relationship between management control systems and strategy: Multiple institutional logics in practice

Master Thesis in Accounting

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Abstract

Background and problem: SKF AB, one of the world's largest roller bearing manufacturing companies, has considered the introduction of a payment factory. This constitutes a potential strategic change and a good opportunity to contribute to literature on management control systems (MCSs) and strategy.

Purpose: To investigate the interrelationship between MCSs and strategy through the lens of institutional logics.

Research questions: I. How the overarching MCS influences the strategic decision of implementing a payment factory. II. How the strategic change of implementing a payment factory implies a change in the micro MCS controlling the payment process.

Theoretical frame: A macro MCS is distinguished from a micro MCS. The macro MCS is defined as critical success factors and their enforcement while the micro MCS is defined as various actions and results controls aimed at controlling the payment process. The micro MCS is the object of strategic change and the enforcement of the macro MCS is viewed through a lens of institutional logics.

Method and data: A qualitative study based on interviews, internal and publicly available documentation. Three interviews with treasury departments outside the case firm and three interviews with business unit financial managers inside the case firm supplemented by informal meetings in the group treasury department. Documentation consisting of procedure descriptions, project plans, payment statistics and annual reports.

Analysis and conclusions: Dynamics of three distinctive institutional logics were centred around three CSFs identified within the macro MCS. The implied impact of these dynamics and the macro MCS were evaluated in terms of the potential strategic change in the form of the payment factory. This resulted in two discrete alternative designs of the new payment process with the associated micro MCS designs detailed.

Discussion and theoretical contributions: The analysis results in two distinctive professional logics, a controlling logic and a treasury logic, previously not emphasized in the literature. It also leads to a detailed account of the bidirectional nature of the MCS-strategy relationship highlighting the heterogeneity of the MCS concept and the complex nature of the relationship.

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1 Introduction

Prior studies on the interrelationship between management control systems (MCSs) and strategy has been focused primarily on the significance of fit between the design of the two concepts (Dent, 1990). However, the interface between MCSs and strategy is still not clear. From the traditional point of view, strategy is primarily viewed as a long-term rational plan aimed at creating value and MCSs are perceived as consequences of strategy (Chenhall, 2005). However, more recent research also develops the point that MCSs could facilitate a change of strategy (Davila, 2005).

Through synthesizing and extending existing research, this study investigates the interrelationship between MCSs and strategy in two ways: the influence of an extant, 'macro MCS' on strategy and the impact of a potential strategic change on a 'micro MCS' enacted as a part of the payment process. The macro MCS refers to the overarching control environment, comprising the critical success factors to which organizational members are held accountable, and the micro MCS refers to the specific checks and balances performed to control the payment process. As it is relevant to learn more about the role of MCSs in the strategic change process (Chenhall, 2003), this relationship is explored in the context of a potential strategic change at a large, multi-national industrial company; SKF AB. SKF is a global manufacturing company with main industrial markets including bearings, seals, lubrication systems, and condition monitoring. To introduce SKF briefly, it has three geographical sales areas; Industrial Sales Americas, Industrial Sales Europe, Middle East and Africa, and Industrial Sales Asia (SKF, 2016). The responsibilities for those sales areas are end-to-end procurement, manufacturing and logistics. In total, the group has 108 manufacturing units and ten major warehouses among 130 countries. Because of this supply chain complexity, it is important for SKF to manage payments in the most effective and efficient manner, illustrating the potential importance of a payment factory.

Because of an academic preference for contingency-based research on the relationship between MCSs and strategy, and because of a lack of consensus on the core, defining concepts, the successive accumulation of knowledge has been wanting (Frigotto, Coller and Collini, 2013), something that has been found to be the case in applying contingency approaches in management accounting research generally (Otley, 2016). This study aims for an enhanced knowledge by explicitly defining the concepts and clearly linking them to their instantiations in the case. A theoretical contribution is made by inductively exploring the relationship between MCSs and strategy, by relating the results to findings in previous literature, and by especially emphasizing key points of difference in method, theory and conclusions. Additionally, the rich traditional MCS-strategy research mainly adopts a contingency approach and, as Langfield-Smith (2006) suggests, it is still not common to use institutional theory in the MCS-strategy field.

The research questions are investigated based on an in-depth case study about the potential strategic change in the form of a payment factory, i.e. a centralized payments process which is aimed at rationalizing supplier payments, in SKF Group. Today, the payment procedures in SKF are dispersed across the organization. Centralisation of payment activities has been proposed as an initiative with the possibility of reducing costs, mitigating risks and streamlining operations.

SKF is chosen because it is a world leading manufacturing company and it has relatively complete and advanced management control systems that provide an opportunity and richness of data to do an in-depth study. Additionally, it faces the specific strategic change of payment factory which provides an appropriate context for the MCS-strategy topic.

This paper is divided into six sections. After elaborating on the purpose and defining key concepts in the present section, the study's theoretical framework is explained in the next section. Following that comes a section of the method of data collection and analysis. Next comes a section with detailed results and analysis utilizing the theoretical framework, and then a section with discussion of the present findings with prior literature. Finally, a conclusion is made based on the findings and contributions.

1.1 Purpose

The purpose of this study is to investigate the dynamic relationship between management control systems and strategy. This is done in the organizational context of a finance function and in the case of a pre-decision investigative phase of a payment factory implementation project at SKF. The chance to observe a strategic change in the process of developing provides a unique opportunity to contribute to the field of MCS-strategy research (Kober, Ng, Paul, 2007). Previous studies have mostly focused on one-way influence (Chenhall, 2005) and broad thematic typologies (Langfield-Smith, 2006) leaving room for deeper analysis of the dynamic relationship between MCSs and strategy. By focusing on two distinct MCSs operational at two distinct hierarchical levels, where a micro MCS constituting a part of the payment process and is the target for a potential strategic change, and a macro MCS constituting critical success factors enforced through organizational discourse, the purpose is focused into two research questions:

I. How does the macro MCS influence the potential strategic change in the form of a payment factory within the organizational context of the finance function?

II. How would the micro MCS be changed by the realization of the strategic change of a payment factory?

1.2 Definitions of core concepts

Management control systems (MCSs) are defined as "everything managers do to help ensure that their organization's strategies and plans are carried out or, if conditions warrant, that they are modified" (Merchant & Van der Stede, 2007).

Strategy is defined as patterns of realized behaviour (Mintzberg, 1987a).

Critical success factors (CSFs) are defined as "areas of activity that should receive constant and careful attention from management" (Rockhart, 1979).

Payment factories are a popular term within the professional field of cash management that means centralizing payments in a business group (Fanning, 2015). The payment factory can include people operating it, but can also consist of just an IT system.

A *shared service centre (SSC)* is an accountable entity that provides the firm with administrative services (Fanning, 2015).

In-house banks (IHB) are set up within business groups to serve business units with clearing services for internal transactions (Fanning, 2015).

Payments-on-behalf-of (POBO) is a service to give bank customers the possibility of instructing their bank to make payments, and to keep money, on behalf of some other legal entity (Dumont, 2017).

The *single euro payments area* (SEPA) "establishes a single set of tools and standards that make cross-border payments in euro as easy as national payments" (European Commission, 2017).

Internal financial netting is done by receiving all invoices for internal transactions in one central organizational unit and accumulating them into periodic payments (usually in IHB ledger) to and from each respective buying or selling group entity (Head of Treasury Operations).

End of day, zero balance *cash-pools* are bank account hierarchies where one central organizational unit keeps a master account 'sweeping' (or 'filling' if there is a negative balance) sub-accounts to a balance of zero at the end of each day (Head of Treasury Operations).

2 Theory

In this section, the definitions of macro and micro MCSs are developed together with the applied meta-theoretical framework of institutional logics. Previous research regarding the relationship between MCS and strategy is also discussed. Gaps in this previous research where this paper can contribute are identified and the section is finished with a summary of the theoretical framework.

2.1 Findings from previous MCS-strategy research

There has been an increased interest in empirical research on the relationship between management control systems (MCSs) and strategy over the course of the decade leading up to the year of 2006 (Langfield-Smith, 2006). However, the following decade seems to have experienced a drop of academic interest on the topic (Otley, 2016). Studies up until the mid-1990s usually adopted a contingency theoretical perspective and placed primary focus on the *fit* between management control systems and strategy (Langfield-Smith, 2005), a research approach that has been dominating ever since (Bedford et al., 2016). The presentation of previous MCS-strategy research is structured into three identified themes; hierarchical use of MCSs, the fit between MCSs and strategy, and dynamics between social domains of strategy-driving ideas.

2.1.1 Hierarchical use of MCSs

Simons' (1995) levers of control (LOC) framework is one of the most prominent frameworks applied in the field of MCSs and strategy. It has inspired research within the contingency-based tradition with quantitative and qualitative studies and research applying other, non-reductionist empirical approaches as well (Martyn et al. 2016). This framework highlights how formal MCSs are used by top management, and orbits around four categories of control systems; beliefs systems, boundary systems, diagnostic control systems (DCSs), and interactive control systems (ICSs). The latter two being the most industriously researched concepts empirically (ibid). By explicitly referencing top management in Simons' original definition, the framework is inherently hierarchical in nature, but there have been some applications in organizationally lateral and inter-organizational settings as well (e.g. Kastberg and Siverbo, 2013; Kominis and Dudau, 2012).

Many studies support the main contention in the LOC framework that MCSs can have an impact on strategy (e.g. Marginson, 2009; Widener, 2007; Kober et al., 2007; Adler, 2011; Frow et al., 2010; Plesner Rossing, 2013). Especially, interactive control systems have been found capable of effecting strategic change (e.g. Kober et al.; 2007; Adler, 2011; Frow et al., 2010). Other methodologies besides the LOC framework have led to similar conclusions. For instance, Mouritsen et al. (2001) discovered unintended intra-organizational effects on firm strategy from the adoption of new inter-organizational controls. The new MCSs of open book accounting and functional analysis, while not introduced to control the organization internally, also defined strategy and the two firms' respective roles in their value creating systems. However, there are also some contradicting evidences on the effect on strategy from MCSs, suggesting that the MCS-strategy interrelationship may be more complex than what is assumed

in the LOC framework (Henri, 2006; Bisbe and Otley, 2004).

A weakness within empirical research applying the LOC framework is a lack of studies on informal MCSs (Collier, 2005), which is also a weakness within the larger field of MCS-strategy research (Tucker and Parker, 2015). As will be shown shortly, this paper addresses this lack by a unique definition of the macro MCS.

2.1.2 The fit between MCS design and business strategy

Contingency-based MCS-strategy research is one example of studies primarily interested in the unidirectional influence of strategic orientation on the choice of MCS design, or the *fit* between MCS and strategy (e.g. Bisbe and Otley, 2004; Abernethy and Lillis, 2001; Davila 2000; Abernethy and Brownell, 1999; Chenhall and Langfield-Smith, 1998; Collins et al., 1997; Ittner and Larcker 1997; Carr, Mak, and Needham 1997; Abernethy and Lillis 1995; Daniel and Reitsberger, 1994; Reitsberger et al., 1993; Daniel & Reitsberger, 1992; Daniel & Reitsberger, 1991; Govindarajan & Fisher, 1990; Govindarajan, 1988; Simons, 1987a; Merchant, 1985; Govindarajan & Gupta, 1985; Miller & Friesen, 1982). Strategic orientation is usually operationalized by categorizing firm strategy into some broad typological framework such as Porter's (1980) differentiation strategies and cost leadership strategies, or more specific typologies such as quality, manufacturing flexibility, or new product development (Langfield-Smith, 2006).

The question of fit between MCSs and strategy does not have a completely unproblematic answer. For instance, Bisbe and Otley (2004) finds that more interactive uses of MCSs leads to better performing product innovation activities in low-innovating firms and the opposite in high-innovating firms. The former result is supported by Davila (2000) but stands in contrast to the findings of Abernathy and Lillis (2001) that higher delegated autonomy (i.e. more diagnostic uses of MCSs) are correlated with more service innovation in a hospital setting. Abernathy and Brownell (1999), again in a hospital setting, finds support for the assumption that more interactive uses of budgets imply better learning and adaptation capabilities in the context of strategic change. Elucidating a similar tendency, Collins et al. (2001) finds that more innovation focused firms, place higher reliance on budgets than others, also lending support to the concept of fit between MCSs and strategy.

In summarizing the body of research based on contingency theory it is clear that there are more or less suitable MCSs for various strategic orientations. But the question of whether there might be some influence of MCSs on strategy formation has still only been hinted at. It is remarkable that many of the unidirectional MCS-strategy studies focus on the levers of control framework, since that framework was developed to highlight this question; and even the bidirectional relationship. As previously discussed, other studies applying the levers of control framework has made some progress on answering the question by affirming that MCSs at least may have an impact on future strategy. However, exactly *how* strategic development is moderated and mediated by MCSs has been largely ignored.

2.1.3 Dynamics between social domains of strategy-driving ideas

There are some studies looking at detailed events and practices, and thus highlighting the social

complexity in which strategy is formed. What these studies have in common is that they all provide some account of conflicting and collaborating ideas within an organizational context.

Hansen and Mouritsen (1999) looks at practices surrounding the MCS of 'order performance', a sheet of paper detailing actual and budgeted sales orders, and its role in shaping competitive strategy. By following the argumentative process focused on 'competitiveness' within a small high-tech firm, distinct strategic preferences are conceptually identified within sub-networks of actors within the firm. The role of 'order performance' display higher mobilising power within certain contexts; when performance is negative, something that is termed diagnostic use in the levers and control framework (Simons, 1990). While Hansen and Mouritsen (1999) still centre the analysis around one specific, formal MCS, Roberts (1990) instead centre analysis around accounting controls more broadly, in the context of one specific strategic change. He studies the choice of corporate parenting style in the context of an acquisition, where the mother company possessed a strong financial logic, with corporate control exercised through financial control, i.e. heavy delegation of authority with managers evaluated on financial performance. The acquired company on the other hand displayed a production logic that suddenly became contested by the new financial logic. Short-term profitability was shown to increase by this change, but a concern that long-term profitability might become impaired remained within the acquired company. The present paper elaborates on the concept of various logics within a firm.

The absolute majority of research on the MCS-strategy relationship has been done within either a holistic organizational context or within some aspect of line organizational functions (Langfield-Smith, 2006). In the LOC framework, top management is the dominant organizational unit under study, but investigations have been performed in middle management organizational levels as well (Martyn et al., 2016). Some examples exist within the LOC body of research in investigating support functional organizational units as well. For instance, Plesner Rossing (2013) looks at the tax department in the context of international transfer pricing strategy in a multinational enterprise. However, this is a rare instance and the present study adds to previous research by looking at the organizational unit of a finance function.

2.2 Macro- and micro MCSs and their organizational context

In large corporations, finance functions are typically divided between a controlling function and a treasury function, roughly as illustrated in Figure 2-1 where the line organization is assumed to consist of business units (Merchant and Van der Stede, 2007, p. 634).

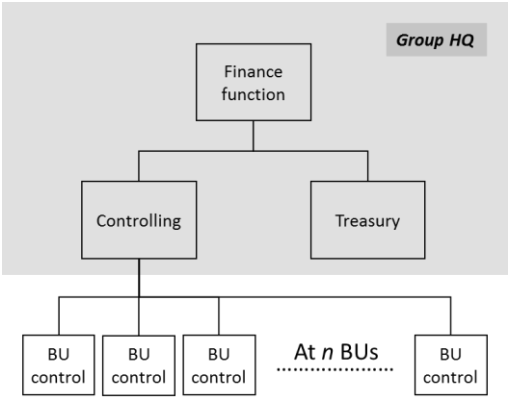

Figure 2-1. The 'normal' organizational form of finance functions, and the case at SKF.

Of these two sub finance functions, the treasury function is usually highly centralized while the controlling function is often decentralized as in Figure 2-1. The treasury function usually raises and manages capital, while the controlling function usually performs financial record keeping, reporting, reconciliations and control (ibid).

In the present case study, the MCS-strategy relationship is investigated by separating between one micro MCS and one macro MCS within this organizational context.

The micro MCS concerns detailed control of payment processes (and to some extent accounts payable processes); the people and activities involved in the making of payments, regardless where they might be located organizationally. This is a traditional, highly formalised MCS centred around the flow of payment information primarily represented electronically in enterprise resource planning (ERP) systems, bank provided IT systems (i.e. online banking) and similar IT systems. This kind of financial information is a part of a firm's accounting system (Zimmerman, 2010) but it is a somewhat novel definition of a MCS in an empirical setting. Besides the informational core, the micro MCS concept also includes its use. Boundary systems are present in the form of authorities defined in IT systems, procedure manuals, job descriptions or through authorized manager instruction. Diagnostic use is prevalent, including corrective action taken when such action is deemed necessary. Basically, the micro MCS includes everything the financial department does to ensure that payments are performed correctly.

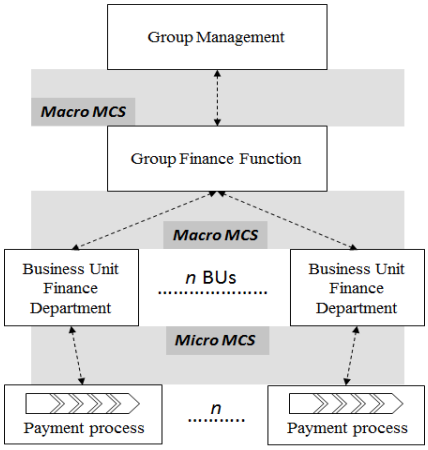

Figure 2-2. The Macro MCS and Micro MCS, and the case at SKF.

The macro MCS concerns control of organizational units and refers to the overarching control environment, centred around the critical success factors to which organizational members are held accountable in internal discourse, and in the way this accountability is enforced. In other words, it is the total performance of the organisational unit that is controlled, including strategic decisions made by that unit. Comparing with the micro MCS, the critical success factors take on the role of the informational core while the enforcement corresponds with use of the MCS. As is evident from the definition of CSFs as "areas of activity that should receive constant and careful attention from management" (Rockhart, 1979), they do not necessarily imply the collection of any financial or other numeric information. It is also evident that the macro MCS may vary between organizational contexts (Lukka, 2007) and that it depends greatly on personal judgement by the manager using it. This judgement can be difficult to separate from the manager's personal values or values adopted from some institution external to the organization such as religion or profession. This implies a comparatively informal MCS

(Collier, 2005). That is why, in this case, the macro MCS is analysed by connecting its enforcement to a framework of institutional logics.

2.3 Institutional logics

The concept of institutional logics is always at the core of institutional theory which is described as "symbolic systems, ways of ordering reality, and thereby rendering experience of time and space meaningful" (Friedland and Alford, 1991). It is also defined as " the formal and informal rules of action, interaction, and interpretation that guide and constrain decision makers" (Thornton and Ocasio, 1999, p804) and "the belief systems and related practices that predominate in an organisational field" (Scott, 2001, p139), thus institutional logic becomes a field-level concept and studies in this area more focus on the inter-organisational relationships in an operating field level, which results in a relative scarcity of literature taking the perspective of an organisational level (Lindberg, 2014). In this way, the micro-level dynamics of meanings is often ignored (Zilber, 2008); how logics work in practice, how people act upon them and what the consequence of this in practice is not deeply investigated (Lindberg, 2014). Hence, most studies only address questions on how organisations react on the stabled institutional logics and neglect the other way - how logics are translated and enacted in practice.

The present study therefore aims to contribute by focusing on the multiple institutional logics in practice. This is done by investigating how different institutional logics present under the case context and how those logics influence on different actors. Logics in practice have been investigated in previous studies and some of them adopted practice-oriented approaches within institutional theory (e.g. Lounsbury, 2008; Czarniawska and Sevon, 1996) and some of them investigated the research question from a process-oriented point of view and using qualitative approaches (Lindberg, 2014). From this approach, the importance of dialoguing with Actor-Network Theory is mentioned in order to analyse how logic and practice affect each other and impact on the (re-)construction of new logics and practices (Lounsbury, 2008). The ideas of objects, actors and translations are borrowed from Actor-Network Theory; Objects always have agency, this is a property not reserved for human actors; everything can be an actor, even ideas and concepts; translation in the organisational change is described as the travel of ideas and ideas and logics are similar in the sense that they are properties of communities but logic are different in the way of taking actions (Lindberg, 2014). For instance, many companies may have the same idea of having a payment factory but they might have various actions when they implement the project. The project might be guided by professional logic of doing the payment process and some might follow the corporate logic of achieving CSFs in the organisation.

Goodrick and Reay (2011) mentioned that institutional logics represent sets of expectations regarding social relations and behaviour. Friedland and Alford (1991) also illustrated that society is constituted by multiple institutional orders guided by specific institutional logics. In this way, there could be multiple logics providing institutional foundations for competing demands and various courses of action by enabling actors to segregate and distinguish themselves from others (Lounsbury, 2008). For example, Lindberg (2014) mentioned bureaucratic logics, professional logics and market logics as well as how different actors in the field are affected and guided in accordance with various logics.

For the multiple institutional logics, if we take a closer look, there are several logics are

frequently used which are professional logics, corporation logics, market logics, bureaucratic/state logics, regional logics and family logics (see the table from Thornton et al, 2012, p. 56). Since our research focuses on the multiple institutional logics on the organisational level, the identifications of family logic, religion logic, state logic and market logic won't be elaborated. The characteristics of those logics do not perfectly fit in the current circumstance because they keep the focus on a higher level and the impact of higher level logics on the organisation level logics is still outside the purpose of the present study.

Hence, only the concepts around professional logic and corporation logic will be elaborated in this study since the aim is to investigate the relationship between MCSs and potential strategic change within the organisation. So the multiple institutional logics used will be fitting in the context of research on an organisational level. In the table, the Y-axis elaborate upon implied typology of two different institutional logics and, on the X-axis, it shows how the categorical elements tie to each of the institutional orders (Thornton et al., 2012).

Y-Axis:	X-Axis: Categories						
institutional orders	**Root Metaphor**	**Source of Legitimacy**	**Source of Authority**	**Source of Identify**	**Basis of Norms**	**Basis of Attention**	**Basis of Strategy**
Corporation	Corporation as hierarchy	Market position of firm	Board of directors/ Top management	Bureaucratic roles	Employment in firm	Status in hierarchy	Increase size&diversification of firm
Profession	Profession as relational network	Personal expertise	Professional association	Association with quality of craft/ Personal reputation	Membership in guide&association	Status in profession	Increase personal reputation

Table 2-1. The ideal types of institutional logics with characteristic categorical elements from Thornton et al. (2012).

Thornton (2004) describes the professional logics from different elements. For example, the root metaphor for professional logic is the relational network and authority of this logic usually comes from the professional associations. Legitimacy is always based on personal expertise and the norms is pretty much self-regulated. People who follow the professional logic is often guided by their professional guidelines and expert judgement, as it is mentioned in the book (Thornton et al., 2012), "science and expert knowledge or professional values of what is proper based on similar education and training". Thornton et al. (2012) also mentioned that "executives' views on how to best run the corporation were selectively influenced by their professional or functional background in the corporation". Mangen and Brivot (2015) also mentioned that the notion of professional logics does not have a fixed meaning rather it is related to a specific type of work and organisation. For example, the professions could be treasury people who does the daily payments and the organisations could be an international manufacturing company like SKF. Professional logic always refers to self-regulation norms that requiring autonomous decision making (Evetts, 2013) which means the decision making upon professional logic is mostly inner-directed or exposed to peer control (Mangen and Brivot, 2015) since their work is opaque and based on specific work routinisation. In this way, even though for the same strategic change, people might reflect differently based on their different professional logics. For example, for the micro MCS like payment process, treasury people and finance people might have different perspectives since they look at the MCS of payment process from different perspectives.

As it is mentioned by Fligstein (1990) in his research on corporate conceptions of control through the institutional logics approach, even though "within a corporate institutional logic, there could be contending logics of actions that motive different views of power and their accompanying practice" (Thornton et al., 2012). As can be seen from the table, the corporate

logic is often directed by the board of directors and top managers in the corporation. Also, it usually presents as a bureaucratic rule upon which employees in the organisation need to follow as bureaucracy is the central role here (Thornton et al., 2012). For example, employees in the company need to follow the rules and controls such as CSFs set by the top managers. Since the corporate logic is pretty much guided by the market position, organizational culture and other factors, it could be different from company to company. Thornton et al. (2012) also argue that, "according to a corporate logic, the person becomes an employee, which equates to being under the control of managers (Pellegrin, Blau and Scott 1962), not functioning as a quasi-independent source of expertise". In this way, we could see that individuals could be guided by different logics within the organisation.

Lindberg (2014) elaborated upon the relationship between multiple institutional logics for lengthy periods of time which could not only be competitive but also be cooperative. From earlier research, Goodrick and Reay (2011) also mentioned that multiple logics can coexist cooperatively because the practices could be facilitated by each other and they can also be competitive because the practices are segmented. Even though this research highlights the relationship between multiple institutional logics, its purpose is not on what happens in practice. Thornton et al. (2012) further confirm the lack of practice oriented studies on institutional logics within an organizational context. In this paper, the relationship between MCSs and strategy is examined by identifying institutional logics as they are enacted in the practice of organizational discourse.

2.4 Summary of theoretical framework

The main elements of the theoretical framework used in this study consists of a separation between macro and micro management control systems, professional and corporate institutional logics and a strategic change. The relationship between these concepts are outlined in Figure 2-2.

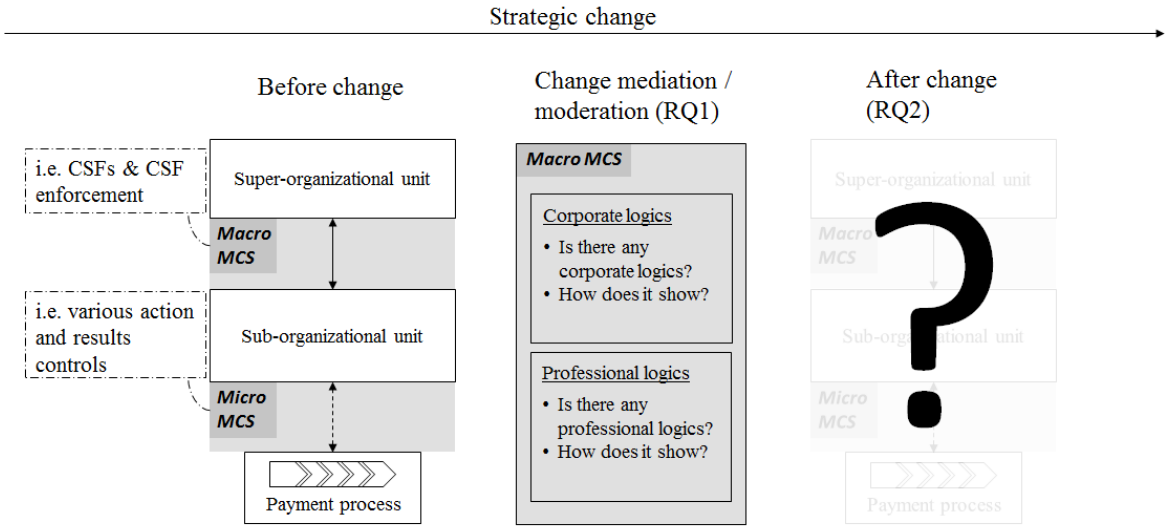

Figure 2-2. Summarized theoretical framework.

Macro and micro MCSs alike are viewed as stable institutional structures operating at distinct

levels in the firm. The macro MCS comes alive in the context of a strategic change prospect where it regulates the outcome of the change itself. Simultaneously the change would imply a change of the micro management control system that itself regulates a distinct routine or process. The first research question is answered by explaining how the macro MCS regulates the strategic change. This is done by analysing professional and corporate logics that organizational actors use in the process of evaluating and debating strategic change and linking them to relevant critical success factors that makes up the most formalised part of the macro MCS. The second research question is answered by explaining the difference of the actions and results controls at work before and after the potential strategic change with an emphasis on the changed flow of information.

3 Method

In this section, data collection and analysis methods are described and the research quality is discussed.

This study adopts an interpretive and inductive approach meaning that theory is built over the course of the research process (Collis and Hussey, 2014). This approach stands in contrast with deductive methods trying to explain a priori theory by collecting and reconciling evidence with preconceived notions (ibed). Thus, in this case, no hypotheses are formally developed before actually conducting the study. However, some preconceptions are bound to exist, and it is acknowledged that a study like this can never be completely objective.

The adoption of an interpretive approach drives the analysis of the materials collected in the case study at SKF. A case study is a methodology that uses different kinds of methods to find out the in-depth knowledge under the conditions of the case (Collis and Hussey, 2014). Interpretive research is about making sense of human action and to meanings attached to their everyday contexts (Lukka, 2007). The case study methodology is chosen in order to investigate the relationship between MCS and strategy in a highly practical and detailed way. In this spirit, six formal interviews were conducted, internal and public documents reviewed, informal meetings attended and observations undertaken. The spirit of interpretive research also permeates the subsequent analysis of the collected data.

3.1 Data collection

The main piece of data consists of formal and informal meetings, internal documents and observations conducted over the course of approximately 2 work days per week for 2 months at the case company, SKF. Three interviews were also held with representatives from three other firms' treasury departments. Two interviews were held with SKF regional CFOs for Sweden and Germany respectively. Another interview was held with a representative from Group Finance responsible for finance process transformations globally, though this interview was chaired by our two main contact persons at SKF Group Treasury. Informal meetings were held primarily with our two main contact persons at Group Treasury with sporadic short intermissions of other people working at Group Treasury or Group Reinsurance (these two departments were located in the same office). The regional CFOs are the heads of the finance functions for their specific regions, these organisational functions are referred to as Business Unit Finance Departments.

Organisational belonging	Informant position	Document accessed
SKF internal		
Group Treasury*	Head of Treasury Operations	Procedure descriptions, ERP system implementation plan
Group Treasury*	Cash Management, Treasury Operations	Transaction information, procedure descriptions

Group Finance	Manager finance Development and Outsourcing (referred to as Group Finance representative)	Invoice and payment process
Business Unit Finance Department, SKF Sweden	Senior Accountant & Team Leader (referred to as CFO for Sweden)	Payment limit check instructions, Bank details, Payment methods, Partner Bank types
Business Unit Finance Department, SKF Germany	Treasurer, Chief Accountant (referred to as CFO for Germany)	Payment process chart
Companies with PF in place		
Volvo Cars, Group Treasury	Head of Cash Management and Settlement	-
Sandvik, Group Treasury	Senior Cash Manager	Procedure descriptions, Conceptualisation of payment factory system, Questionnaires to CFOs
Electrolux, Group Treasury	Financial Controller	Procedure descriptions, Project implementation schedules, Conceptualisation of payment factory system
*Our main contact persons at SKF.		

Table 3-1. Informant list and relevant documents.

Informal meetings with Group Treasury were held regularly in the process of working in the location of SKF's office. In pure quantity, this source was perhaps the most abundant, but its assimilation somewhat haphazard. Photographs of whiteboard drawings complement memory and one tape-recorded session. Other than the two listed individuals from Group Treasury there were also others, but to a much lesser extent.

All formal interviews were arranged by our main contact persons in the case firm. These were based on quite detailed interview guides to ensure that no important data would be missed, but discussions around the questions were quite free and open. The interview guides were made available to all informants at least one week before the interview. In the case of the three treasury departments outside of SKF, the questions were centred around their respective payment factory solutions and organisational discussions around them, both before and after they had been implemented. In the two interviews of regional CFOs the questions were centred around the current process of making payments and the invoice approval process preceding it. In the interview of the Group Finance representative the questions were centred around the current IT setup and how that might support an introduction of a payment factory at SKF. Ample opportunity was given by all respondents to ask follow-up questions by correspondence afterwards, and some of the interviewees also provided written documentation on the issues discussed.

Volvo Cars, Sandvik and Electrolux were chosen for interviews of treasury departments outside of SKF, since it was known that these companies have had payment factories in place for many years already, and because they represent comparable companies to SKF. Meetings were held in person and lasted about one and a half hours, except for the Volvo Cars interview which had

to end prematurely after one hour and later continued via telephone. All interviews except one were tape-recorded and transcribed. Major themes discussed during the interviews included the decision-making process in arriving at the payment factory, and the post-implementation operating process with expected and experienced costs, benefits and risks. These themes were believed to contribute to the research questions in pinpointing the probable direction that a payment factory solution and its associated micro MCS would have to take at SKF and by drawing parallels between SKF's and each respective companies' macro MCS.

The regional CFOs for SKF Sweden and SKF Germany were selected in consequence of the meeting with the representative from Group Finance who considered this a natural next step. It is also a natural expansion of the circle of informants in that these individuals would be the ones primarily affected by the strategic change of a payment factory, since they managed the payment process at the time. The interview with the CFO for Sweden was held face to face while the interview with the CFO for Germany was held over telephone. Each lasted for almost an hour and both of them were interviewed using the same interview guide. Both interviews were tape-recorded and transcribed. These results were believed to contribute to answering the research questions, by supplying data for describing the current micro MCS and by finding evidence of the macro MCS as an influencer of actions.

Written documentation was received from the informants as detailed in Table 3-1. The majority consisted of process descriptions of various kinds and were mostly used to verify conceptions gained from informants verbally, or used to gain a more detailed description of specific aspects. However, it is also recognized that no formal description or rule, written or verbal, can represent the true routine *completely* as it is (Lukka, 2007).

3.2 Data analysis

In analysing the macro MCS (i.e. research question 1) it is necessary to identify two aspects; what critical success factors are used, and how those are enforced. In order to identify the critical success factors, SKF's latest annual report is consulted. This should reflect, to the extent of top management's honesty and account-giving capabilities, what critical success factors are operational at the top of, and to some extent throughout, the firm. Annual reports often contain a description of strategic priorities, key value drivers or similar concepts which might have significance for investors' evaluation of firm performance. The analysis of SKF's report for 2016 takes its starting point in the section called "Value creation and strategic priorities" on pages 8-10 with some reference made to pages 11-47 for clarification. All of these factors are evaluated based on their applicability in the specific case of controlling the finance function, as this function, is the organizational part of interest in this case. The evaluation is based on the descriptions provided in the annual report and combined with data provided through informal meetings and observations at the group treasury department. In evaluating the company's CSFs, they are related to Rockhart's (1979) definition. The data is structured with Thornton et al.'s (2012) framework of institutional logics outlined in Table 2-1 where informants' answers and written documentation are associated with categories of institutional logics. The logics are then contrasted with each other, with tensions between them highlighted, in order to arrive at possible implications and solutions to the tensions. In this way, the macro MCS's impact on the potential strategic change is evaluated.

The framework of institutional logics is used to structure the analysis of micro MCS change (i.e. research question 2) as well. However here, the data lends itself to a more direct analysis leading to a conclusion on the impact of the strategic change. First, the current payment process with its associated micro MCS is described. This is a comparatively direct output of combining the micro MCS concept with the collected data describing the payment process at SKF. Second, future possible states of the payment process are derived by comparing the case of SKF to the cases of the other three companies already in possession of payment factories. Specifically, various possible payment factory solutions are defined from the informant's descriptions by defining a number of key dimensions which are then superimposed on the case of SKF. These future states are intermixed with the output of analysing the macro MCS influence on the strategic change; by seeing the various institutional logics at work in the organizational discussion and to what extent they are conflicting or collaborating with the macro MCS. Proposed strategic change supported by arguments more in line with the macro MCS are more likely to become realized. In this way, the analysis is condensed into a small set of potential future designs of the payment process and the micro MCS.

3.3 Research quality

Collis and Hussey (2014) delineate four criteria that could be used for evaluating the quality of research; credibility, transferability, dependability and confirmability. *Credibility* have to do with the subject of the inquiry; whether it was correctly identified and described in the research (ibed). To improve the credibility of the research, rational criteria are established to do a indepth study. For example, when scrutinizing the current Micro MCS, criteria are set in the interview guide about getting opinions from different perspectives of current control. Approval process, information flow, outsourcing conditions and difficulty of doing current work are the necessary aspects that should be asked.

Transferability is similar to generalization, which is about examining whether the findings might be applied to another setting (Collis and Hussey, 2014). To enhance transferability, data related to the topic is required from various sources. For example, the considered possible change on micro MCS is the outcome of combining the opinion from SKF and experiences from the three external companies. It is also an outcome of combining interviews at the SKF group treasury department with interviews at SKF business unit financial management. These multiple sources enhance the transferability of the study in the presence of unavoidable subjective opinions in informant responses.

Dependability is concerned with whether the research process has been rigorous and well documented (Collis and Hussey, 2014). To obtain high dependability, the interview guide is formed by following the main discussed theory and the answers from the formal interviews are all transcribed into documents as it creates a process of evidence. The last criteria, *confirmability* focus on whether the research processes have been fully described and whether the findings flow from data. The procedures of data collections and analysis are described above to give a full picture of the overall research processes and how findings flow from data.

3.4 Limitations

The study might be limited by the 'social desirability' bias exhibited in part of the interviews. 'Social desirability' bias means the interviewees might be misrepresenting their responses to make them 'look' better (Babbie, 2005). Hence, the subjective responses of interviewees might be influenced by a particular enthusiasm for, and the pride in their approaches to strategizing and control (Tucker et al., 2015). There is a caution that the subjective responses might influence the generalization of the results of the study in the institutional field.

As there are self-assessment involved in our study, although there are much empirical MCS-strategy research adopting this approach, the validity of unverified self-reports is often raised as a concern (Chenhall, 2003). Parker (2011) also mentions that the behaviours, actions and general responses of interviewees might be influenced by their inner drivers. Hence, with the chosen research method, the study is limited by the nature of interviewees. Since the interviews in this study is arranged by primarily two people in Group Treasury, there is also a gatekeeping function from them. For instance, one person with another role at Group Treasury displayed a willingness to participate and good insight into the subject matter but were explicitly cut out from the list of informants.

The world of treasury, and especially when delimited to Sweden, is a small one. It is also a business function that is categorized by low interfirm competition and high bank-firm competition. Hence, there are comparatively strong incentives for treasury functions across firms to collaborate with each other, an argument which speaks in favour of the reliability of the information gained from the external interviews. However, the fact that all three external interviews belong to the same professional group could also have negative effects in terms of introducing a measure of bias, despite their opinions arguably being the most expert opinions available on evaluating the credentials of payment factories.

4 Results and analysis

In this section, result from the data collection of external interviews is presented first in order to identify the possible solutions of payment factories. Then, the current macro MCS and the current micro MCS at SKF are described and analysed through the framework of institutional logics. Next, the possible influence of the strategic change on the micro MCS is illustrated. Finally, the findings are summarised.

4.1 Payment factories at Electrolux, Sandvik and Volvo Cars

In 2013, when the Payment Factory implementation started, Sandvik had a highly scattered IT system landscape, with about 120 different ERP systems and over 100 banks. On the other hand, both Electrolux and Volvo Cars had quite unified IT system landscapes, with SAP as their main ERP systems. Electrolux started its payment factory implementation in 2011 or 2012, and decided to include it as a part of the SAP ERP rollout. Volvo Cars started its implementation in 2013, again coinciding with the rollout of SAP as a global ERP system.

Volvo Cars and Electrolux also defined the payment factory concept in a similar way in that it includes making 'payments on behalf of', through separate payment-factory-owned bank accounts. In the case of Sandvik the 'payments on behalf of' was not considered part of the payment factory. Rather, the payment factory was considered to consist of a common payment platform IT system, which interfaces with the company's banks through the SWIFT network using standardised file formats. That is, instead of logging in to the bank-provided internet bank interface, employees would log in to the Sandvik-provided platform in making their payments.

The two SAP-based companies use SAP In-House Cash as their central system in the payment factory, the system communicating with banks but also where internal balances are settled. In other words, this is a core component of their respective in-house banks. Generally, the in-house bank concept was very tightly coupled to the payment factory concept for both of these companies, something that might be connected to the heavy emphasis placed on making payments on behalf of group entities. When paying for other legal entities in the group, it is obviously imperative to settle the internal balance.

Decisions to implement payment factories in the first place tended to coincide with other projects going on within the companies and with external demands placed on them. At Electrolux, the payment factory was part of an overall SAP ERP rollout. At Sandvik it was more of a stand-alone project but was done largely due to demands to conform with SEPA (Single Euro Payments Area) regulations, which in turn was made easier by centralizing control of the file flow going to the banks. At Volvo Cars, it was made part both of an SAP rollout and the SEPA compliance project. Though, in all three cases SEPA had a significant influence in making XML ISO 20022 the standard file format de facto used to communicate payment data with banks.

In order to realize the implementation of a payment factory, organizational support was

marshaled through primarily two sources; centrally, at group treasury, and locally, at business unit financial management. Generally, the formal decision was made by the CFO and the level of local support attained differed to some extent between the companies. However, local management always have an important role in the knowledge of the the payment process and the associated micro MCS and was consulted on practical implementation issues; e.g. legal, technical, and operational. The other main stakeholder was the treasury department, being responsible pre-and post implementation of the payment factory project, but the IT function had major responsibilities in the operative execution of the implementation, and legal, tax and internal control were important as well. Electrolux and Volvo Cars, had the operations of their respective payment factories outsourced to shared service centres whereas Sandvik's, not really needing any manual handling, is run from Group Treasury directly.

Approvals in the payment process should generally adhere to the four eyes principle. In the cases of Electrolux and Volvo Cars, once a payment file is done, it is approved by two persons in the shared service centre, one preparer and one supervisor. At Volvo Cars one more approval is needed from Treasury before the bank takes over with execution, but at Electrolux the bank steps in right after shared service centre approval. In the case of Sandvik, two persons at the business unit approve the payment before the bank steps into the process. Before the point where a payment file is being approved, the accounts payable liability should have been approved in accordance with the four eyes principle also earlier in the process. Since the payment factory in all cases were confined almost exclusively to deal with supplier payments, this approval was done mainly as a part of the purchasing process.

The scope of the payment factories is limited to supplier payments mainly because of the difficulty in including other kinds of payments such as taxes and salaries in relation to the benefits that are imagined from including them. These kinds of payments are generally way less in number than are supplier payments and since business units, for which the payment factory makes payments, still have to have their own bank accounts in place to receive payments, it was not deemed necessary to include these other kinds of payments. Geographically and organizationally the payment factory scopes are limited within the three companies. Electrolux has a prerequisite that subsidiaries need to have SAP in place as their ERP system in order for them to be included in the payment factory. SAP subsidiaries number about 70 subsidiaries today, but only about 20 of these are covered by the payment factory; the rest are excluded due to tax and legal reasons. Sandvik has Europe and Australia covered today and about 60 countries on plan, and Volvo Cars' payment factory is operational in North America, Europe and China, with 'payments on behalf of' being done in Europe only.

All companies saw similar benefits with their payment factory solutions and expected benefits were in reasonable proximity to what was actually experienced. Electrolux expected cost savings—mostly by turning previously cross-border payments into domestic payments, not by bundling payments and not that much from reducing the number of bank accounts—, more efficient use of liquidity, some reduction in local administration, and a structured and standardised process. Post implementation, the cost savings did not seem as important as the improved process. Sandvik's focus has been on standardising procedures and saw benefits in cost savings by reducing the amount of payment transactions, by exchanging currency centrally, and by reduced system complexity. They also saw benefits in increased bank

independence, and tighter access and authority control. Volvo Cars also stressed the merits of standardised procedures and experienced benefits in terms of cost savings from a reduction in the number of banks, a reduced number of transactions, a reduced number of payment files, by making cross-border payments domestic, in terms of transparency of liquidity flows, and of flexibility in banking relationships.

IT was considered the main cost driver of the implementation and subsequent operation of payment factories. Including license costs of new IT systems (SAP In-House Cash, or FIS Trax) and integration work done to connect the new IT system into feeder IT systems and bank communication interfaces. Training and change management were thought to have some implications for cost as well, although, since the three companies all implemented the payment factory as a part of larger change projects, this training might be related to other aspects of those projects.

The main risk perceived by the interviewees tended to be orbiting the concept of process breakdowns where suppliers would fail to get paid. However, even this was not considered a major risk, and was not something that had actually happened as of yet. In the cases where the payment factory implementation was part of the SEPA compliance project, the failure to comply on time was viewed as a major risk. Human resource risks—or motivational risks—that people are unsatisfied with the new operating procedures were generally considered something that could be solved by change management; i.e. as sentiments that came up as arguments in the debate preceding the implementation projects, but that later were transformed into sentiments of content with the new way of working. Fraud risk was generally considered to have been reduced because of reduced manual inputs in the payment process.

4.2 Current state at SKF

The current state at SKF is delineated through the macro MCS and the micro MCS. These are connected to various institutional logics in order to set the stage for an analysis of how the macro MCS can mediate or moderate the strategic change in the form of a payment factory and the consequent change of micro MCS.

4.2.1 The macro MCS and institutional logics

In order to give the macro MCS a clear definition in the case of the potential strategic change of introducing a payment factory at SKF, critical success factors must be identified. Three in total are made the focal point of this analysis. First, SKF aims for *cash flow maximisation over time*, i.e. the profit motive. Second, and related to the first, *cost competitiveness* is viewed as important; especially within the context of the payment factory decision. Third, it is important to deal with *globalization*, to follow shifts of economic power and to ensure organizational capability to adapt globally.

All three CSFs are made public in SKF's annual report for 2016 and arose as considerations in discussing the payment factory idea in informal and formal meetings. The fact that these three subject areas are simultaneously anchored in top management, as suggested by their inclusion in the annual report, and taken into account in discussions at various places in the finance function indicates that they truly can be considered CSFs in accordance with Rockhart's (1979)

definition. For example, in the context of the strategic change of a payment factory, cost competitiveness could be obtained from the reduction of bank fees per transaction, reduction of cost for maintaining bank accounts, reduction of cost for foreign exchange conversions and reduction of cost due to a more efficient process (Head of Treasury Operations). Cash flow maximization could be obtained by offering internal customers timely payments and accurate management of internal balances, and the organization could become more adaptive to globalization in making global supplier payments easier (ibid). However, without analysing the enforcement of these CSFs, the description of the macro MCS is not complete. This analysis is centred around professional and corporate institutional logics as they appear in informant argumentation around the proposed strategic change of the payment factory at SKF.

Discussions surrounding the three CSFs fulfil the criteria of a *corporate logic* in the institutional logics framework of Thornton et al. (2012) since they display all distinguishing features (see Table 2-1). The root metaphor is clearly related to the corporation as a hierarchy since the CSFs were discussed mainly in relation to the very practical question of how to gain organizational support from the right decision makers. What hierarchical level would be required to make the formal decision were an explicit consideration here, and a decision's 'strategicness' were its basis of status. The source of legitimacy is related to the market position of the firm since all CSFs relates to competitiveness, and strategic priority is given to firm growth. With annual reports as a foundational element of the CSFs it is clear that the board of directors and top management is the source of authority. It is also evident that all employees are expected to share these CSFs as goals to work against, but that specific bureaucratical roles define in what way. In the capacity as a support function, the group treasury department were highly focused on their specific role which, as will be shown, also is connected closely to their professional logic.

Within the context of the finance function, both people at the group treasury department, which is on a higher hierarchical level, and people at business unit financial management, which is on a lower hierarchical level, follow all three CSFs. Hence, the macro MCS should be successful in guiding employee behaviour (Anthony, 1965), regardless if the outcome is a better performance in the CSFs or not. As long as they are kept in mind and perceived to be important by individuals in the organization, they are in some way working as a guiding influence. Because people from the group treasury department and people from business unit financial management hold different opinions towards the potential strategic change of a payment factory it is apparent that multiple solutions could exist that would contribute to performance in a CSF equally. Thus, in order for the macro MCS to be effective, it would require some kind of selective mechanism as well. This mechanism is a negotiating process between organizational members, and since the corporate logics are already largely imbued in the CSFs some other logics are required to give meaningful input on how good CSF performance can be achieved.

4.2.2 Professional logics and the current micro MCS

The group treasury department operates the group's cash-pool, in-house bank with financial netting of group internal business transactions, hedges operational risks with financial instruments, engages in proprietary trading, are involved with supply chain financing

arrangements, manages central payments and capital market funding. The opportunity of setting up a payment factory was also identified by this department, and it is them that takes the initiative in favour of the project. With a worldwide SAP rollout and perceived inefficient payment processes at local subsidiaries, it was realized that there might be a chance to improve the current control situation for the currently organizationally dispersed supplier payment processes. In taking the initiative, the group of treasury professionals guides the organizational discussion on the subject. As will be shown shortly, this discussion proceeds with a quite distinctive logic on the part of treasury professionals as differentiated from the logic of other financial professionals in the organization. Also, as indicated by the close association between treasury professionals across firms, found in the course of informal and formal interviews, treasury professionals can also be said to have their own institution of common norms, values and interests, making this an institutional professional logic (Evetts, 2013).

As the organizational form of the finance function is usually split into a control and a treasury part (Merchant and Van der Stede, 2007), the corresponding professional logic of other financial professionals will be termed the 'controlling logic' and the logic based in treasury reasoning as the 'treasury logic'. The two taken together then, would be the 'finance professional logic', or 'finance logic'. The uniting feature of the treasury and controlling logics can be found in the focus on money, in the one case as a means of regulating group external relations and in the other as a means of regulating group internal operations. Hence, they both share a direct collaborative relationship with corporate logics as expressed concisely in the first two of the three CSFs of cash-flow maximization, cost minimization and globalisation. Indeed, finance as a function of business has been dominant within firms over large periods of time in recent history (Fligstein, 1987). Hence, it is not surprising that the professional group operating this function has its own institutional logic, also possessing strong associations with corporate logic.

The difference between the controlling and the treasury logics can be illustrated by a comment made by the only supply chain financing person in the group treasury department. He noted that everyone else is mentally geared towards looking outwards at bank-firm financial arrangements while he is more focused on internal processes; a necessity when setting up supply chain financing arrangements. This is an example of controlling logics; and of treasury logics by negation. In this case, treasury logics seem to emphasize external relations, while controlling logic emphasize internal routines. Indeed, controlling functions place more focus on the design and operations of internal controls than treasury functions (Merchant and Van der Stede, 2007). However, the remark of the supply chain financing person is also indicative of the intersection of the two logics; while supply chain finance requires taking internal process into consideration, it also aims at managing external relations with suppliers from a financing arrangement perspective.

The group treasury department at SKF identified closely with their professional institution and were persistently stressing the limits and possibilities within the sphere of their functional domain. In the context of the payment factory it was emphasized that the group treasury department does not want to get involved in the internal process preceding the point where the payment file can be sent to the bank for execution. Everything preceding this point was considered to be outside the department's sphere of competence. It was also evident that the

new payment factory should become a part of the group treasury department, since this department is equipped with the knowledge to manage the payment factory in the best possible way. This idea went together with the idea of being served with pre-made payment files ready for execution. Approval of the payment order would then merely be a matter of formality in terms of time requirements, hence rendering the idea of having shared service centres running the payment factory immaterial in the context. The capability supplied by the group treasury department to the payment factory would instead be in regulating relationships with banks. Choosing 'payment types' (e.g. domestic versus cross-border payments), exchanging currency in the most efficient manner, bundling multiple payments to the same supplier through 'payments on behalf of', an easier negotiation and change process of banking arrangements, and better cash projections per bank account.

Business unit financial management on the other hand, failed to immediately recognize the usefulness of the payment factory idea. When explained in treasury logics terminology, some of the possible benefits with the payment factory arrangement were acknowledged. However, these benefits were still regarded as minor improvements in comparison to the problems they were faced with in their daily work. That is, in their work in the process prior to issuing the final payment order; the processes of purchase and invoice approvals for example. This controlling logic were more focused on reconciling information from various sources to ensure its correctness, in the context of imperfect IT systems supporting an in many ways non-technical process. The emphasis of technology support was not absent in this logic either, but included views of more and less optimistic varieties. Especially informants situated at headquarters expressed opinions on the enabling uses of IT, and the relative ease to which a payment factory could possibly be put into practice.

4.2.3 The current micro MCS

The micro MCS related to this case is centred on the information system and a very detail-oriented control of the payment process. Its main purpose is to make sure that all payments going out are based in legitimate financial claims on the corporate group, and that they are paid on time and in the most cost-efficient manner.

Today, the SKF Group has a highly scattered IT system landscape and has recently initiated a global rollout of an ERP solution based on SAP. Legacy systems connect to a general ledger in a custom-built IT system called SARA (SKF Accounting and Reporting Application) referred to as a 'Masterpiece' system (which might be the name of the base system from which the SARA system was adapted). About 80 to 85 % of the group companies makes use of SARA while the others run on completely different systems. The companies running other systems are mostly recently acquired companies. SKF launched the SAP ERP rollout from 2015 in both Sweden and Finland and covers finance, purchasing, sales and other functions. For the immediate future, launches are planned for Poland and Spain, with estimated time of global completion set at 2022.

This means that there are different ERP systems in SKF Sweden and SKF Germany. The CFO for Sweden said that the current state of the new SAP system is not a good solution since people in the department are used of working in the old SARA Masterpiece system; some having worked in SARA for 37 years. Additionally, it is hard to manage the cash flow since with SAP,

there is no easy way of scheduling payments to be executed in the future. Once the payment order file is sent from SAP to the bank it is executed that same day. For SKF in Germany, companies use the old SARA system. This leads to maintenance problems with technical integrations between the multitude of systems (CFO for Germany).

The invoice and payment process is managed by a division of activities between business unit financial departments and shared service centres managed by Capgemini. Usually the process starts with the receipt of a paper invoice that is scanned by Xerox at Sandviken in Sweden and uploaded into the IT system used by the receiving group entity to manage its accounts payables. There also is a possibility of directly importing the data into the accounts payable IT system. Either through emailing of PDF invoices or of electronic data interchange via a recently acquired IT system called SAP Ariba, however the current usage of these methods remains relatively low.

Then, Capgemini takes over. The key information contained in the invoice is coded into the correct fields into the accounts payable system and automatic matching of the coded invoice to similar electronic representations of purchase orders and goods received vouchers is attempted. In Germany, about 50 to 60 % of all invoices can be matched whereas the percentage is materially lower in Sweden. If purchase order, goods received voucher and the invoice match, Capgemini prepares a payment proposal file for all invoices with due dates falling inside the range of the current payment run. Early payments to take advantage of early payment discounts in Germany are initiated manually by the German finance department. After the payment proposal is approved, it is issued as a payment order to the bank which in turn schedules the payment for execution. If the three documents do not match, or if there is no purchase order, a separate flow is pursued.

The no-purchase-order flow or the document-mismatch flow requires the obtaining of additional approvals following the "four eyes principle". If, for example, an SKF representative is written on the invoice lacking a purchase order, it is sent to this person for a first approval, and if no representative can be found the supplier is contacted to get one. After the first approval, it is approved again by the first approver's manager or the otherwise organizationally closest manager with sufficient approval limit. Once approved, it is marked as such in the accounts payable system and included by Capgemini in coming payment runs.

The CFO for SKF Sweden mentioned that purchase order invoices are much safer than non-purchase order invoices, because the system does not react on approval limit breaches. So, every day, these kinds of breaches need to be checked manually. There are also other problems such as mismatches of master data and the wrong setting for payment method. Since it is the purchasing people that controls the vendor master data, all changes must go through them. If the vendor master data has the wrong payment method (e.g. SEPA payment) it might result in that the vendor will not get paid. The CFO for SKF Germany also mentioned some problems regarding the communication with the shared service centre. Since invoices are processed by a shared service centre in Poland, with not everyone speaking perfect German, there is a larger risk of invoice information being misunderstood.

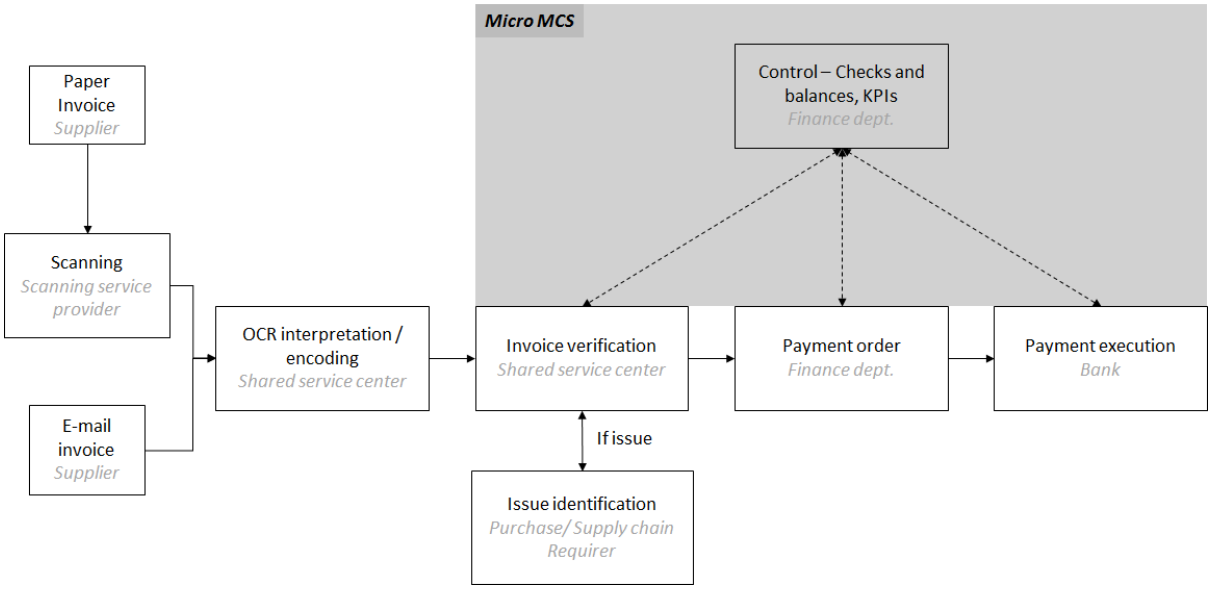

Figure 4-1. Current Micro MCS at SKF.

Usually, the business unit financial departments follow up various performance measures in relation to the invoice and payment process, such as the amount of cash discount loss in Germany, and the number of days non-purchase order based invoices are unapproved in Sweden. These, together with the unaggregated data are the central, most formalized aspect of the micro MCS. The interactive use of the data is the more informal, but for the effectiveness of the MCS, equally important part. For instance, invoices approved by individuals breaching their approval limit are corrected by finding new approvers with the right authority, and unprocessed invoices are dealt with by communicating with the person responsible for processing it.

4.3 SKF's new micro MCS, I - two routes

In addition to differing focus along the dimensions of 'external financial arrangements'/ 'internal routines' and 'IT'/'personnel' already noted, a marked difference of the treasury logic to the controlling logic is the tendency of the group treasury department to emphasize decision-making. That is, things which they can do themselves directly through technological means or otherwise, while the controlling logic on the other hand, recognize and accept the complexity of social action. In other words, the payment factory project itself is conceptualized to change the decision-making authority and thus moving control of the banking relationship to the group treasury department instead of local business units. Presumably, by changing this decision-making authority, better decisions will be made from an organizational perspective.

The tension between the treasury logic and the controlling logic manifests itself in different opinions about the preferred design of the payment process. If the group treasury department's unwillingness to dabble in the process prior to the issuing of the payment order to the bank—other than choosing the account to pay from, what payment type to use, and how to fund the transaction with the required currency—should become a reality with an implementation of a payment factory, then this implies a small change in the payment process. The new process is depicted in Figure 4-2 where all solid line arrows indicate information transmitted in order to

arrive at final payment and control with associated feedback information is indicated by dashed arrows. In terms of the micro MCS, the Payment Factory steps in as a new element in the control of bank activity; i.e. inter-organizational control. However, the same reconciliations and the same amount of work is done by business unit finance departments. Treasury logic stress that control in the payment factory will not extend backwards, but when the flow of information change, this might become a consequence anyway. The potential strategic change of a payment factory on the micro MCS governing the payment process is identified as a changed flow of information, altered approval authorities enforced through IT-enabled action controls, and newly created organizational tasks. The informational core of the micro MCS is almost exclusively made up of financial information in the form of planned and historical payments.

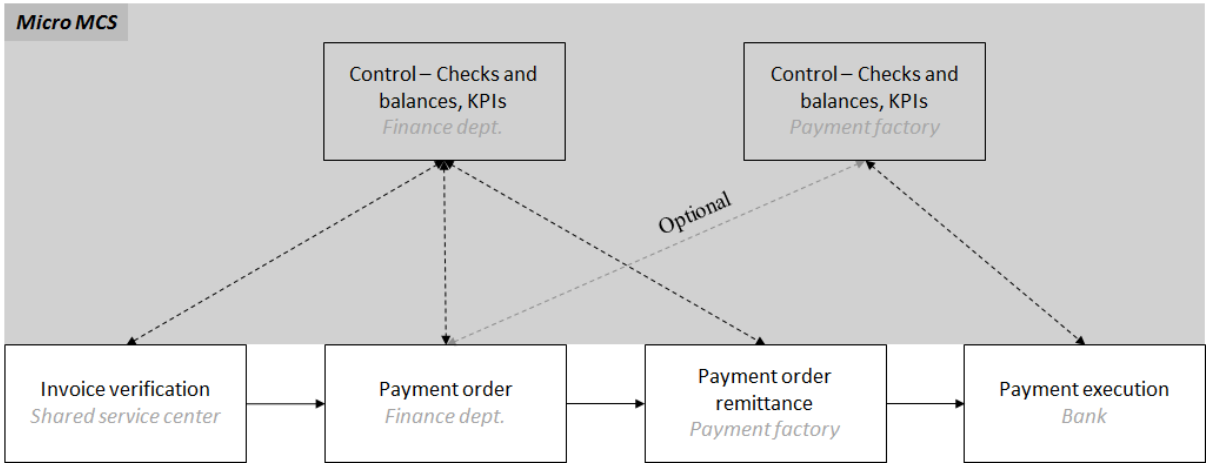

Figure 4-2. The proposed new payment process at SKF.

Two main types of payment factory supported payment processes within this general frame have been identified in the interviews of group treasury departments outside the case company (see Figure 4-3). Firstly, the payment factory could be conceived of as an IT-system through which business unit finance departments access their banking services, like a common internet bank portal for all their banks. Secondly, it could be conceived of as a system closely intertwined with the group's in-house bank through which business unit finance departments conduct their banking business. The second alternative implies the payment factory as an internal counterparty in group external transactions, while the first alternative implies a control function of the payment factory without being directly involved in payment execution. That is, in the first alternative, the exercised control would be backwards on business unit finance departments regarding their banking transactions, in addition to control of bank contract adherence.

Two companies out of three had a solution of the second alternative, and one company of the first. Corporate logic dictated the choice between the two, as the first-alternative company were dominated by trends of decentralization partly originated in the visions of a new CEO, while the others were dominated by trends of centralization. Treasury logic in itself does not seem to favor any one of these solutions in particular, since all informants agreed that payment factories can take on both varieties. However, the second alternative is viewed as the more 'evolved' version.

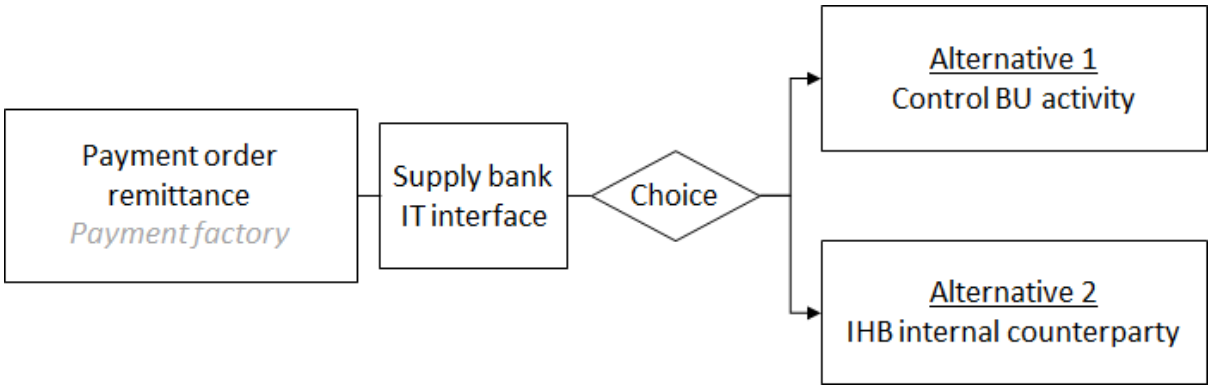

Figure 4-3. Two possible types of payment factory solutions with two distinct Payment Factory roles.

Since SKF is in the process of implementing a global ERP system, it could theoretically go both ways in this decision. Because a common ERP solution would make the second alternative more attractive while a multitude of ERPs makes the first alternative more attractive. All two 'with-payment-factory companies with in-house bank integration' had its payment factory as a part of a common ERP solution while the one 'with-payment-factory company with control of business unit payment activities' did not have a common ERP solution. As long as the payment file is sent manually by business unit finance departments through a common payment platform it does not make sense to add another level of approvals at the payment factory. Since, at this stage the payment file is already effectively internally approved at the business unit level. On the other hand, if the completely approved invoice travels to the payment factory automatically, the final payment could then be approved only once (with the four eyes principle, i.e. by two individuals), legally binding the bank to execute the payment simultaneously. IT costs of integrating many ERPs into a common payment factory platform would most likely not be motivated to achieve the second alternative solution with a multitude of ERPs.

4.4 SKF's new micro MCS II - the choice

Corporate logics, as expressed in annual reports and through informal meetings, suggest that cash flow maximization over time and cost competitiveness, i.e. the profit motive, are important CSFs and that globalisation is another one. Specifically, in the context of the finance function, cost minimization becomes the most relevant CSF. The group treasury department highlights efficiency gains, i.e. cost savings, from a payment factory implementation, something that is corroborated by the experience of the treasury professionals at the other companies. However, people at business unit financial management are afraid that the strategic change would influence their flexibility and capacity to meet external demands placed on them effectively. For example, the CFO in SKF Germany stated that:

> "I do not really see an advantage [of centralizing payments] because still we need to have control over the payment, when it comes to VAT payments to recurring payments etc. He [people at payment factory] will pay an exceptional list of suppliers. If you completely centralize this process, the persons who dealing with this, need to be aware of the exceptions and the process. You can of course centralize everything, the question is 'are you flexible enough from local point of view?"

Specifically, he mentioned that their financial measurement of getting more cash discount might be influenced by the reducing of flexibility locally:

> "At the moment, we're doing an extra payment run for certain cash discount suppliers because we do not want to lose the cash discount. If this can be picked up centrally it can work of course, if not, we lose our flexibility in doing our daily business, manage the payments at the end of [the process]. Of course, if treasury centralize the process, group treasury can influence the process worldwide. If the centralizing payment can fulfill with exceptions it can work, but someone needs to sign up for the payment."

Thus, Group Treasury favours efficiency or cost, while business unit financial management favours flexibility. In this sense, business unit financial management apply treasury logics to argue that the business unit is better situated to keep the decision-making authority; that they are better situated to manage the external financial arrangements with suppliers. On the other hand, the group treasury department apply controlling logics in arguing for the payment factory in terms of an improved internal process. In reality, the only improvement to the payment process would be in the absolutely last stage; in the relationship to banks. Though, here, another kind of flexibility was argued for, a flexibility for the group as a whole in relation to banks. In other words, the group treasury department, and their colleagues at other companies, apply corporate logics in highlighting the effect on the overall business, rather than the needs of local business units. This tension between corporate and treasury logics on the one hand, and controlling logic on the other was expressed explicitly by the CFO for SKF Sweden, with corporate logic represented by the group purchasing department:

> "In masterpiece [the old ERP] we could change the master data. But in SAP we can't, instead we have a special master data group. It's really hard for us to change bank account for example. That is also a bad setup I think. Purchase [for Sweden, the group purchasing department] says that this is a purchase process – everything. We have a lot of problems with the master data so that is very bad for us."

When retold to the group treasury department, this sentiment was met with the argument that this arrangement is there for a purpose; separation of duties. A response indicating strong association with corporate logics and simultaneously an example of treasury logics in the unwillingness to meddle in pre-payment processes. But it does have limiting and process detrimental effects at the business unit level, leading to more time devoted to unproductive tasks such as side-stepping the master data requirement and the purchasing department in order to make legitimate payments needed in the business.

In taking a broader view, corporate logics aims to serve the entire group rather than constituent parts. However, there is no guarantee that this purpose would actually be served by following the arguments of the group treasury department and implementing a payment factory at SKF, even within the organizational CSF of cost minimization. The main benefits identified in the interviews with Group Treasury and the treasury representatives from the other companies included:

- foreign exchange cost savings
- cost savings from changing cross border payments into domestic payments ('payment

type benefit')
- standardized process

Data on the current number of cross-border payments indicates that the maximum cost savings possible is somewhere around 1.75 million SEK. Redundant foreign exchange cost is currently unknown and could make a material contribution to the overall payment factory performance. Even if the total 'payment type benefit' would be realized, the license cost for the payment factory IT system could consume a major part of this financial benefit. On top of this, IT implementation costs need to be considered. Hence, alternative one (see Figure 4-3) of integrating the payment factory into legacy systems, by needing a great deal of IT implementation efforts, seems like a worse solution than alternative two for the case of SKF when confining the analysis to corporate and treasury logics. Therefore, the strategic change in the form of a payment factory is not certain to make a contribution to the CSF of being cost competitive.

Having standardized processes were a common theme in discussing with all representatives of treasury departments and thus, can be considered an integral part of treasury logics. This is not necessarily something that contributes to the CSF of cost minimization but is still an argument in congruence with corporate logics in the case of SKF (e.g. SKF, 2016, p.26).

4.5 Consolidating treasury and controlling logics

It is unclear if the strategic change of a payment factory will become realized or not in the case of SKF. However, it is clear that people at the group treasury department and people at business unit financial management hold different opinions on its merits. People at the group treasury department believe that the changes enable them better control of payments. For example, they can better plan the overall cash flow and reduce the costs through bundling payments. However, people at business unit financial management think the micro MCS change may have a negative impact on their capacity of reducing financial cost and on flexibility of managing local payments. The strategic decision of having a payment factory is also treated as an unnecessary change. The tension between these two logics might bring problems in coming to an agreement on the potential strategic change.

The tensions between treasury and controlling logics lead to difficulties in obtaining organisational support in order to implement the strategic change of a payment factory. The importance of getting organizational support for strategic change is mentioned multiple times during the interviews with treasury departments outside of SKF. Therefore, organizational capacity and receptiveness need to be identified in an early stage. For example, before the other three payment factory companies implemented the payment factories, CFOs in subsidiaries were involved to make sure that they understand this idea and that headquarters can get the support from their subsidiaries. One treasury professional mentioned that negotiations at the beginning with the subsidiary management team are important and that questionnaires were sent out to get the answers in advance. One of them mentioned that getting organizational support is not a difficult thing as long as the firm has a clear policy and offers sufficient training.

If the strategic change of a payment factory were to occur at SKF, the payment process would end up as outlined in Figure 4-2 with new control exercised by the payment factory on banking

relationships. Possibly also with control of business unit finance department payment routines. This change would proceed along the lines of Figure 4-4 where the complete 'circle' from macro MCS influence on strategic change to the strategic change impact on the micro MCS is mapped out. Though, only one 'after change' state is displayed; the case when a payment factory is implemented.

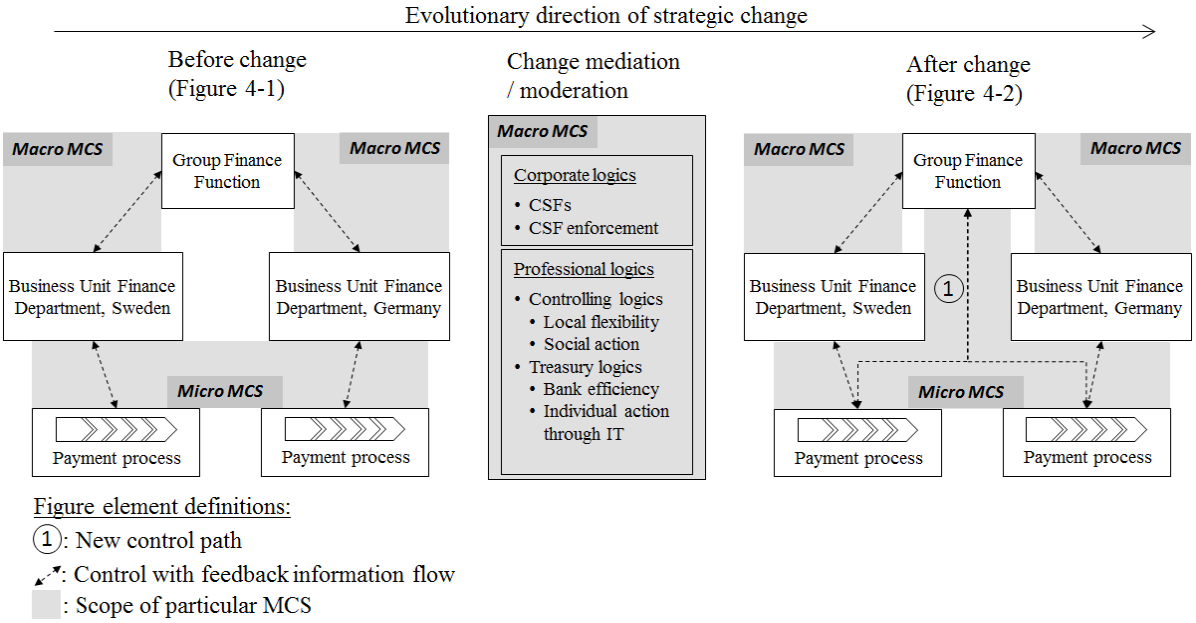

Figure 4-4. Main conclusions.

Both corporate logics and professional logics mediate and moderate the enforcement of the macro MCS, and thus the strategic change. In identifying the possible paths of micro MCS change, it is evident that people from the group treasury department and business unit financial management hold different opinions towards the potential strategic change of a payment factory. These differing opinions are related to two distinct professional logics, treasury logics and controlling logics which are key in understanding the macro MCS enforcement. The tensions and collaborations between these two logics will have decisive influence on whether and how the strategic change of a payment factory will become realized. Both logics can be used to make strong arguments aimed at convincing about the advantages and disadvantages of the strategic change. Treasury logics places its focus on efficiency and in making decisions on behalf of the group executed through IT systems. The point being that this centralisation benefits the group as a whole. Controlling logics on the other hand argues for the local flexibility of the current payment process and stresses the complexity of the process preceding the payment, downplaying the significance of potential group benefits contributing to the CSFs.

5 Discussion

In this section, the analytical conclusions are related to findings in previous research.

By applying the institutional logics framework of Thornton et al. (2012), it was possible to identify two distinct professional logics together with a corporate logic at SKF. The separation of a finance professional logic into a treasury professional logic and a controlling professional logic seems highly reasonable in light of the most common organizational form of finance functions (Merchant and Van der Stede, 2007). However, this separation has not been emphasized in previous research.

It can generally be said that previous studies on the interrelationship between management control systems and strategy have been focused on the organizational context of line management (Martyn et al., 2016). Hence, the finance function usually becomes perceived as one homogenous organizational function with one unified 'voice' out into the rest of the organization. That is, the only way that the finance function is perceived to exert its influence is through the specific management control tool under scrutiny. For example, Hansen and Mouritsen (1999) focus on one very specific management control tool in the form of a sheet of paper detailing budgeted and actual sales orders. This is the only way that the finance function enacts its influence, and instead, argumentation occurring within sub-networks of actors in various line organizational functions is the focal point of analysis. Roberts (1990) gets closer in identifying distinctive financial sub-logics by explicitly involving and conceptually mobilising a financial logic in the organizational debate, but it is still a unified logic representing one set of common interests. While there are some studies looking at specific parts of the finance function, they still view the part as a representation of the whole. Plesner Rossing's (2013) study of a multinational enterprise's international transfer pricing strategy is an example of such a study. In this study, it is highlighted that inter-organizational networks are especially important within the area of international transfer pricing strategy, suggesting that a common professional logic may be distinguishable. But instead of elaborating on differences between international transfer pricing logics and finance logics, the control of this tax strategy is viewed as one example of the operation of the finance function.

Thus, the present study contributes with a new way of analysing professional tensions within and between finance functions. Like the Plesner Rossing (2013) study suggests, it might also be possible to identify more professional logics within the general institutional logic of finance professionals than has been identified here. This further decomposition could be a fruitful area of future research.

The general closeness of the specific institutional logic of finance professionals and corporate logic in today's society has also been pointed out and explained by the dominating role played by finance professionals during recent history (Fligstein, 1987). This dominating role played by finance professionals within corporations means that the distinction can be hard to make between finance and corporate logics. Though, one distinction can be made by remembering the tension of long-term strategic success and practical possibilities of delegation suggested by Goold and Campbell (1987) and supported by Roberts (1990). A finance logic would generally

prefer the latter. Cash flow maximization over time can be regarded the primary CSF in SKF's macro MCS. Finance logic obviously frames this CSF since it is explicitly expressed in financial terms. However, performance in it can be achieved in an infinite variety of ways. In the present paper, this was elaborated upon in the tensions between the controlling and treasury logics in how best to achieve cash flow maximization and success in the other CSFs within the context of a payment factory decision. While it is hard to draw definitive conclusions on which specific argumentation is stronger even within the very specific dimension of cash flow maximization, previous research in the contingency theoretical tradition does support that this negotiating process does lead to good outcomes under certain conditions. More interactive use of the MCS is one such condition (e,g, Bisbe and Otley, 2004; Adler, 2011; Kober, Ng and Paul, 2007; Frow et al., 2010). The extent to which the macro MCS is enforced interactively in the case of SKF is not known, but the CSFs themselves were deemed important in the discussions surrounding the potential strategic change of the payment factory. Thus, the guiding influence of the macro MCS was apparent, and the success or failure of outcomes is dictated in part by the rhetorical capability of the proponents of various solutions for design of the payment process.

Like already noted, most research on the relationship between MCSs and strategy has been targeted on only one direction of influence, either in the form of a fit of MCS design to certain strategic orientations as is the focus in contingency-based research (Langfield-Smith, 2006), or in the form of MCS impact on strategy as is the focus in case studies applying the levers of control framework, usually looking at interactive uses of formal MCSs (Martyn et al., 2016). By looking at two specific management control systems, one micro MCS and one macro MCS, it was possible to investigate the dynamics of a bidirectional relationship between MCSs and strategy.

Building upon previous research on interactive use of MCSs (Martyn et al., 2016) it was assumed that some kind of guiding influence does exist from the macro MCS on the potential realization of the strategic change. The dynamics of this influence were analyzed by following the points made within corporate and professional logics made use of by organizational actors in trying to convince other actors of the contribution that their respective solution would make to the critical success factors. These dynamics became a representation of the enforcement or use of the macro MCS. In this respect, the present study shares a common approach to the article by Hansen and Mouritsen (1999) who looked at arguments centred around 'competitiveness', which can be considered to be a critical success factor. By pinpointing plausible paths that SKF could possibly take and highlighting the paths preferred in the argumentation of each respective institutional logic, this dynamic influence was made concrete. The plausible alternative paths were derived from the data by comparing various possible payment factory solutions' respective contribution to performance on the critical success factors taken together. This is an unusual research approach because it involves imagining what may become realized in the future. But it does respond to the suggestion made by Kober et al. (2007) in that it provides a case study in the context of a decision-making phase preceding a realized strategic change. The specific case of a payment factory does provide a good kind of strategic change in this regard because of a comparatively narrow set of possible alternatives, moderating the drawback of imagining the future.

One of the few articles explicitly lending support to the idea of a bidirectional relationship between MCSs and strategy is the article by Kober et al. (2007). The present study adds another case in support of the bidirectional MCS-strategy relationship. But more importantly, it provides an account detailing *how* one complete 'circle', from an instance of MCS influence on a strategic change, to the strategic change's influence on another MCS, may proceed over time. The bidirectional relationship is supported implicitly in studies looking separately at either the question of MCS influence on strategy (e.g. Marginson, 2009; Widener, 2007; Adler, 2011; Frow et al., 2010; Plesner Rossing, 2013) or the question of strategy's influence on MCSs (e.g. Abernethy and Lillis, 2001; Davila 2000; Abernethy and Brownell, 1999). However, some contradictory evidence also exists (e.g, Bisbe and Otley, 2004). In following the complete 'circle', both effects become explicit. In particular, it is evident that all management control systems are not made equal in their ability to influence strategy. The micro MCS, as an example of a highly detail-oriented MCS can be perceived to exert only minor, or even void, influence on strategy, while the macro MCS exerts material influence. This heterogeneity of strategic influence in MCSs is not explicit in previous literature because of a dominating focus on budgets and performance management systems in most studies investigating MCS impact on strategy (Martyn et al., 2016). In other words, these studies primarily look at MCSs centred around numeric measurements. Heterogeneous strategy effects are made clear by conceptualizing the macro MCS as largely non-numeric and contrasting it to the micro MCS centred around payment information, the most basic of financial numeric information existing in business.

However, the detailed nature of the micro MCS may not preclude some other strategy effect, due to a change in the micro MCS, from occurring. The change under investigation here had inter-organizational control as its primary target, as is evidenced by the strong reliance placed on external efficiency in the bank-firm interface within treasury logics argumentation. Mouritsen (2001) notes that 'unintended' control effects may arise in exactly such a setting. That is, despite arguments made in treasury logics, the change might imply other strategic reorientations as well. But in the SKF payment factory case this point would require further investigation. On the other hand, one thing that is clearly supported is the importance of adapting inter-organizational MCSs to external demands as stressed by Euske and Riccaboni (1999). In all treasury departments outside of SKF, the new SEPA requirements were an important consideration in making the payment factory decision, and the control of banking relationships an important perceived benefit in having this solution.

The non-numeric nature of the macro MCS also relates to the fact that it is comparatively informal (Collier, 2005). Martyn et al. (2016) and Tucker and Parker (2015) points out that there is an insufficient body of research on informal controls. While the definition of MCS in many research settings includes a wide spectrum of formal and informal controls, empirical studies in the specific field of MCS-strategy research often operationalize MCS narrowly as *formal* controls (Berry, et al. 2009). By applying a broader definition of MCS, specifically in downplaying the significance of numeric data in the macro MCS, this paper provides a case study on the influence of informal controls on strategy.

6 Conclusion

In this section, the research questions are explicitly answered, theoretical contributions and future research summarized, and practical implications explained.

The purpose of this study is to investigate the bidirectional relationship between MCSs and strategy. This purpose is decomposed into two research questions. The first research question is how the macro MCS influence the potential for strategic change in the form of a payment factory within the context of the finance function. This is answered by following the dynamics of corporate and professional logics in informants' argumentation aimed at achieving performance in the critical success factors in the macro MCS. In this analysis, two distinctive professional logics were identified within the finance function; a controlling logic and a treasury logic. These are identified as key in the enforcement of the macro MCS in the context of the potential strategic change of a payment factory. Tensions between the treasury logic and the control logic highlights a conflict between efficiency and flexibility. The second research question is how the micro MCS would be changed by the realized strategic change of a payment factory. This question is answered by describing the old payment process, and comparing it to a new, probable payment process as described in Figures 4-1 and 4-2 respectively. If the payment factory would become realized it means the creation of new activities at the location of the payment factory which may or may not be contributing to the CSFs' in the macro MCS.

This study contributes to MCS-strategy research and accounting research more broadly in pointing out the distinction between controlling and treasury logics. By making this distinction it is possible to follow and elaborate upon tensions within the internal operation of finance functions. The present paper further contributes to MCS-strategy research by investigating the bidirectional relationship between MCSs and strategy and detailing its complex dynamics. Previous studies have been focused on either of the unidirectional influences; MCS influence on strategy (Martyn et al. 2016) and strategy's influence on MCSs (Langfield-Smith, 2006). This was made possible by separating between a micro MCS and a macro MCS and by looking at one specific strategic change context instead of broad thematic strategy typologies. The study also supplies a case study involving informal MCSs which are generally lacking in MCS-strategy research (Tucker and Parker, 2015).

It has been hinted that the investigated separation of a finance logic into a controlling and a treasury logic may be one way of decomposing the finance logic among many. For instance, Plesner Rossing's (2013) study suggests a separation of international transfer pricing specialist logics, and others can most definitely be imagined. This can provide a fruitful area of future research. Alternatively, while the present study centres around various institutional logics within a finance function, future research could look at other organizational functions in similar, or even greater, detail. Another area of future research concerns the distinction between a micro MCS and a macro MCS in the investigation of the bidirectional MCS-strategy relationship. This research design allows the construction of a detailed account, tracking the complete 'circle' of events from macro MCS influence on strategy, to a strategic change, to the strategic change's influence on the micro MCS. It highlights the heterogenous nature of the MCS concept and places emphasis on the less rigorously research area of MCS influence on

strategy by detailing the change process in practical terms. In applying this approach, it would be optimal to study a strategic change from initial decision to realization (Kober et al., 2007).

6.1 Practical implications

The payment factory is a highly practical concept with almost no prior academic literature referencing it. Most written materials on the subject are authored by professionals or service providers such as banks, involved in the working process of running payment factories. The practical implications in this study are concerned with the practical design of the payment process and whether it is a good idea for SKF to implement a payment factory.

As all three interviewed companies besides SKF introduced their respective payment factory as a part of some other project, either in the context of a global ERP solution or as a part of the SEPA compliance project, it does not seem reasonable for SKF to act otherwise. Because SKF does have a global ERP roll-out in early stage progress, it is an opportune time to include the payment factory as a module within this overall project. This would minimize implementation costs which otherwise could eradicate a large portion of expected benefits and would also make an alternative two (see Figure 4-3) solution a realistic alternative. A material part of benefits with a payment factory at SKF would be in the making of ‘payments on behalf’ of other group entities which is only possible in alternative two. Implementing a solution of alternative one (see Figure 4-3) would lead to an internal control responsibility that no organizational actor is currently fit or willing to take.

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