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An Institutional Study on Management Accounting Change in Air Greenland

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SOLBJERG PLADS 3
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PhD Series 27-2017

Lars Balslev

ACTORS AND PRACTICES

**AN INSTITUTIONAL STUDY ON
MANAGEMENT ACCOUNTING
CHANGE IN AIR GREENLAND**

Doctoral School of Business and Management

PhD Series 27.2017

CBS  **COPENHAGEN BUSINESS SCHOOL**
HANDELSHØJSKOLEN

Lars Balslev

Actors and practices – An institutional study on management accounting change in Air Greenland

An institutional study of how commercial and social forces effect management accounting change in Air Greenland

Lars Balslev

Actors and practices

– An institutional study on management accounting change in Air Greenland

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**Actors and practices –
An institutional study on management accounting change in Air Greenland**

Lars Balslev

Supervisor:
Sof Thrane, Professor MSO
Department of Operations Management
Copenhagen Business School

Doctoral School of Language, Law, Information, Operations Management and
Accounting and Culture
PhD programme in Technologies of Managing
Copenhagen Business School

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I hope that further research and more knowledge can promote much needed development in Greenland and that the people of Greenland can show their greatness and work together in building the future of this beautiful country and culture.

Resume

Actors and practices – An institutional study on management accounting change in Air Greenland

My former CEO was one of the first executives in Greenland to formally implement an extensive commercial strategy to identify the contradictory forces of social obligations and commercial strivings. This strategy was aimed at connecting managers, executives, and directors under a vision that was calibrated commercially and sociopolitically in support of a commercial airline that was a state-owned enterprise (SOE). In one of my first interviews with my CEO, I asked him about managing an SOE with a strong societal obligation. He noted that:

“...there is some inherent conflict in having the type of ownership we have, one in which the commercial owner demands higher profits or they will sell their shares, and the other two government owners, where one wishes to have the lowest possible fares and better infrastructure and the other one just wants less trouble. Well! This is the ongoing inherent conflict of the owner composition we just have to deal with.”

He emphasized that SAS, the more “commercial oriented” owner and private shareholder, wanted higher profits and gains, whereas the Government of Greenland, the “social oriented” owner, wanted their SOE to deliver affordable tickets and better infrastructure at a lower price. The Danish government was stuck in the middle of these conflicting forces, because they could see the validity of both the commercial and the social aspects. He emphasized that operating an organization that followed a social, political, and economic track made it difficult to determine the development of the organization. He saw that managers who adhered to following these tracks simultaneously created a wider range of rationalities in terms of socioeconomic output.

This thesis is inspired by research in the fields of management accounting and corporate governance in developing countries. It is noted that accounting and governance in Greenland resembles those in developing countries. However, the individual case studies in this thesis exhibit several differences (e.g., regulation, demographics, contextual, and economical) compared to developing countries. These case studies analyze change by focusing on actors and

practices and show how change results from the highly institutional environment found in Greenland. This thesis aims to answer the following research question:

How does change occur in Greenlandic SOEs, and how has this impacted management accounting practices?

To investigate and answer this question, this thesis and the individual papers use an institutional perspective to analyze organizational change in Greenland's unique environment. To fully understand change in this environment, this thesis uses both an institutional analysis and an analysis of strategic conduct to examine social structures (Giddens, 1984), competing institutional logics (Thornton & Ocasio, 2008), and institutional rules and routines (Burns & Scapens, 2000). The particular area of interest is understanding how change occurs in a highly institutional environment; how this is a part of organizational development; and how actors, institutions, and tools are elements of change and are central to the development of SOEs. This thesis analyzes one SOE and draws the following overall conclusions:

- SOEs in Greenland have developed despite the lack of wider regulative change, significant amounts of privatization, and strong market forces.
- The setting between social and commercial forces can be viable for the development of Greenlandic SOEs.
- The relation between social and commercial forces results in unintended consequences.
- These consequences create the "space" in which the actors maneuver and act.
- Individual actors act and create change that affects the development of SOEs.
- Complete liberalization and privatization would not be a panacea for Greenlandic SOEs and their development.

Furthermore, this thesis contributes to literature in the fields of management accounting and corporate governance. The papers examine multiple cases that establish that to analyze change in a highly institutionalized environment, multiple institutional perspectives are useful. More research is needed on the complex relations between different types of organizational change and what this does to organizational development when considering the uniqueness and extremes of the environment. Change in this environment needs to be understood more

thoroughly through the dual roles of structures and human agency. Change often results from exogenous forces and is thus also a part of endogenous processes.

Resumé

Aktører og praksisser – Et institutionelt studie af økonomistyringsforandring i Air Greenland.

Min tidligere administrerende direktør var en af de første ledere i Grønland der formelt implementerede en omfattende kommerciel strategiplan, hvilken skulle omfavne de modstridende kræfter af sociale forpligtelser og kommerciel stræben. Dens strategiske rolle var at samle chefer, direktører og bestyrelsesmedlemmer sammen under en vision, der var kalibreret kommercielt og socio-politisk til at støtte det selvstyreejede kommerciel flyselskab. Under et af mine første interview med den administrerende direktør, spurgte jeg ham om det at forvalte et selvstyreejet aktieselskab som har en stærk samfundsmæssig forpligtelse, og han kommenterede:

"... Der er nogle iboende konflikt i at have den type ejerskab, vi har den kommercielle ejer der forlanger højere overskud ellers sælger de deres aktier, hvor der er to andre regeringsejere, hvor den ene vil have lavest mulige priser og bedre infrastruktur og den anden blot ønsker mindre besvær. Nå! Dette er den tilbagevendende konflikt i ejer sammensætningen som vi bare er nødt til at leve med."

Den administrerende direktør understregede, at den mere "kommerciel orienterede" ejer og private aktionær SAS ønskede større overskud og gevinster, hvor Grønlands Selvstyre som den "social orienterede" ejer ønskede deres selvstyreejede aktieselskab til at skabe billigere billetter, bedre infrastruktur, til en lavere pris. Den danske regering som ejer var i midten af disse modstridende kræfter, da de kunne se rationalet i både det kommercielle og sociale aspekt (interview med CEO). Han understregede, det at drive en organisation, der skal følge et social, politisk og økonomisk spor, gjorde det vanskeligt at bestemme udviklingen af organisationen. Han observerede at ledere, der skulle følge disse spor simultant, skabte et bredt rationale når det kom til det socio-økonomisk output.

Denne afhandling er inspireret af forskningen inden for økonomistyring og corporate governance i udviklingslandene, og erkender, at der er ligheder til Grønland, når man analyserer økonomistyring og governance i Grønland. De enkelte casestudier i denne afhandling etablerer flere forskelle (f.eks. regulering, demografi, kontekstuelle og økonomiske faktorer)

sammenlignet med studier i udviklingslandene. Casestudierne i denne afhandling fokus på aktører og praksisser i analysen af forandring og hvordan dette er resultatet af et højt institutionelt miljø hvilke Grønland besidder. Forskningsspørgsmålet der skal besvares i denne afhandling lyder som følgende:

Hvordan sker forandring i de grønlandske selvstyrejede aktieselskaber, og hvordan har det påvirket økonomistyringspraksisserne?

For at undersøge og besvare dette spørgsmål har denne afhandling og de case studier tage et institutionelt perspektiv for at analyserer organisatoriske forandringer i dette unikke Grønlandske miljø. For at kunne forstå ændringerne i dette miljø, gør denne afhandling bruge af både en "institutionel analyse" og en "analyse af strategisk adfærd", hvor der sker en analyse af de sociale strukturer (Giddens, 1984), de konkurrerende institutionelle logikker (Thornton og Ocasio, 2008), og institutionelle regler og rutiner (Burns og Scapens, 2000). Fokus ligger i hvordan det høj institutionelle miljø skaber forandring og er en del af organisationsudviklingen, men lige så vigtigt, at aktører, institutioner og værktøjer faktisk er forandringselementer og central i udviklingen af de selvstyrejede selskaber. I analysen af dette ene selvstyrejede selskab er der skabt følgende konklusion.

- At statsejede virksomheder i Grønland har udviklet sig trods manglen på bredere regulativ forandring, store privatiseringer og fraværet af stærkere markeds kræfter,
- At konstellationen mellem sociale og kommercielle kræfter kan bidrage til udviklingen af grønlandske statsejede virksomheder,
- At forholdet mellem sociale og kommercielle kræfter skaber utilsigtede konsekvenser,
- At disse konsekvenser skabe "rum" for aktøren at "manøvrere" og agere,
- At de enkelte aktører agerer og skabe forandring der påvirker udviklingen af de selvstyrejede selskaber,
- At liberalisering og privatisering ikke er et universalmiddel for de grønlandske selvstyrejede aktieselskaber og deres udvikling.

Ligeledes, bidrager denne afhandling til litteraturen indenfor økonomistyring og corporate governance. De enkelte papirer belyser flere sager der etablerer ændringer i dette stærkt

institutionaliserede miljø, hvor flere institutionelle perspektiver nyttige når man skal forstå forandring. Mere forskning er nødvendig med hensyn til de komplekse relationer mellem forskellige former for organisatoriske forandringer og hvad det gør ved den organisatoriske udvikling, når det ses i det unikke og ekstreme miljø Grønland er del af. Forandring i dette miljø skal forstås mere dyberegående igennem strukturer og aktører som en dualitet – at forandring er en effekt af de eksogene kræfter, men også som en del af de endogene processer.

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1. Introduction

1.1 Empirical problem

Across a large part of Greenland, it is hard to establish sustainable businesses owing to the country's extreme and unique environment. Located in the far north, Greenland is the world's largest island with an area of 2,166,086 km², covering an area equivalent to the distance from Norway to the Sahara. It has a coastline of 44,087 km. Greenland has a population of 55,984 that is scattered over four cities, 14 towns, and 120 villages, all of which are geographically isolated from each other (Naatsorsueqqissaartarfik, 2015). Even today, many of Greenland's industries are operated and controlled by the Government through state-owned enterprises (SOEs)¹. The government uses this form of control and ownership to meet its obligation of ensuring the vital functions of society.

The Danish and Greenlandic governments are acutely aware of the challenge of this unique and undeveloped market. In 2003, the Commission for Self-Government Arrangement² reported its findings regarding future development in Greenland, stating "...the Commission accepts that within several industries, it will still be necessary to uphold natural monopolies. Complete or partial governmental ownership is needed to secure production and service. It is the Commission's recommendation that these monopolies adhere strictly to their core businesses. The Commission recognizes that these monopolies and governmental organizations take over production and operation of services, that by a private organization under competition could be upheld and secured more efficiently" (Government of Greenland, 2011, p. 3). The Commission also emphasized that more analysis should focus on the composition of the ownership of these large organizations in the future so as to better contribute to society.

To ensure social equality, the Greenlandic government is obliged to operate large SOEs. These enterprises span across domains including commerce, exploration, production, communications, supply, logistics, and infrastructure, which operate as both monopolies and duopolies. This

¹ The Greenlandic government predominantly uses the legal structures of limited companies, "aktieselskab" (A/S), that are governed by their own individual boards. The government is also working within new industries and initiating development by partly owning limited companies such as NunaOil A/S, NunaMinerals A/S, Greenland Development A/S, and Visit Greenland A/S. These companies are working with growth and other potential industries (i.e., mining and tourism) that are still in the development and exploration phase.

² After considerable effort and work by the Self-Rule Commission, the Act on Greenland Self-Government (Self-Government Act) came into force on June 21, 2009. This self-government arrangement for Greenland replaced the Greenland Home Rule Arrangement that was established in 1979. The Self-Government Act is based on White Paper No. 1497 drawn up by the Greenlandic-Danish Self-Government Commission in 2008.

unique environment does not foster competition or market competition, and therefore, large parts of production are run by the government. Consequently, the Greenlandic government operates almost all vital functions of society through the production of its SOEs. On average, SOEs employ 14% of the working population, and the government employs another 47%; therefore, a total of 61% of the working population is employed, directly or indirectly, by the government. The remaining 39% are employed in private businesses that, in one way or another, are dependent on the government in that they sell the majority of their products or services to the SOEs or directly to the government (Naalakkersuisut, 2011). This illustrates the fact that SOEs play an important role in society and are therefore also essential when seeking to understand development in Greenland. Winther (2003) argued that SOEs in Greenland have been heavily influenced by political decision-making, which has become a problem for the development of these enterprises.

Since the establishment of the Greenlandic government in 1979, its political arena has been controlled by “Siumut,” the leading Democratic Party. Siumut has controlled the political environment for 30 years, and it lost an election for the first time only in 2009 to another left-wing party, “Inuit Ataqatigiit.” This was a strong sign from society that change was desired. During the same period, the CEO of Air Greenland, Michael Binzer, together with other businesspeople, established “Transparency Greenland.” It was evident that since the establishment of the Greenlandic government, SOEs and industries had been strongly affected by national politics and individual political agendas. A significant proportion of the business environment wanted to reduce nepotism and the degree of political intervention in business because they believed that these factors were affecting their ability to professionally manage and secure their companies’ production. This suggests that managers could seemingly influence their own internal surroundings and also impact external factors in attempting to change the larger forces that affected their businesses.

In 2009, most SOEs were operated as private limited companies, although there was still substantial political interference. Society and businesses in Greenland wanted more transparency and professionalism. Inuit Ataqatigiit, while in government (2009–2013), formulated a protocol consisting of some guidelines and rules (Naalakkersuisut, 2011) to ensure a more professional approach for SOE operation and production. This protocol aimed to debate the role that agencies, departments, politicians, and the government should play in the development of

Greenlandic SOEs. It presented clear guidelines for the governance of wholly or partly state-owned enterprises by summarizing (Naalakkersuisut, 2011, p. 18):

“...the Government of Greenland as owners of most of the large enterprises plays a significant role in the development of the Greenlandic business environment. Having state-ownership within many of the important infrastructural enterprises obligates the government to create good conditions for industrial development. The Self-rule government must therefore work purposefully to manage its ownerships in an active and professional way that creates economic growth, development and good jobs through a long-lasting and predictable policy, which focuses on social responsibility.”

The report explicitly stated that to work diligently with politics regarding the government's ownership of these enterprises, several guidelines had to be established and followed to ensure correct practices when it came to government involvement. These SOEs were a strong part of societal production as they were subject to political and social agendas. It became evident that working in these settings and under these conditions meant that the SOEs had to operate even though they were not profitable. This illustrates the fact that Greenland is still in its developing phase rather than being industrialized, and it is trying to adapt to the modernization and professionalization that was predominantly embraced through Greenland's relation with Denmark.

Although Greenland is a part of Denmark, a developed country, in several ways, it is still an emerging country. A large part of society is still reliant on fishing and hunting, and most of societal and industrial production is dependent on government subsidization in one way or another. Society has not been industrialized or supported by any large production, meaning that the financial situation in Greenland is challenging. Given this situation, most cities and settlements cannot sustain themselves economically. Many of the SOEs contracted³ by the government to uphold production in these remote and unsustainable areas are subsidized to ensure production (Hendriksen, 2013). Considering these conditions and the special setting in

³ To support vital functions in society that are not economically feasible, the Greenlandic Self-Rule Government has created “service contracts” to financially support industries producing products or services for society. A service contract is an agreement in which a company is obliged to perform specific tasks for the Self-Rule Government; in return, it gets financial support from the government to cover any deficit.

Greenland, the environment in which these SOEs operate is not only unique but also rather extreme.

This research assumes that Greenland, as a small semi-autonomous nation, faces particular challenges. The nation seeks economic prosperity and sovereignty despite the fact it only has a small domestic economy (Naalakkersuisut, 2011). To this day, Greenland remains heavily dependent on Denmark's larger economy (Winther, 2003), and it does not have the structures of an industrialized nation. Furthermore, Greenland is currently unable to build up economic efficiency based on self-production or to benefit from larger industries (e.g., tourism, oil, and minerals). Considering the unique and extreme conditions in Greenland, its government and politicians have a strong desire to become more independent. This means that Greenland has to make huge changes and develop its production, including that of SOEs, to become sustainable (Winther, 2003).

Greenlandic SOEs were created as a necessity for addressing governmental obligations to fulfill and support society; in most cases, these SOEs were created as monopolies. However, this resulted in less incentive to operate on market terms. Furthermore, the social significance of SOEs in Greenlandic society and the special conditions of the environment have made it difficult to privatize or endorse competition. In analyzing this environment, it is important to understand the extreme conditions in this large country, with its isolated cities, small population, and low levels of production. This thesis establishes that SOEs in Greenland face special challenges in this unique environment when compared to those in other developing countries. To understand these issues, the next section reviews literature on corporate governance and management accounting in developing countries.

1.2 Theoretical problem

Change, and factors that make organizations develop, is viewed differently from the governance, critical, or institutional perspectives. Many researchers in the field of corporate governance have established that the development of SOEs occurs through privatization, whether partial or full. These studies establish how this is meant to create more transparency and efficiency, thereby positively impacting SOEs (Gupta, 2005; Wong, 2005). Researchers in the field of management accounting have made significant efforts to understand the development of SOEs by taking a rather critical perspective on their development (Uddin & Hopper, 2001, 2003; Uddin &

Tsamenyi, 2005; Hopper et al., 2008) and their commercial transformations (Wickramasinghe et al., 2004). This has illustrated how larger forces affect SOEs and how changes are often unsuccessful or have unintended consequences. Researchers in the institutional field have illustrated how the institutional environment either produces change as different types of isomorphisms or how change does not occur owing to a decoupling process in the organization (Alam & Lawrence, 1994; Hoque & Hopper, 1994; Firth, 1996; Xu & Uddin, 2008). From an institutional perspective, organizational change and management accounting development are indeed linked. These three theoretical perspectives illustrate organizational change in different ways; however, all predominantly view change as something caused by external factors that impact organizations in various ways.

Literature on management accounting change in developing countries has emphasized the strong role that the political aspect plays in the development of SOEs. Hopper et al. (2008) extensively reviewed current research on management accounting development in late developed countries. They argue that most management accounting problems are related to government and politics and are therefore socioeconomic in nature (Wallace, 1990). Hopper et al. (2008, p. 498) also state that “late developed countries have powerful governments but weak and corruptible governance. State capitalism encouraged this, but market reforms, especially NPM, may diminish local politics and civil society’s influence.” Their review emphasized that there should be a focus on the politicized and institutionalized environment and how this plays a substantial role in the development of organizational practices. Their review focused on management accounting change by analyzing the environment and how it is affected by larger forces such as political, social, and economic factors. However, they did not sufficiently conceptualize how actors can affect development.

Institutional researchers investigating management accounting change in developed countries tend to focus on the routinization of institutional structures or the decoupling from the institutionalized environment (Burns & Scapens, 2000, Busco et al., 2006, Busco et al., 2007; Cullen et al., 2013). Several researchers in the field of management accounting claim that environmental conditions such as structures, practices, and systems, in which management accounting exists and is embedded, do change and therefore result in change in management accounting (Ezzamel et al., 1993; Shields, 1997). In an extensive study analyzing management accounting change, Busco et al. (2007) reflected on *what* changes by illustrating certain key

dimensions of management accounting change. Burns and Vaivio (2001) conceptualized the way in which management accounting changes as being from three different perspectives; epistemological, logical, and change management. By adding to the institutional perspective on change, this thesis argues that more emphasis should be placed not only on *how* change happens and how it can be analyzed in terms of how structures affect actors and practices but also on analyzing how actors draw on these structures, thereby explaining the complexity of organizational change in more detail.

In general, literature on management accounting has viewed change to be a result of exogenous forces and focused less on endogenous processes. Research has tended not to understand change as something that can happen from within the organization. For example, Thrane and Hald (2006) and Mouritsen and Thrane (2006) illustrated how change should be analyzed at the microlevel by understanding how it affects and how it is affected by individual actors. Most literature in developing countries views change as something more structural, through a revolutionary process from the outside-in (Hopper et al., 2008); this is true of most literature on management accounting as well (Scapens & Bromwich, 2010). This thesis builds on the literature in developing countries to establish the development process of SOEs operating in Greenland's extreme and unique environment. This perspective adds to the literature by analyzing how development can occur under special conditions, thereby emphasizing agency.

1.3 Problem statement

This thesis analyzes change to understand development in Greenlandic SOEs. The study takes the starting point that existing literature in developing countries has neglected to study the development of management accounting in an environment that is not moving toward higher industrialization or fostering privatization. Furthermore, this thesis emphasizes that the literature has, to some extent, neglected the role of endogenous processes as well as the capacity of individual actors when it comes to understanding change in the context of emerging countries.

This study analyzes development in the absence of privatization, market forces, and larger regulative changes. It addresses what has induced change in this unique environment by emphasizing modernization and professionalization and the larger institutionalized environment enacted by reflexive actors. Considering this special environment and the vital position that SOEs have in Greenlandic society, this reveals an interconnectivity between society and SOEs

that needs to be analyzed further. Considering this, and with an interest in the development of SOEs in an emerging country, this thesis aims to answer the following research question:

How does change occur in Greenlandic SOEs, and how has this impacted management accounting practices?

To understand change in Greenlandic SOEs and to answer this research question, this thesis focuses on literature on accounting and governance in a developing country. Empirical analyses will more specifically examine practices, negotiations, and relationships in an emerging country to establish the contradictions and conflicts providing the foundation for change. This is illustrated through a more process-based perspective of organizational development over time and at specific points of time.

Individual papers focus on micro practices and actors and portray effects and changes as something that can also be identified from within the company. This thesis recognizes that organizations operating in an emerging country are affected by many institutional factors that are part of the overall environment and by environmental turbulence (i.e., sociopolitical, cultural, and economic factors). This thesis therefore extends existing studies in the fields of management accounting and corporate governance by emphasizing the duality of structure⁴ and human agency when analyzing change. The empirical study illustrates that there has been a lack of privatization, weak market forces, and only minor regulative changes. Despite this lack of conventional forces that have been established as drivers of change in numerous studies (Uddin & Hopper, 2001, 2003; Uddin & Tsamenyi, 2005; Hopper et al., 2008), this thesis aims to illustrate how change occurs through changes in the institutional environment, which is in agreement with most literature, as well as how actors can create change from within the organization.

The researcher argues that more needs to be known about organizational change in a special environment like that in Greenland. Both the highly institutionalized environment and the capacity of individual actors need to be emphasized when analyzing change. This thesis adds to

⁴ “Duality of structure” is a concept used by Anthony Giddens. This theoretical perspective analyzes social life by considering both human action and social structure. This means that structures are constraints that shape what we do; furthermore, it is our actions, or practices, that constitute these structures (Giddens, 1984, p. 25).

existing literature on management accounting and corporate governance through its individual case studies that analyze micro practices and actors' ability to effect change. The case studies use different institutional perspectives, and they examine the environment of one focal organization that operates in Greenland's unique and extreme environment. The thesis illustrates how ongoing contradictions and conflicts between actors influence the changes that shape the distinct organizational development of Greenlandic SOEs. This thesis emphasizes that endogenous processes and actors can participate in larger changes and development (Ezzamel et al., 2004). The empirical studies establish how the social and commercial forces of the SOEs produce contradictions and conflicts that consequently create spaces in which actors can maneuver in a highly institutionalized environment. Furthermore, they examine how these settings are used by individual actors from time to time and how this also affects the individual actors.

This thesis uses a sociological perspective for analyzing change to engender development in the three individual case studies. The case studies analyze change and organizational development by focusing on management accounting. This thesis examines the following issues: (1) the development and modernization of SOEs and how this impacts management structures and their further progression by analyzing the practices that are dominated by social and governmental intervention; (2) the comprehensive nature of institutionalization and how this affects calculative practices by analyzing two competing logics and how a specific negotiation develops; and (3) the professionalization and impact of technology and how this affects different information systems by analyzing interorganizational relationships. Earlier sections have provided the background and discussion of the focus of this study. The following two sections explain the case organization and certain aspects of development.

1.4 The state-owned enterprise

The case company, Air Greenland (originally called Greenlandair), was established in 1960 as a private entity as the demand for transportation increased when the Americans were operating military facilities in Greenland and required commercial logistical infrastructure to support their operations. The shareholders in this new company were two private investors: Scandinavian Airlines (SAS) and the cryolite mining company "Øresund." Only two years after the company was established, the government of Greenland (at that time, the "Greenlandic National Council") and the Danish state (The Royal Greenland Trading Department (KGH)) joined as

shareholders. Today, Air Greenland's shareholders are the Greenlandic Government (37.5%), the Danish State (25%), and SAS (37.5%). the airline has been transformed into a private/public partnership as an SOE. This ownership composition was mandated to ensure infrastructure in Greenland, and it was kept unchanged to supply transportation for the public at large.

From a legal perspective, the organizational structures of SOEs can take many forms. These range from organizations that are functionally but not legally distinct from the government to incorporated organizations (Aivazian et al., 2005; Ng et al., 2007; Hu & Leung, 2012). In this case study, the SOEs are recognized as incorporated organizations that are defined as separate legal entities distinct from the government. They have the freedom to control their own capital and income, and they are referred to as private limited companies. This thesis focuses on SOEs that are private limited companies. In such organizations, the shareholders' responsibility is limited to the capital that is invested, and therefore, they are called "limited" companies. Such organizations are directly controlled by a professional group of directors and are governed by the board of the organization. These organizations exclude those that are more or less controlled by and are a part of the government and, indeed, are subordinate to governmental agencies or the government itself; these organizations are known as "nettostyrede virksomheder"⁵ (e.g., Mittarfeqarfiit, Nukissiorfiit, Asiaq, etc.).

Greenland's extreme environment creates rather unique conditions for growth and development. In general terms, industrialization has not occurred in Greenland. Greenland does not foster competitive markets, and therefore, monopolies proliferate. Despite its monopoly status, Air Greenland has often been condemned to inactivity and economic inefficiency by not being able to realize strong economic growth or the necessary dynamics to achieve satisfactory results (Winther, 2003). This is an important dimension in the concept of "development" that refers to economic growth or, more precisely, growth of national income per capita, which is strongly affected by social and political issues and the large subsidies received from the Danish Government.

⁵ These companies are characterized as being under direct political leadership, and the Treasury is directly liable for their business and function. This is in contrast to SOEs that are "limited companies"; their assets and accounts are only partly (and not directly) dependent on the Treasury. Government-controlled companies are responsible for presenting their accounts in accordance with principles that are, as far as possible, similar to the Financial Statements Act of "limited companies."

The settings and characteristics of “developing countries” all vary, and they are not homogenous; neither are the SOEs within them (Boardman & Vinning, 1989). The case study approach enables a more comprehensive examination of change and, in turn, an understanding of development in Greenlandic SOEs. The special conditions of the Arctic and the research approach provide valuable insights for analyzing this unique development of SOEs. A strength of this thesis is that Greenland’s unique environment provides empirical settings in which change can be analyzed simultaneously by incorporating macro-, meso-, and microlevels of change.

1.5 Developing countries and emerging countries

Because of Greenland’s unique conditions, it is difficult to classify Greenland as being either a developed or developing country. The term “developing country” is commonly used to refer to countries that do not enjoy the same level of economic security, industrialization, and growth as developed countries. These are not to be confused with third-world countries. A developing country can be described as “a non-industrialized poor country that is seeking to develop its resources by industrialization”⁶. This definition could be applied to Greenland, where the definition of poverty is not especially relevant because Greenland is not poor in income per capita terms. According to the World Bank, Greenland’s income per capita corresponds to “High income non-OECD”; in 2009, Greenland had a gross national income of DKK 174,000 per capita⁷, and therefore, it is not comparable to other developing countries. The reason for this high income is that the Greenlandic economy is sustained by financial support from the Danish government, which also supports vital functions in society⁸.

Greenland is unique owing to its enormous size, inaccessibility, and small population. Greenland is distinguished by its unusual establishment of wealth through a large annual subsidy of 3,678 billion DKK from the Danish Government. This creates a sociocapitalistic system, given that the total production in society is 11,061 billion DKK (Danmarks statistiske årsbog, 2015, p. 464), meaning that a third of the country’s production is based on subsidization. Social distribution is not in any way supported by forthcoming industrialized development, and exports have been decreasing since the late 1980s, during which time 88% of exports have been

⁶ Definition from Wikipedia; http://en.wikipedia.org/wiki/Developing_country

⁷ These data are the latest available from The World Bank; <http://data.worldbank.org/country/greenland>

⁸ The Danish State still controls and supports Foreign Affairs and Defense and all areas of the Justice and Courts system: http://www.stm.dk/_a_2566.html

fish (Naatsorsueqqissaartarfik, 2015, p. 9). Given Greenland's special conditions, it has a sociocapitalistic and sociopolitical system that to a large extent is part of a highly institutionalized environment. The relationship between Danes and Greenlanders shows Greenland to be a unique nation with a small population spread over a large area.

Greenland's lack of industrial development has meant slow economic growth, leading to a reliance on funds from external parties, especially the block grant from the Danish government. The inflation rate is high although economic growth and the general production output are low. Goods and services are expensive because the country is geographically large and has a small population, meaning that it economies of scale cannot be achieved in infrastructure, commerce, communication, and the civil service. Greenland's general conditions pose a challenge for sustainability and economic growth because the country does not have "critical mass."

Greenland, in light of its special conditions and development, is more appropriately described as an "emerging country." Countries like Brazil, Russia, Taiwan, Malaysia, India, and Pakistan are also considered emerging countries. This term refers to countries that are economically backward compared to developed countries and that have much to achieve in terms of economic growth and industrial development. It should be noted that Greenland is relatively quite different from these countries owing to its unique conditions. This thesis frames Greenland as being in a "gap" and trying to develop while also being part of and under the influence of Denmark, a developed country.

2. Literature review: Management accounting and governance in developing countries

The previous chapter discusses the empirical and theoretical problems, and these suggest that conventional ways of theorizing change could be further elaborated to understand change by placing equal emphasis on actors and the institutionalization of change. This perspective can help to understand change in the context of an emerging country and thereby contribute to existing literature. This section examines literature on corporate governance and management accounting in developing countries and more closely reviews how these different perspectives are used to understand change in management accounting and how this is linked to the development of SOEs.

The relation between organizational development and management accounting change in developing countries has been studied over several decades. Researchers, academics, and practitioners in this area have made considerable efforts to understand the role of accounting in developing countries in comparison to that found in developed countries. This research links development to management accounting change by using three main perspectives: governance, critical, and institutional.

2.1 Governance perspective

Literature on governance illustrates how privatization is a central driver of organizational development. Studies reveal how corporate governance reforms encourage the government to establish a sharper distinction between commercial and noncommercial aspects. This is done by gradually replacing government control with private market-based controls through either partial or complete privatization of government entities and SOEs. The principal-agent perspective is often used in corporate governance studies because it focuses on how interest has to be aligned toward value maximization. The principal-agent theoretical perspective more narrowly focuses on the interests of individuals and society and the principal-agency problem. This theory states that an organization's objective is to optimize shareholder wealth through productive, allocative, and dynamic efficiency, meaning that a crucial objective of the organization is to ensure the maximum profits. When looking at SOEs, the question is what should be maximized, and how, when organizations are owned by the government, and whether the organization could benefit from the transformation from government to private ownership. Literature on corporate governance examines how privatization affects organizational development and performance, and it shows that the partial privatization of SOEs has a positive and statistically significant impact on the operating performance of SOEs. This study shows that the development of governance is fundamentally social as there are interactions between human actors. The result of the analysis shows that improved managerial efficiency, understood as the transfer of management control to private owners, to a large extent explains the effect of privatization on performance.

Several studies have established how ownership concentration affects SOEs and the privatization process. These studies have analyzed how the type and size of shareholders influences performance. Rajagopalan and Zhang (2008) examined foreign organizations' involvement in wholly owned or joint ventures in developing countries such as China and India.

Their study noted two major driving forces behind governance reforms in developing countries: privatization and globalization. They examined the development of governance reforms and identified four obstacles: "...how external monitoring systems are underdeveloped, lack of incentives, that the dominant shareholders are powerful, and the lack of qualified independent directors" (Rajagopalan & Zhang, 2008, p. 60). These obstacles illustrate the principal-agent issue that is part of and affects the development of governance reforms. Omran (2009) investigated organizational development in greater detail when examining post-privatization and corporate governance. His research showed how foreign investor private ownership can have a positive impact on an organization's performance. He noted that the government should assign control to the board and allow for changes in the directors following privatization. The assumption here is that performance improvement will not follow automatically without a change in the management and directors.

The literature argues that governmental interventions must decrease to ensure positive development. Several studies have established how state involvement has decreased, resulting in privatization, for organizations to develop. Boubakri et al. (2004a) analyzed the privatization of SOEs in various developing countries to understand how and when privatization works. They found that the relinquishment of control after privatization results in higher profitability, efficiency, and output. Their analysis showed that "...corporate governance variables drive the performance improvements of newly privatized organizations" (Boubakri et al., 2004a, p. 787) and that there is a significant increase in efficiency and profitability. However, performance improvements vary across regions. In another study, Boubakri et al. (2004b) examined the post-privatization performance of SOEs in Asian developing countries. Their study examined the change in the ownership structure of newly privatized organizations and established that development in the market, foreign investors, and a positive institutional environment are some of the key factors that can determine how these organizations develop. They concluded that despite decreased government involvement, state control was not eliminated. Naceur et al. (2007) analyzed how privatization affects profitability in the Middle East and Africa and showed that through initial public offerings, privatization results in significant increases in profitability and efficiency as well as a decrease in employment. Their analysis also found how market reforms and foreign ownership have a positive impact on organizations and how this is important post-privatization.

2.1.1 Summary of governance perspectives

Governance studies illustrate how development is furthered through privatization based on changes in governance structures. This is seen in most SOEs as a requirement for achieving market capitalism and a reduction in government control. A significant number of these studies establish how privatization is a way of enhancing operational efficiency. Numerous studies in the field of governance have illustrated that privatization is a natural evolutionary process and an appropriate outcome for many SOEs, with the literature revealing how privatization is more effective in improving performance than public governance reforms. Corporate governance studies illustrate how this form of development in an open market results in efficiency and therefore contributes to general social welfare and economic benefits.

The governance perspective looks at how economic, social, and political goals create incentives for more private activities, resulting in a transformation from a bureaucratic entity to a state that is aligned to the economic interests of the market. The governance perspective establishes the development of SOEs as a part of privatization, which is why many of these studies cannot understand the process of development when change does not occur through changes in regulative structures or privatization. These studies state that relinquishing control from the government to private shareholders ensures greater effectiveness and efficiency. Furthermore, corporate governance reforms have encouraged politicians to draw a sharper distinction between commercially and non-commercially oriented operations in SOEs. This literature stream has difficulties in understanding development when it is not part of a privatization process or where there are no major changes in governance structures.

2.2 Critical perspective

The critical perspective mainly focuses on the interaction between the organization and the external environment and the conflict that could arise from this interaction. From the critical perspective, management accounting and the specific role it plays in SOEs are analyzed as a consequence of the conflicts arising at the macrolevel. These are caused by the pressure that the external environment places on organizations. The critical perspective highlights how capitalist systems have crisis tendencies. Studies with a critical perspective have extensively focused on political interference, the act of privatization, and the cultural context in developing countries, as reviewed below.

Political impact

The critical perspective discusses societal and political impacts on management accounting development. Studies analyzing political interference and management accounting in developing countries have shown how politics and power inform the complexity of institutionalization in these unique politicoeconomic environments. Critical studies have analyzed how organizations are controlled by political interventions. Hoque and Hopper (1997) investigated how environmental factors affect budgeting characteristics in an SOE and argued that political volatility makes budgeting and controls ineffective for management despite their good intentions. Uddin and Tsamenyi (2005) examined World Bank sponsored public sector reforms and showed how this leads to negative implications and that budgeting remains politicized and ineffective. They established that initiative led by the government and the World Bank to improve development had a negative impact and outcome. Wickramasinghe et al. (2004) examined how new management structures reduced bureaucratic controls in the context of partial privatization. Their study examined how internal Japanese management and a new accounting regime replaced bureaucratic management controls, yielding positive economic effects. They established how employees did not approve of these internal changes and allied with politicians. Employees were frustrated with the change process and wanted the foreign managers removed, resulting in the return of the old bureaucracy.

These studies establish how, both on a political and a regulative level, there is interference, and this has a significant impact on organizations. Political interference reveals that the speed and direction of organizational development is affected by each country's history. The analysis in these studies illustrates how political interference, over-bureaucracy, and government intervention affect the development of SOEs.

Privatization initiatives

The critical perspective tends to argue that privatization initiatives have a less positive impact on development. Studies analyzing SOEs operating in developing countries illustrate how privatization can have negative effects despite their worthy intentions. Uddin and Hopper (2001) analyzed the effect of full privatization on accounting systems and showed how transnational institutions (i.e., World Bank and International Monetary Fund) promoted global capitalism by forcing developing countries into market-based policies and practices. These practices had a negative impact on the development of SOEs. In a later study, Uddin (2009) examined private

management practices in less-developed countries, such as a “familial and direct control system.” The findings were similar to those of Uddin and Hopper (2001) in that full privatization was not necessarily found to be fruitful. Uddin and Hopper (2003) examined how privatization initiatives are led by the World Bank and argued that the privatization of SOEs did not benefit society and had negative implications for SOEs. Tsamenyi et al. (2010) studied political interference and reforms in developing countries and analyzed the performance of two privatized SOEs in Ghana. They aimed to use the balanced scorecard framework, thereby adding a fifth dimension focusing on community. They found that their performance under state ownership was poor, although post-privatization processes could improve performance for former SOEs.

These studies analyzing the privatization of SOEs tended to argue that privatization has been ineffective. Individual studies have shown how privatization must, in several ways, be seen differently from the type that exists in developed countries. Given the special settings in late developed countries, development through privatization has to be understood as a more complex and more controlled process. Studies show how development has, in many cases, led to the transfer of power to large private shareholders, thereby giving them the dominant position. This illustrates that this form of development through privatization has not always improved these organizations. Uddin and Hopper (2001, p. 652) stated that “...markets will ensure that inefficient enterprises will either fail or be taken over. However, neo-classical economists do not study in detail whether the controls within enterprises that are integral to their prescriptive models actually materialize and operate as they predict.” Considering these strong external forces, there should be more focus on change and how this can also result from individual actors and internal processes.

Cultural context

Critical research in management accounting emphasizes the importance of understanding management accounting from a wider perspective, because culture is conceptualized as having a big influence on management accounting. Wickramasinghe and Hopper (2005) analyzed cultural and political factors in developing countries and how they affected the practices of an SOE. They found that management accounting and control are not separate from the culture, arguing that “...management accounting is not independent of culture, but rather an expression of a modern and industrialized culture and capitalist modes of production (MOP)” (Wickramasinghe

and Hopper, 2005, p. 500). Modernization is affected by traditional cultures that are in these MOPs. Efferin and Hopper (2007) focused on the sociocultural aspect and analyzed how contextual factors affect management control. They examined what they called “ethnic tensions and commercial effectiveness,” how this affects management control, and how the owner gains control in accordance with cultural preferences.

These studies establish that cultural and political influence impacts management accounting practices. The implication of this in organizations is that processes and practices are affected, further suggesting that organizational elements such as actors, structures, systems, and culture are continuously and simultaneously affected; this has consequences for organizational development. These studies, to a lesser extent, focus on the specific micro practices and power of individual actors and how this creates change that can shape overall development.

2.2.1 Summary of critical perspectives

The critical perspective offers a critical stance and reveals how organizations change depending on larger regulative structures and market initiatives. The critical perspective argues that the state, market, and society have a significant impact on the formation of management accounting, thereby emphasizing how structural change coming from the macrolevel affects the organization or how structural changes are affected by culture, which leaves individual actors powerless in the face of these changes. The critical perspective thus predominantly takes a structural perspective and focuses less on human agency and microlevel practices. Most critical studies on management accounting consider organizational development from an “outside-in” perspective, i.e., environmental impact on organizations (Uddin & Hopper, 2001; Wickramasinghe & Hopper, 2005; Uddin, 2007).

Organizational development could be understood in more detail by analyzing change from within the organization. An inside-out perspective (Frances & Garnsey, 1996; Thrane & Hald, 2006; Mouritsen & Thrane, 2006) can be established by analyzing the social structures and microlevel practices of individual actors in their usual processes. This can illustrate how development can occur through a process that is initiated as both a consequence and a result of the external environment as well as a result of individual actors. Below, literature with an institutional perspective of change and development is reviewed, and the approach of this thesis, which has both exogenous and endogenous views of change, is developed further.

2.3 Institutional perspective

In a developing country, the institutional framework can help clarify change through a wider perspective. Several studies on management accounting in a developing country have adopted an institutional perspective, using both new institutional sociology (NIS) and old institutional economics (OIE). In management accounting research, institutional perspectives are extensively used through NIS, which seeks to understand the influence of external factors on the internal environment and how this is linked to management accounting change. Accordingly, the endogenous view on change is developed further through a discussion of the duality of structure, as noted by Giddens (1984).

In the field of management accounting, many institutional studies have taken a new institutional perspective. Several of these studies are based on the studies by Meyer and Rowan (1977) and DiMaggio and Powell (1983). These studies analyzed decoupling and isomorphism and how this affects management accounting systems and practices. Studies in developing countries using this perspective emphasize the strong relationship between organizations and their environments.

Institutional isomorphism

This institutional perspective illustrates how organizations match the environment they operate in and how external forces can impact the internal structures of the organization. Alam and Lawrence (1994) analyzed budgetary processes in the institutional settings of an SOE in Bangladesh and found that they were procedural and formalistic. They showed how the organization sets its own internal budget and how this is spread to different levels in the organization. They also showed how budgeting processes were not grounded in the current situation but were more affected by the requirements of external authorities. This indicates how this form of isomorphism has a negative impact on the budgetary processes. Firth (1996) examined isomorphistic pressure and the development of management accounting practices by examining state-owned manufacturing organizations. He found that institutional isomorphism and mimetic mechanisms explained the significant changes in SOE accounting innovations. These were led by joint ventures with American organizations, illustrating how external forces at a macrolevel were part of the change in SOEs.

Lin and Yu (2002) examined how new control techniques and procedures are adopted and showed that management-oriented accounting measures and procedures play a positive role in the development of Chinese businesses. They used the “institutional isomorphism” theoretical framework and analyzed business enterprises in the context of a developing country. They investigated how advanced Western management accounting practices can be applied in the Chinese business environment. They also emphasized how management accounting can play a very important part in the development of management in late developed countries.

Institutional theory illustrates how changes occur under isomorphic pressure and how this affects the organization. Isomorphism is considered a process that forces SOEs to resemble external stakeholders that are facing similar environmental conditions. The literature shows the development and process of institutional homogenization. These studies also illustrate how institutional isomorphism can have positive implications for organizations. Another stream of research in institutional research investigates how the external environment leads to resistance and decoupling.

Institutional decoupling

Examining change as a process of decoupling in relation to management accounting in this research stream illustrates how organizations stay unchanged while their environment changes. Xu and Uddin (2008) examined how Chinese privatization and economic reforms affected SOEs and analyzed how development occurs through the decoupling of management accounting practices. Their study found that privatization did not lead to superior management controls; rather, systems for control and accountability were preserved, and they became ritualistic and decoupled from operations. Hoque and Hopper (1994) analyzed systems of control at an operational level in a jute mill and found that management control was more a social and political phenomenon than a rational decision-making process. In this case, the consequence was that accounting decoupled and became ritualistic within the mills. Accounting systems focused on gaining external legitimacy. The study showed how the state had a major influence on the development of management controls, and it noted that political instability could make controls ineffective.

These studies illustrate how accounting practices have decoupled owing to differentiation between the external environment and the internal practices. They also show how development

was stalled when political interventions and requirements were not affecting practices. This perspective illustrates how internal and formal systems, including organizational structure and management accounting systems, remain unchanged following an impact from the external environment.

Hybrid-institutional framework

Several studies have also used a hybrid institutional framework with both new and old institutional perspectives. These studies are creating a more holistic framework that seeks to understand development and change in management accounting. This framework involves the development of rules and routines, as outlined in Burns and Scapens' (2000) theoretical framework. This hybrid-institutional framework analyzes how external factors are institutionalized, which leads to isomorphism when using DiMaggio and Powell's theoretical framework. However, they also used the concept of decoupling, as discussed in Meyer and Rowan (1977).

In the context of developing countries, several studies have used this hybrid-institutional perspective. Nor-Axiah and Scapens (2007) examined a public utility transformation and analyzed decoupling and the corporatization process; they found that the "loose coupling" of budgets was dominated by conflict and tension when establishing efficiency between employees in day-to-day activities. Their study takes a different perspective to that of Burns and Scapens (2000) and emphasizes the role of individual agents in causing institutional change. Their study focused on the corporatization process and explored the linkages between corporatization and accounting change. Hassan (2005) analyzed the potential role of management accounting during a period of organizational change in a public hospital and showed that it was not independent of the external environment. The study draws on both DiMaggio and Powell's (1983) concept of isomorphic mechanisms and Giddens' (1990) concept of "elements of system contradiction" to analyze the development and role of management accounting. Their study found that accounting change and new institutional reforms altered practices, although these were "...not necessarily toward practices of the private sector" (Hassan, 2005, p. 136).

These studies combine both new and old institutional perspectives and analyze both revolutionary and evolutionary organizational change. Researchers can use this hybrid-theoretical framework to understand some of the effects occurring both inside and outside the

organization. This encompasses the rules and routines presented in Burns and Scapens' (2000) theoretical framework as well as the external factors using DiMaggio and Powell's conceptualization of a mimetic and coercive isomorphism framework. This hybrid perspective clearly shows how institutions influence the behavior of individual actors and how individual actors try to modify institutions and organizations. This hybrid perspective resembles the theoretical perspective that this thesis uses for analyzing the development of one specific SOE.

2.3.1 Summary of institutional perspectives

Many studies in the institutional field have focused on how institutions form and affect practices through the processes of isomorphism and decoupling. They examine the process of differentiation between organizations and their external environment, which leads to decoupling or isomorphic behavior, as actors try to legitimate their actions. The institutional perspective provides valuable insights into how change occurs, how structures develop, and how the environment and external parties strongly influence the organization. The institutional perspective thus demonstrates how change is caused by exogenous factors in a developing country. This perspective also clearly shows how the organization and employees resist change decoupling actions. The institutional perspective mainly views change as being caused by external factors.

2.4 Summary

This literature review shows that organizational development in a developing country occurs in a highly institutionalized environment. The governance, critical, and institutional perspectives predominantly view change as a consequence of the external environment. Change in management accounting practices and corporate governance structures are unavoidably interconnected, and this interdependency is important when analyzing organizational development. Furthermore, changes are affected by public policy struggles and interventions by the state and international organizations, as argued by several critical studies on accounting.

The abovementioned studies can be extended with a stronger focus on individual actors and how they participate in the change process. More research into the contradictory pressures that create conflicts and how endogenous forces can create change could extend existing research. This could extend the different views on organizational change and emphasize both structures and agency in their duality. More emphasis has to be placed on exploring how actors both shape and

are shaped by institutions and structures. Change has to be viewed from both outside-in and inside-out. In an emerging country, structures and agency have to be considered when establishing change, especially the way in which development occurs within SOEs. In summary, further knowledge can be generated by understanding change as being both endogenous and exogenous and by observing management accounting development through a longitudinal perspective.

3. Institutional theory in management accounting studies

The previous section reviewed institutional studies and the way in which they analyzed management accounting in the context of developing countries. This section reviews the institutional perspective in management accounting at a more general level. To understand organizational development, this thesis examines management accounting change using Burns and Scapens' (2000) perspective and recognizes management accounting practices that both shape and are shaped by institutions. Organizational change is a process that consists of many institutions operating within individual companies (Scapens, 1994). These institutions may be analyzed as microprocesses in the institutional context, both within and outside the organization (Burns, 1998; Burns & Scapens, 2000). Both these perspectives are based on Giddens' structuration theory.

The institutional perspective analyzes management accounting in two different ways. Management accounting practices and accounting themselves can both be seen as a physical calculation (Englund & Gerdin, 2008) and as a part of organizational rules and routines (Burns & Scapens, 2000). By using the latter perspective, Scapens and Macintosh (1996, p. 677) argued that management accounting, "...provide[s] interpretive schemes, communicate norms and are facilities for control which can be drawn upon in everyday life." Similarly, Burns and Scapens (2000, p. 3) argued that "management accounting systems and practices constitute organizational rules and routines."

A multiinstitutional perspective may be useful for understanding the change in management accounting practices over time. Scapens (2006) reviewed changes in management accounting over three decades and argued: "...to make sense of diversity in management accounting practices we need to understand the complex mish-mash of inter-related influences which shape practices in individual organisations." They also argued for "unique idiosyncratic factors" when

analyzing management accounting change (Scapens, 2006, p. 10) and how institutional theories can help in understanding this mish-mash. The authors also discussed “...when and how actors actually decide to revise their rules and routines” if there exist constraints and contractions. This extends the need to further understand the implications of management accounting change in an organizational context.

This thesis consists of three papers that all take an institutional perspective and analyze management accounting as both a physical calculation and as rules and routines. The first paper analyzes the modernization of management accounting practices and understands management accounting as rules and routines. The second paper examines management accounting more as a physical calculation and how it is institutionalized. The third paper investigates the professionalization of information systems and how this changes management accounting rules and routines. The first and third papers view management accounting as a series of rules and routines, whereas the second paper views management accounting more as a physical calculation. The following sections illustrate the different ways of viewing management accounting and how numerous studies use the institutional approach to understand management accounting change. The next chapter develops the approach found in this thesis, with a focus on contradictions.

3.1 Structuration in management accounting studies

In management accounting literature, numerous researchers have used structuration theory to analyze change and organizational development. In analyzing structuration theory, Englund and Gerdin (2008) discussed the concepts of structuration and their pitfalls and their implications for management accounting research. They examined how Giddens conceptualized structures and how they work. This theory sees structures as both the medium for and the outcome of human action, that is, a duality. Their study emphasized that when management accounting is defined through both virtual structures that generate action and the situated doings of actors, the result is that “structures and actions tend to be viewed as one, giving the risk of drawing weak conclusions about structural change or stability” (Englund & Gerdin, 2008, p. 1128). This is why it can be argued that more attention needs to be placed on human agency.

The duality and structures in the field of management accounting have been further conceptualized to better understand change. Burns and Scapens (2000) concluded that in the

relationship between actions and institutions, it is useful to define what is meant by institution. They defined institutions as "...the shared taken-for-granted assumptions which identify categories of human actors and their appropriate activities and relationships." Their institutional study revealed that the more institutionalized the institution, the easier it is to effect action and resist change. Their study also showed that an "institution is in many cases taken-for-granted assumptions of the way things are done" (ibid, p. 8). This illustrates the sense, values, and powers of individual actors, which highlights human agency. These studies show the importance of both the structures and the human agency. Structures as rules and resources are the medium as well as the outcome of the practices. The ways in which actors use resources and rules in their conduct, confirm or develop new structures (Giddens, 1984, p. 24). Giddens referred to this as the "duality of structures," illustrating that the actor is central in the concept of human agency and is crucial for understanding the concept of structures and the fact that agency and structures are mutually constitutive, creating and shaping social conduct.

By analyzing change from a wider perspective, this thesis focuses on the duality of structures using two institutional perspectives. In the analysis of structures and duality, human agency is observed both through the "institutional analysis" and the "analysis of strategic conduct." Giddens stated that in "...the institutional analysis, structural properties are treated as chronically reproduced features of social systems, whereas in the analysis of strategic conduct the focus is placed upon modes in which actors draw upon structural properties in the constitution of social relations" (Giddens, 1984, p. 288). These two approaches are valuable because they help in analyzing and understanding organizational change from two different perspectives: that of the actor and the institutionalization of practices. Both need to consider the duality of structures, meaning that institutional analysis also needs to analyze the production of structures by agents. Numerous researchers have emphasized the duality of structures as a valuable point of departure when studying management accounting in its social context.

This theoretical approach expands on actors, social structures and micro practices while emphasizing and acknowledging the duality between actors and structures. This illustrates how development is affected and constituted as a result of the enactment of individual actors or actants, which may potentially impact the different types of institutional systems. This thesis uses the view of an institutional analysis and an analysis of strategic conduct. Giddens (1984) and Burns and Scapens (2000) both illustrated the importance of the duality of structures when

analyzing change in organizational practices. Different institutional studies discuss the use of the structuration approach in the social sciences. Giddens (1984, p. 2) argued that “this is not just the experience of the individual actor, neither are it the existence of any form of societal totality, but social practices that go across space and time.” This perspective has often been used with a critical perspective as a way of going beyond the analysis of interpretation on the part of actors and to also consider wider systems of power relations and legitimacy. This thesis uses the institutional approach and follows Burns and Scapens’ (2000) work for examining change in more detail to establish developments in management accounting rules and routines and how human agency is a part of this duality.

3.2 Use of institutional theory in individual papers

This thesis consists of three independent papers that each takes a different institutional stance. The commonality between these papers is that they each investigate the social structures, micro practices, and human agency that are part of organizational development and management accounting change in ongoing organizational processes. This thesis draws upon the ability of institutional perspectives to link the micro and macro in analysis so as to understand change from a more holistic perspective and to more thoroughly examine how structures affect organizational practices.

The first paper use structuration theory by examining contradictions and how they create leverage for individual actors to act. The analysis establishes how this is not automated but is challenged by contradiction and conflict. Contradiction marks the “faultlines” in systems, whereas conflict is the actual struggle between actors (Giddens, 1984). In the case study, faultlines are seen as being between different types of system structures. They produce conflicts among the shareholders, board of directors, managers, and society at large. Faultlines are investigated to understand how “contradiction” and “conflict” affect the organization in terms of shaping structural changes, how individuals produce and reproduce structures, and the impact on the development of management accounting. This case study illustrates how contradictions create the space for maneuverability that gives actors the ability to act.

The second paper draws on a newer branch of institutional theory and analyzes the conflict between two competing logics. This analysis illustrates how these contradicting logics affect particular settings and how these negotiations impact calculative practices through the use of

multiple reference points. Here, accounting calculations are interpreted through the enactment of different institutional logics (Thornton & Ocasio, 1999). Under this approach, actors are at the center of understanding accounting practices because they create different reference points in the pricing negotiation. The analysis examines the faultlines between different ways of understanding and legitimizing pricing strategies and how this may lead to conflict. This analysis identifies that faultlines between two competing structures are especially likely to come into conflict when actors' interests also are aligned according to the contradictory structures.

The third paper uses institutional theory and has a more structural, institutional approach (Giddens, 1984). It analyzes the role of information technology in the interorganizational field. By using Burns and Scapens' (2000) work, this paper conducts an institutional analysis by viewing structural properties in the constitution of social relations. This approach views IT systems as a part of social relations by seeing structures not as being "embedded" in technologies but as being "enacted" by actors (Orlikowski, 2000). The perspective can be used to analyze change between actors and systems in the organization as it highlights the conflict and contradiction that lead to change and, in some instances, unintended consequences. The case study acknowledges that technologies are neither external nor independent of actors; technologies are waiting to be used by actors in repeated and situated interactions with these particular technologies. The institutional perspective is therefore used as a synthesizing device to understand the complex interactions between information technology and organizational practices that create change in management accounting rules and routines. This case study illustrates how actual information systems are used by actors to take on a central role, orchestrating and controlling, thereby affecting interorganizational settings and management accounting practices.

These three papers establish change as both an exogenous force and an endogenous process. This can help in creating a deeper and richer understanding of human agency and how they (re)produce structures in the broader context of this highly institutionalized environment. The three empirical studies reveal that change did occur as a major disruption in the present rules and routines in existing institutions as well as through a challenging re-evaluation of management accounting practices in the organization. These changes occurred through impacts from external factors, as stated by the extensive literature on management accounting and corporate governance, as well as through endogenous processes that have become a vital part of

the evolutionary change, thereby shaping the development of the organization and its practices. The next section explains how this is captured and analyzed.

4. Methodology

This chapter describes the research approach and the research design, including the case study selection, data collection, and analysis. This thesis uses an interpretive perspective that allows me, as the researcher, to play a central role and reflect on the experiences that I have in my working life and in the field as a researcher.

4.1 Data collection

This thesis is based on an empirical study of Air Greenland A/S, Greenland's national airline that was conducted over a three-and-a-half-year period. Data collection has performed in this organization's Greenlandic and Danish offices and subsidiaries and in different parts of its external environment. The focus was on the "commercial division" (i.e., upper management, network revenue management, sales, marketing, distribution, invoicing and settlement, and accounting), which also represent the researcher's commercial workplace. During the study, three individual papers were produced as a part of this thesis.

Much of the empirical data used in this study was collected during the researcher's employment at Air Greenland. Furthermore, there were six field visits to Greenland and Denmark, to both the organization's head office in Greenland and to its subsidiaries in Denmark and Greenland. Data collection was partly performed during the researcher's commercial work hours, thereby providing good insights into the potential contradictions and conflicts of everyday practices. The researcher had full access to all organizational data, with just a few exceptions. Board meetings and actual calculative practices regarding yield and capacity management were classified as they were sensitive data that were part of the competitive strategy. Field visits were focused and used solely for collecting data and conducting interviews. The interviews were undertaken with various employees and stakeholders related to Air Greenland and the subject at hand.

One part of the data collection process involved in-depth "interviewee to interviewer" interviews. These interviews were conducted in an exploratory manner and on a semistructured basis using open-ended questions. This enabled the interviewees to express their opinions without being too limited by specific questions, which allowed for the flexibility to follow

discussions that seemed promising. The study therefore aimed to discover the subjective view of the participants. During the study, the researcher conducted interviews with 46 interviewees. Several interviewees were interviewed more than once to gain a deeper understanding of the issue at hand. As such, a total of 61 interviews were conducted, and these were used to build the case studies in the three individual papers. The table below lists the interviewees, by date, duration, position, and company.

	Interview 1		Interview 2		Interview 3	
Title	Date	Duration	Date	Duration	Date	Duration
Chief System Engineer - Air Greenland	18-04-12	59:42				
Sales Manager - Air Greenland			13-03-13	43:40		
Sales Director - Air Greenland			09-04-13	42:12		
Chief Commercial Officer - Air Greenland	20-06-12	52:50	06-03-13	45:56	02-04-14	38:00
Chief Lead Mechanic/Board Member - Air Greenland	28-06-12	01:16:38				
Network Revenue Controller - Air Greenland					23-08-14	01:10:15
Station Manager/Board Member - Air Greenland	04-05-12	42:58				
Hotel Manager - Hotel Arctic	01-05-12	01:23:14				
CEO - World of Greenland	30-04-12	01:06:22				
Former CEO Air Greenland/Chairman AUL	26-03-12	01:25:51				
Chief Financial Controller - Air Greenland	26-06-12	01:08:15				
Chief Commercial Controller - Air Greenland	24-06-12	57:44	17-04-13	56:43	01-04-14	59:56
General Manager Charter - Air Greenland	20-04-12	47:42	13-03-13	40:47		
Chief Operating Officer - Greenland Travel	29-05-12	01:18:42				
Board Chairman - Air Greenland	28-03-12	01:28:07				
e-Business manager - Air Greenland			05-03-13	37:00	07-01-14	01:27:44
CEO Arctic Umiq Line	06-05-12	55:25				
Chief Operating Officer - WOGAC			03-06-13	35:32		
Vice Chairman - Air Greenland	22-06-12	50:09				
Former Chief Mechanic - Air Greenland	06-05-12	01:17:29				
Post Nominated Holder Operations - Air Greenland	17-04-12	01:03:19			01-04-14	35:42
IT-Manager - Air Greenland					02-04-14	01:07:06
Former Sales Manager - Air Greenland			20-03-13	40:02:00		
Network Revenue Controller - Air Greenland			11-03-13	41:08:00		
Sales Manager - Greenland Travel	04-04-12	57:23:00				
HR Manager - Air Greenland	27-04-12	01:01:22				
Division Manager Greenland Travel			04-03-13	01:07:00		
Group Leader, Accounting - Air Greenland			14-03-13	41:35	03-04-14	01:32:20
CEO - Air Greenland	24-04-12	01:16:16				

Deputy Minister - The Government of Greenland	17-11-12	01:04:21				
Chief Financial Officer - Air Greenland	29-06-12	01:14:48	02-04-13	01:16:06		
CEO - Greenlandic Airports	21-06-12	01:03:50				
Former Station Manager - Air Greenland	21-03-12	01:20:11				
CEO Vejle Rejser - Travel Agent			29-04-13	43:44		
Former CFO - Air Greenland	22-05-12	01:14:11				
Minister of Finance and Treasury - Grl. Government	03-07-12	01:13:14				
CEO - Greenland Travel	22-05-12	01:21:53	22-03-13	45:57		
Chief Technical Officer - Air Greenland	03-07-12	01:08:56				
Sales Manager - Albatros Travel			21-03-13	36:33		
Owner, CEO - Albatros Travel			21-03-13	47:56		
CEO - World of Greenland Arctic Circle	31-05-12	49:11				
Chief Accountant - Greenland Travel	24-05-12	56:32				
Manager, Network Accounting - Air Greenland			06-07-13	56:12		
Distribution Manager - Air Greenland	05-05-12	01:29:58	09-04-13	34:25	07-04-14	01:36:00
Network Revenue Manager - Air Greenland	22-06-12	01:05:09	05-03-13	01:00:42		

Table 1 – List of interviewees and number of interviews.

Interviews were conducted based on a set of broad topics regarding management accounting change and organizational processes. The interview guide focused on how the interviewee saw their workday and the way they had experienced change processes undertaken in Air Greenland. The objective was to understand how the interviewees perceived their workday in terms of rules, routines, habits, systems, processes, and practices. This enabled the researcher to see the contradictions that could potentially lead to conflict, thereby providing a better understanding of *how* management accounting changed and whether it was driven by the external context culture or individual actions. Individual interviews were conducted over a longer period of time and were directed toward the three papers that are part of this thesis.

Twenty-four of the interviews were conducted using a retrospective method. Cox and Hassard (2007) noted that this approach can be used in interviews to obtain more information from the individual interviews. They explained four approaches used in retrospective interviewing: controlling the past, interpreting the past, co-opting the past, and representing the past. To interpret the past as well as possible, the researcher used the approach of controlling the past; “this specific approach is somewhat positivistic and strives to insure validity and reliability as it attempts to maximize accurate recall of the historical event” (Cox & Hassard, 2007, p. 488). This method was specifically used in the first paper to help establish and provide accurate

recalls of specific important occurrences in the development of management accounting in Air Greenland.

Commercial workdays were also used to gather data, because these are important for stakeholders and data pools. The daily work occurring in Air Greenland's commercial division enabled the researcher to observe and collect data concerning everyday production and operations. Being a participant observer in one's daily work was quite fruitful, but it was neither feasible nor desirable to take notes during work hours in front of fellow colleagues, because this could have inhibited them from talking freely. Consequently, observation notes on incidents and conversations were written up after work hours.

During the workday, observations were made across all sectors of the organizations and their subsidiaries. The researcher worked in multiple locations in both Denmark and Greenland and interacted with many different departments and employees. The focus was on the everyday activities and interactions in these specific settings. The purpose was to observe the environment in which operations were influenced by institutional views that reflected the organizational culture. Instead of solely relying on talk about occurrences, these observations gave the researcher direct access to concrete actions. To triangulate, the intranet and internal documents provided a large and valuable source of information to complement the findings from participant observations.

To analyze the practices in detail and understand how change occurs, this thesis uses a case study approach. The case study approach used in this thesis adopts Yin's (2003, p. 13) definition: "...a method taking an empirical inquiry that ...benefits from existing development of a theoretical view that guide the data analysis and collection ...handle the technically situation in which there will be many more interesting variables than the data shows." The case study approach is also useful in management accounting studies. Ferreira and Merchant (1999) reviewed and evaluated the case study method from a management accounting and control perspective and argued that the main characteristic of case study research is that it is "not completely structured as this builds along with the observations in the field ...where the researcher are in the organization having contact with the organizational participants ...where the data includes relatively rich and descriptive sources of organizational context and practices" (p. 4).

Flyvbjerg (2006) defined four case study approaches: extreme, maximum variation, critical, and paradigmatic. Given the uniqueness of the environment explored in this thesis, individual case studies can be considered extreme, which Flyvbjerg defines as a situation in which one "...obtain[s] information on unusual cases, which can be especially problematic or especially good in a more closely defined sense," (p.34) further noting that "atypical or extreme cases often reveal more information because they activate more actors and more basic mechanisms in the situation studied." (p. 19). The case study is extreme because it is executed in an environment that is unique, considering the small number of citizens and the country's large size, remoteness, and isolation. The extremeness is seen in the case study's ability to analyze at the macro-, meso-, and microlevel and to engage a large number of key stakeholders at the production level as well as government ministers, thereby providing a detailed view of the change that is happening. Flyvbjerg explained that the extreme approach places more emphasis on clarifying the deeper causes behind a given problem and its consequences as opposed to describing the symptoms of the problem and how frequently it occurs.

Greenland and Air Greenland provided several advantages owing to the uniqueness of the setting. Having one nation with only 55,000 people and a case company central to those, the case study approach could include actors from all levels of society in the empirical analysis. In addition, detailed descriptions of organizational procedures and practices helped in understanding the social, political, and economic factors that influence the development and, more specifically, the management accounting change. This provides better grounds for interpreting and understanding the different views of the participants in relation to their working experiences and changes in habits, rules, and routines.

4.2 Data analysis

The individual case studies analyze the contradictions in the micro practices to establish change and organizational development. The case studies examine specific occurrences with regard to change by using different case studies and different institutional perspectives. The first part of the analysis was the pre-analysis process, in which large data pools were created. Here, all data were assembled into a suitable format and were labeled according to subject and year. The data were then categorized into specific sets of data pools, i.e., interviews, informal talks, observations, participations, internal and external documents, intranet, and newspapers.

To ensure greater validity, triangulation was used in the analysis. The interviews were one of the main data sources that were supported by participant observations and field notes. Archival documents, governmental reports, newspaper articles, and other interviews were then used to triangulate specific data to check their validity. This validation was then used in new and follow-up interviews to clarify specific moments in time that were important. This improved the clarity of specific episodes and occurrences and helped to establish the change and understand the development. Yin (1994) emphasized the importance of using data triangulation, which was defined as combining different sources of evidence to increase validity. In this instance, internal reports, industry papers, annual reports, data from the company intranet, and interview transcriptions were used.

The large collection of data was coded onto an extensive coding framework using digital coding software. This framework was developed through the study and the three papers, and it was facilitated by the Nvivo computer coding software. The qualitative data was processed using Nvivo for data analysis. Programs such as Nvivo afford several advantages for handling different types of data. One advantage of this type of software for data analysis is that it enhances the researcher's ability to handle large amounts of nonnumeric data. Another advantage is that it facilitates the research process by applying mapping techniques when structuring the data. The researcher conducted the research in a systematic way to ensure sufficient reliability of the data to support the arguments in this thesis.

During this study, Nvivo was useful for processing and coding large amounts of data. This software made the data more accessible in the different phases of the analysis. It should be noted that Nvivo was only a tool, and the analysis itself had to be done by the researcher himself. Yin (2009) stated that "the software will not do any analysis for you, but it may serve as an able assistant and reliable tool," (p.128) illustrating that the analysis itself is the work and responsibility of the individual researcher. When coding the interviews, important events, situations, and conversations were discovered that were then triangulated with other interviews at different levels of the organization and with external parties. Official documents, newspaper articles, and internal memos were also used to establish and verify these situations. When triangulating, some incidences were encountered where the triangulation showed inconsistency; therefore, the researcher reevaluated the conclusions and triangulated them again.

The following chapters discuss the three individual papers that provide a detailed analysis of the practices, negotiations, and relationships that clearly illustrate the change in management structures, calculations, and information technology systems that are part of organizational development.

5 Paper I - Institutional contradictions and management accounting change: Case evidence from Greenland.

Abstract

The purpose of this paper is to analyse how contradictions between institutional pressures shape the emergence and development of management accounting within AirGreenland. The paper applies document analysis and retrospective interviews to trace the emergence and development of management accounting practices spanning 50 years and analyses developments on multiple levels: societal, governance and micro levels. The paper illustrates the didactical development of the organisation and management accounting. The contradictory impetus from the institutional level generates a space where actors are able to affect development and change management accounting systems. Actors at company level further acted on the institutional level to affect change in governance and institutions. The case differs from case studies in emerging countries due to the low number of inhabitants in Greenland, its income per capita and the legislative influence asserted by Denmark, the former colonial power, restricting the generalizability of findings. The paper extends extant research on development of organisations and management accounting change in developing countries through a longitudinal study of how contradictory demands from the governance and legislative levels affect accounting and organisational change. Moreover, the paper is the first case study to address management accounting practices in Greenland.

5.1 Introduction

The development of management accounting in state-owned enterprises (SOEs) in developing and emerging countries is important, because of the social and economic consequences of management accounting systems (Uddin and Hopper, 2001; Uddin and Choudhury, 2008). The development of management accounting practices is tightly linked to changes at political and macro institutional levels. The macro level, however, may be both an impetus for change and an

obstacle generating unintended, politicised and dysfunctional outcomes (Gupta, 2005, Uddin and Hopper, 2001; Hopper, Tsamenyi, Uddin, Wickramasinghe, 2009).

Development may be impeded by the institutional level for a number of reasons. Actors at the institutional and political levels may have interests that are in opposition to the development of efficient forms of governance (Hopper et al, 2009). Development may be used to favour political factions and often changes are implemented “for political gain rather than commercial ends” (Xu and Uddin, 2008). Furthermore, developing countries often lack financial and technical capacity as well as strong institutions (Hopper et al, 2009) and institutional pressures may be contradictory where multiple inconsistent modes of production (MOP) (Hopper, et al 2009) are affecting the development of organisations and management accounting. Accounting and organisational change practices in developing and emerging countries is therefore problematic because it is closely tied to the institutional and the political level, which may facilitate as well as impede change. These problems however have only to a limited extent been analysed in longitudinal studies spanning multiple systems (MOPS). This paper therefore wishes to analyse “How is organisational change and the development of management accounting in SOEs affected by contradictory institutions and systems of governance”

In general the development of organisations and management accounting have been analysed through governance, critical and institutional perspectives. The governance perspective argues that privatisation and removal of political influence furthers development. The critical perspective argues that development towards market and state capitalistic modes of production are diverted into dysfunctional, politicised governance modes. The institutional perspective either seeks to understand how institutional changes are enacted or how contradictions lead to decoupling between institutions and operations. These three research streams however only to a limited extent focus on how structural contradictions affect accounting and organisational change over extended periods of time and only to a limited extent investigate how actors affect development and change. The second research question of this paper is therefore “what is the role of actors in accounting and organisational change subject to structural contradiction”.

The paper contributes to extant literature by employing a dialectic, structuration theoretical perspective to analyse a development process within one organisation (AirGreenland) spanning 50 years. More specifically, the paper contributes by analysing contradictions on multiple levels and identifies four types of conflicts and contradictions – principal versus principal conflict; nepotism and corruption versus transparency; independence and dependence on Denmark, and lastly; market efficiency versus social concerns. These contradictions were identified at macro institutional level and at board/governance level and we investigate how these contradictions affect change. Secondly, contrary to most literature in this field, it illustrates how actors in SOEs have the capacity to act and influence development at governance and political level. Change doesn't just flow from societal and governance levels, modernising organisations, but sets processes in motion that enable key actors to affect corporate and societal development.

The paper is structured as follows. First, we develop the research framework by reviewing extant literature and discussing the structuration perspective used in the paper. Second, the case is analysed and conclusions are presented.

5.2 Theoretical approach

Review

Literature on accounting and organisational change has analysed development of management accounting in developing countries in three different ways. One stream of research argues that changes in governance systems are important as they potentially increase transparency, efficiency and profits (Uddin and Choudhury, 2008). Here, extant corporate governance literature focuses on how privatisation of SOEs (State Owned Enterprises) increases the efficiency and effectiveness of operations (Boubakri, Cosset, Guedhami, 2005). Privatisation increases performance through two mechanisms. The managerial view argues that privatisation improves performance because private owners monitor more intensively than civil servants. The political view argues that governments pursue political objectives that are detrimental to profit maximisation and motivation. Privatisation removes political influence and hence improves efficiency (Gupta, 2005). This view, with its teleological connotations, (Van de Ven and Poole, 2005) however, has difficulty understanding how changes in organisations come about without changes in governance like privatisation and how conflict and contradiction affect outcomes.

A second strand of research employs old or new institutional theory to investigate changes in governance and control. This stream of research either looks at how isomorphic pressures change routines in organisations or how the pressure to change is decoupled from operational decision-making. Guerreiro, Alberto, Pereira and Frezatti analysed how the institutionalisation of accounting differed across hierarchical levels (2006). Firth (1996) studied the diffusion of management accounting techniques through isomorphic pressures. Nor-Aziah and Scapens (2007) analysed how change in a Malaysian company was loosely coupled both as a process and as an outcome because of power relations and lack of trust. This stream of research either focuses on the unfettered institutionalisation of accounting reforms or discusses the lack of institutionalisation due to decoupling (Hoque, Siddiquee and Hopper 1994). This approach, however, has difficulties explaining how change may come about without large institutional changes and often disregards the actor's view.

A third stream of literature focuses on how the macro institutional level affects efforts to develop companies in emerging and developing countries. This literature is much more critical about the effects of governance changes to development. The literature analyses how changes in modes of production affect management accounting and outcomes like profit and social needs. A key model outlining typical development patterns is Uddin and Hopper's (2001) model of the development patterns of less developed countries.

The model has three stages and two unintentional outcomes. The first stage of development, Colonial despotism, is based on weak capital markets; minimal state regulation and management accounting systems (MAS) are based on centralised, coercive controls and violence. Such a system has a low implementation of management accounting systems – a non-accounting style – but physical measures of production are important (Hopper et al 2009).

The second and third stages embody ideal and politicised state capitalism focusing on the public governance of SOEs. The system is based on weak financial markets, heavy regulation by the state and “bureaucratic rational legal accounting” (Hopper, et al 2009) and budgets are “seen as corner stones of planning and monitoring” aimed at increasing efficiency and accountability (Hopper et al, 2009; 482). Legal rational accounting however is likely to be in opposition to traditional cultures (Hopper et al, 2009).

The development towards state capitalism is therefore often diverted into the third stage of politicised state capitalism. In this model politicians interfere directly with the operations of companies. MAS is ritualistic, used for external legitimation and have a low level of cost and profit awareness. The system is likely to be troubled by contradictions because “local leaders faced conflicting expectations – traditional, modern or hybrid” (Hopper et al, 2009; 484).

Lastly, the system may move towards the fourth and fifth stages of ideal and politicised capitalism. Ideal market capitalism is based on capital market controls. Strong profit consciousness is to be expected in this stage as market pressures affect signification and legitimation structures. The system, however, often (“actually”) develops into politicised market capitalism. Politicised market capitalism is characterised by crony capitalism with politicised regulation corrupting political and economic ideals (Hopper et al, 2009; 475).

The perspective is critical and focuses on the clash between traditional cultures along with state and capitalistic societal forms. Hopper et al (2009) argue that contradictions fuel instability, a potential driver for change; “Each regime is rendered unstable by contradictions and conflicts that fuel political struggles nationally and within production and lay the basis for new regimes” (Hopper et al, 2009; 476). Traditions and efficiency may contradict each other and development is often diverted and thus employs a dialectical view (Van de Ven and Poole). The perspective is critical to the effect of privatisation, and sometimes looks at how actors circumvent intended effects, however, their key explanation lies at the institutional and regulative level. Here, it is argued that actors in less developed countries “have a larger residue of traditional cultures and MOPs [Modes of Production]; their poverty renders them more dependent on external finance, ideologies and structural reforms, with lower institutional capacity to deliver change.

This limits locals’ ability to determine political choices and state mechanisms of governance“ (Hopper, et al 2009; 496). In general, the literature therefore pays less attention to agency at company level and when agency is taken into consideration it is usually in the form of interruption by actors producing unintended, negative effects.

In sum, the argument is thus far that current perspectives has difficulties understanding how accounting and organisational change take place without alterations in governance and it has not sufficiently analysed how institutional contradiction affects change processes over extended periods of time. Furthermore, research tends to conceptualize actors in developing countries as powerless, neglecting the ability of actors to affect developments.

Structuration theory

Giddens's Structuration theory embraces structuralist and actor oriented positions and is consequently ideally suited for analysing management accounting change as both institutional and driven by actors. This approach has been widely applied to study organisational and management accounting change (e.g. Burns and Scapens, 2000; Busco, 2009).

As discussed, the typical development phases of less developed countries are characterised by contradictions between traditional cultures, legal rational accounting and market-based reforms (Hopper et al 2009). Such contradiction shows what Giddens calls "fault lines" in systems, which often lead to conflict and actual struggle between actors or groups.

Structures and agency are thus both emphasised in structuration theory. A key assumption in structuration theory is the "duality of structure" that enables actors to "draw on the modalities of structuration in the reproduction of systems of interaction, by the same token reconstituting their structural properties" (Giddens, 1984; 28), whereby agency and structure are not two independent phenomena, a dualism, but are a duality, meaning that they mutually constitute each other. Social structures both enable and constrain action (Busco, 2009).

In structuration theory the contradictory structures affecting development – such as between traditional cultures, nepotism, social concerns, free markets and efficiency - may be viewed as affecting actors through three distinct modalities. Interpretive schemes are "the core of mutual knowledge whereby an accountable universe is sustained" (Busco, 2009; 251). Norms are related to the legitimation structure and are "the actualization of rights and enactment of obligations" (Busco, 2009; 251).

Facilities is the modality which relates domination structures to interaction and are “reproduced relations of autonomy and dependence in social interaction” (Busco, 2009; 251).

However power is never one-directional but dialectic meaning that “in power relations there is no condition where one party possesses absolute power while the other possesses no power at all” (Uddin and Tsamenyi, 2005).

The discussions above points to several theoretical foci. Firstly, changes at institutional level should be specified in terms of Uddin and Hopper’s (2001) model. Secondly, the effects of contradictions on conflicts at governance and operational level of the company is analysed. Finally, all factors are analysed by the duality of structure to ensure that the analysis doesn’t become deterministic – where changes at societal level automatically affect lower levels, but that the enactment of contradictory social structures and institutions is dynamic and dependent on actors’ active and reflexive reproduction or production of structures.

5.3 Method

The paper follows the majority of studies on MAS and developing countries, which have employed the case study method (Hopper, et al 2009). However, the AirGreenland case has special features compared to extant research on MAS in emerging countries. For example, Greenland is part of the Danish realm but with significant powers deferred to the Greenlandic self-rule government. Greenland is not part of the European Union (as is Denmark) and has wide autonomy over internal affairs. In some respects Greenland is an emerging economy with a colonial past, a relatively short history of government institutions, weak infrastructure and industrial base and is somewhat dependent on subsidies from the Danish government. Based on income though, Greenland at present time is not considered a developing economy.

We choose to frame Greenland as an emerging country due to the study’s longitudinal nature, which incorporates the colonial past and the current great involvement of the state in larger Greenlandic organisations. This choice we find is warranted given that the model seems to presume a development towards more industrialized and emerging country states. This development Greenland indeed has had, but present time’s high income and modern legal framework is of a somewhat more developed nature than assumed in the Uddin and Hopper model.

The uniqueness of the case restricts generalizability of findings, however, it is also advantageous, the close-knit Greenlandic society with only 56,000 inhabitants made it relatively easy to get access to key respondents such as former leaders of the home-rule government, chairmen of different boards, key regulators, etc. Thus, the choice of case compared to extant research facilitated analysis of the multiple levels affecting changes to the organisation and management accounting systems.

The paper has employed multiple methods in a longitudinal case study of AirGreenland. We have conducted 31 interviews (+ 3 follow-up interviews and 17 interviews for other research projects) using a retrospective interview method (Cox and Hassard, 2007). Interviews focused on key developments in management accounting and governance in Airgreenland. We have performed archival analysis of government records, newspaper articles and company files and have had access to most documents within the organisation. One exception was the minutes of board meetings where access was not granted. This despite the second author's employment at the firm while pursuing an industrial Ph.D.

The employment of the second author facilitated access to key respondents but also generated reliability issues because of the potential interests of respondents and familiarity with interviewer. We have sought to handle these issues through triangulation and through the first author reviewing interviews and the use of quotes. Furthermore we have selected respondents from inside and outside the organisation in order to get a nuanced perspective on developments (see Appendix 1).

Data analysis occurred in an iterative process. First, we researched relevant literature, then we conducted and subsequently coded interviews and as analysis progressed more detailed literature studies were performed, coding categories developed and data recoded. The second author was chiefly responsible for coding, which the first author reviewed for reliability and selection bias. The different data sources were triangulated to augment validity of the study.

We apply Hopper et al.'s models of MOPS (2009) to divide the case analysis into periods. We distinguish between the epochs through key events in relation to the governance of AirGreenland. These epochs overlap as “organizational change represents not so much a shift from one archetype to another, but a layering of one archetype on another” while each epoch overlap contradicts new structures and continues to affect events in subsequent periods (Cooper, Hinings Greenwood and Brown, 1996: 624). Each period is analysed in the following manner. First we analyse the societal structures and governance at macro level. This is followed by an analysis of key events and the use of management accounting in the period.

5.4 Analysis

Company background

AirGreenland is a semi-public, semi-private, state-owned enterprise (SOE). It was, founded in 1960 as a fully private firm for commercial purposes by SAS and the Cryolite Mining Company “Øresund” (CMC). The firm was founded in order to execute a contract with the U.S. Military supplying their four U.S. radar stations that was located throughout the country. In 1962 the government of Greenland and the Danish state (KGH) joined as shareholders, establishing AirGreenland as a semi-private state-owned enterprise.

AirGreenland is a privately held company (close corporation) and the current ownership is split between the owners, as follows: Greenlandic government (37.5%), Danish state (25%) and SAS Group (37.5%). The Greenlandic self-rule government appoints the chairman. The table below presents key financial and operational figures from Airgreenland (all numbers from final year in period):

	1960-1979	1979-1990	1990-2000	2000-2010
Turnover	4-119 mio. DKK	120-399 mio. DKK	418-651 mio. DKK	668-1.134 mio DDK
employees	67-306	365-350	355-502	538-664
passengers	9.000-61.000	70.000-180.000	190.000-308.000	260.000-393.000
Helicopters (O)wned/(L)eased	12	21	16 (O)	9 (O) 5 (L)
Airplanes (O)wned/(L)eased	6 (O)	7 (O) 1 (L)	1 Boing (L) 8 (O)	13 (O)
Routes	Domestic	Domestic	Domestic – Transatlantic – Iceland	Domestic – Transatlantic – Iceland
Subsidiaries		GLA Hotel Arctic A/S Grl Rejsebureau A/S GLACE A/S	Hotel Arctic A/S Grl Rejsebureau A/S	Hotel Arctic A/S Grl Rejsebureau A/S WOG A/S WOGAC A/S AUL A/S
Subsidies	Deficits covered	Deficits covered varied app. 15 mio. DKK	Subsidy 61 mio. DDK	Service contracts 115 mio. DKK
Accounting	Centralized with KGH. Focus on scheduling not with a cost or profit focus. No overhead allocation to routes	Centralized focusing on salaries, later with controllers in each department. Focus on scheduling not with a cost or profit focus. No overhead allocation to routes	Increased cost focus. Change from deficits covered to a subsidy. Attempt at implementing ABC. Unsuccessful “Donald duck” allocation.	Business unit system. Controllers placed decentrally in operating units and departments.

Table 2 – Overview of the different periods within Air Greenland history with key numbers

5.4.1 (Post-) colonial rule, state capitalism and non-accounting (1960-1979)

The constitutional amendment in 1953 established Greenland as a county within the kingdom of Denmark, which officially ended the era of Greenland as a colonial state (Lidegaard, 1991: 198). However, Greenland was greatly dominated by Denmark being a county within Denmark and governed by Danish law through a “national chief” appointed by the Danish state. So while Greenland was no longer a colony officially, it remained controlled by Denmark.

Until the late 1970s the Danish state controlled supplies, infrastructure and maintenance (Tobiassen, 1995). The control of Greenland was overseen by the Ministry of Greenland and through state enterprises. At this time, infrastructure was deemed unsatisfactory “...passenger transportation was in the late 1950s operated with ship and irregular helicopter transport, this had the consequence that a trip from a Greenlandic settlement to Denmark could take up to two weeks” (Det Juridiske Laboratorium, 1978: 12). Transport infrastructure became a political issue and politicians engaged KGH (The Royal Greenland Trading Department) and the newly founded airline (GreenlandAir) to operate vital parts of the infrastructure in Greenland.

Dominance by KGH and SAS

Greenlandair was heavily dependent on subsidies. The need for subsidies was caused by the fact that the operation of domestic flights would mean either very high prices or deficits due to the size of Greenland and the scattered pattern of settlements. The total annual contribution to domestic transport in Greenland amounted to approx. DKK 35 million (approx. 4.5 Mill EUR) in 1975 (Juridiske Laboratorium, 1978: 16). The revenue of the domestic flights only covered approx. 80% of the cost of running the transportation infrastructure in Greenland.

To ensure the infrastructure of Greenland the Danish government acted as a regulatory body by securing funds through subsidies given to KGH (Royal Greenlandic Trading Department), which then gave a block grant to cover unprofitable routes operated by Greenlandair. KGH had appointed a director with obligation to the Ministry in the Danish government. KGH dominated Greenlandair and other parts of the industry in Greenland and “KGH was autocratic, in all areas, shipping, air transport, and supply and store management. You name it! It was like they controlled the economy” (interview with station-manager). The system was primarily state capitalistic, as all vital parts of the industry in Greenland were state owned and heavily regulated by government agencies.

Deficient budgeting, soft budget constraint and external control

Councils, the state and other authorities continually exposed GreenlandAir to intervention. Air Greenland received a deficit guarantee and some politicians intervened in route scheduling (Interview former chief financial officer). KGH owned substantial parts of assets (airplanes and buildings) and was the ultimate decision maker on key decisions about assets. A company controller argues:

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“Back then the company received block grants and no one actually knew what it covered and if it was sufficient. So there was never any time where you could take a commercial decision and rely on if it was good or bad”. (Former CFO)

Greenlandair relied on bailouts from the state and “just got a bag of money, when a deficit was generated” (interview network revenue management). The budget constraint was soft. A former CFO with GreenlandAir compared his role to that of the current CFO:

“I have never personally been involved that much in the use of the management accounting systems... My job as CFO was and has always been different from that of the current CFO nowadays, because I was more into other organizational things, as he now is more into accounting and financial management”. (Former CFO2)

The CFO was more involved in “organisational things” than accounting and financial management, which was seen to by KGH's accounting division. In the mid-70s KGH was responsible for all accounting functions, regardless of origin, including payments and financial accounts. KGH performed the central planning of all flight operations and decided the flight schedule.

In sum, Greenlandair was subject to (post-) colonial rule in a state capitalistic system and was dominated by KGH. KGH handled all financial and operational aspects of business on behalf of the Danish government. The system functioned through cross-subsidisation and Greenlandair had few resources (allocative and authoritative) and a ‘non-accounting style’ is apparent.

5.4.2 Politicized state capitalism and soft budget constraint (1979-1990)

In April 1978 the Home Rule Commission issued a report arguing that Greenland should be given increased independence and on 1, May 1979 the Danish Parliament passed the Home Rule Act (Det Juridiske Laboratorium, 1977).

The regulation of SOEs changed with the Home Rule Act. One of the main objectives of the Home Rule Act and the new Greenlandic government was handling – “the transition to a capitalist market economy based on the development of efficient private businesses”. Greenlandair however continued to be dominated by state and government activities (Harhoff, 1981). A commercial controller working with flight planning back in the 1980s, argued:

“Management's primary focus was basically to accommodate politicians. So in that sense, were we more or less controlled directly by the government - it was hopeless... [We should] think more in terms efficient operations and to make it a little more rational when it came to the infrastructure... We flew four times a week to Nanortalik in South Greenland with an S-61 helicopter, which had an occupancy rate of 40 or 50 per cent.... My first thought was that we could cut a departure or two. As I did it, it didn't take long before my manager stood in my office quite troubled. I asked what was wrong: "Well, yes... this perhaps wasn't that smart. The subject of cutting flights to Nanortalik had been discussed in the Parliament and they wouldn't approve it, because the mayor of Nanortalik had called the Prime Minister, which then told the Parliament that we should reinstate the flights”. (Chief Commercial Controller)

The controller discusses how operational data (occupancy rate) and not cost or profit data was used to make decisions and how political interference in operations was widespread. The objective to be more efficient was circumvented by frequent political intervention.

Operation with a block grant

The management accounting system at that time (1985) was not very developed. It could not measure the cost and turnover of individual routes and budgets were highly inaccurate and decision making was not informed by management accounting. A controller was asked if it was simply a matter of a block grant that was given the organisation:

“... yes, it was just put into the company ... Well, of course, budgets were made and we tried to use it best possible, with no accuracy, but to calculate the profitability of things, that wasn't possible”. (Chief Commercial Controller)

A former accounting executive supports the argument:

“We had an external and an internal accounting system... the internal accounts were not well made, but we were just happy that we got a check” (Chief Accountant)

The internal accounts were made for state subsidization of losses and were not comprehensive and did not allocate overheads. The executive however reckons that “profitable routes” subsidised loss making routes:

“They used the concept of cross-subsidization within the organization. This meant that the earnings on the profitable routes in Greenlandairs traffic system - approx. DKK 40 million (5 Mill EUR) - was allocated to operate the lossmaking routes [e.g. Helicopter routes]”. (Former CFO 1)

This cross-subsidisation was installed to ensure that all parts of the country had equal service. Basically, the same price per kilometre on all routes was charged. In practice, this led to a cross-subsidisation between what they considered to be profitable and unprofitable routes. Their estimation was based on the overall cost of helicopters with low occupancy rates to isolated part of the country compared to airplane routes with higher occupancy and frequency of flights. The differences in cost are of such a magnitude (while the price is more or less the same) that detailed calculations were not necessary to reach a conclusion about the overall profitability – though the accuracy of the specific estimate can be questioned.

The fight for transatlantic routes and domestic subsidies

The division of labour between Greenlandair and its largest shareholder SAS was that GreenlandAir was responsible for the mainly loss-making domestic flights, whereas SAS was responsible for the profitable transatlantic route. The Danish parliament had awarded SAS the concession to fly the transatlantic route between Kangerlussuaq and Copenhagen. However, a new concession was given to GreenlandAir in 1985 to operate a route between Narsarsuaq and Copenhagen making up 20% of the transatlantic market.

At this juncture, management within Greenlandair didn't have the capital to acquire assets of this magnitude. Therefore, planes were leased from Icelandair in 1986 and later from Maersk Air. This meant that Greenlandair was competing against its own shareholder SAS and cooperating with one of SAS's strong domestic competitors, Maersk Air. SAS, however, retaliated by diverting all traffic from Narsarsuaq to Kangerlussuaq. SAS had a strong position on the transatlantic route, resisting change and attacks on the monopoly on the transatlantic route.

In sum, the period is characterised by the change to home-rule signalling the end of (post-) colonial rule and new signification structures of independence were developing but GreenlandAir was, however, still dominated by SAS that handled ticketing and parts of financial accounting. Furthermore, the legislative level sought to increase competition and market-based reforms, but also continued to assert pressure for higher service levels on routes considered unprofitable. The regulative level was contradictory focusing on both efficiency and social welfare. GreenlandAir was not successful in getting the transatlantic route. At end of the period the subsidies changed from covering deficits to a fixed subsidy and accounting was at the end of the period developing with the hiring of the first four controllers in Greenlandair that was placed decentrally in the departments.

5.4.3 Politicized market capitalism and increased budget constraint (1990 – 2000)

In the beginning of 1990s the national economy was in a bad shape and resulted in a de facto bankruptcy of the Greenland Treasury. In the period 1993-1997 the national economy reached a satisfactory profit of DKK 1.1 billion (147 Mill EUR), with a deficit again in 1998.

In the 1990s there was increased focus on competition and transparency and Neoliberal ideas were strong in the 1990's (Naalakkersuisut, 2011; 11). In the 1990s several of the larger organisations were divided into smaller more focused organisations e.g. energy, telecommunications, and fishing organisations. Most of these were also changed to privately held public companies with the majority being 100% owned by the Greenlandic state.

However, this position was contradicted by a government report from the Greenlandic Parliament: "Overall, the government ownerships have to be seen as a strategic shareholder position in state owned enterprises, which ensure that the companies are vested in Greenland. This position gives the opportunity to uphold vital societal tasks, where there is no commercial basis" (Government report). In this way, there was a push for increased transparency and competition but government continued to be highly involved in operations in order to meet social ends. Due to the financial crisis and the changing governance of public companies in Greenland, the budget constraint was getting harder.

Hardened budget constraint

By 1997 pressure had increased on GreenlandAir. A former employee of the executive staff explains:

"We had a comprehensive cost cutting round... where we reduced staff by 150 employees... We had to cut everything that was possible, even in the department of finance. There was virtually no management accounting staff left". (Former CFO

1)

The budget constraint was hardened as a response to the financial pressure and reduction of organisational slack reduced cost. This also meant a centralisation of the accounting function and firing of accounting staff (interview station-manager). Management went to great lengths to improve budgetary management and execution by improving transparency and by strengthening audit procedures. The firm also implemented activity based costing in collaboration with Arthur Andersen, this however with limited success:

” we experimented with ”activity-based costing” and cost allocation and I don’t know what. But it never really worked... we used some very expensive consultants, it was called the “Donald duck accounts” (chief commercial controller)

GreenlandAir had a long history of taking an engineering, operational perspective that was changing to a more financial view of operations. For management, new signification and legitimation structures emerged, especially accounting measures of success, such as profit and shareholder value were new ways of understanding the business. However accounting was limited by the fact that SAS handled financial accounts:

”We were part of SAS accounting system, where all data originated, and then we got some very long lists that tried to check and balance. They were sent by mail... we didn’t even have computers back then”. (General Manager Charter)

Open skies and Greenlandair’s first transatlantic route

During the 1990s a new increased national consciousness brought about by the home-rule government, criticised SAS’s monopoly on the transatlantic route, which was beginning to bear the semblance of colonial times. Expert panels wrote several reports criticising the monopoly. The transatlantic route was potentially highly profitable, especially given its situation as a natural monopoly. In an article published 17, April 1997 the Travel Magazine (1997) states that “...it has frequently been argued that SAS has a profit of approx. DKK 75 million per year on its transatlantic route”.

In the beginning of August 1997 the Danish Ministry of Infrastructure announced ‘open skies’ between Denmark and Greenland in order to increase competition on the transatlantic route. The new CEO of Greenlandair submitted an application for the concession of the transatlantic route, with the condition of five years’ exclusivity. The Ministry of Infrastructure concluded that the application’s claim of exclusivity, in no way corresponded with the spirit of the ‘open skies’ initiative. Therefore, the application was rejected. Greenlandic society and businesses were disappointed – there were still no competition or better conditions (Krarup, 1997).

All in all, the combination of a uniform pricing system, financial pressure, cross-subsidisation and monopoly rights – the contradictory institutional pressures, to which GreenlandAir was subjected didn't just lead to a decoupling but also meant that signification, domination and legitimisation structures were changing with an increased focus on reducing costs. The change from deficit guarantee to a subsidy increased pressures for increased knowledge of cost and profits and Greenlandair experimented with cost allocation, though without much success in generating transparent accounts. Accounts and ticketing, though, was still handled by SAS. A comprehensive cost cutting round, where management reduced staff by 150 marked the period and management accounting was centralised. SAS handled ticketing and financial accounting. The contradiction between independence and dependence was evident in the competition for the transatlantic route. Greenlandair failed to get its hands on the transatlantic route, but the bid illustrates the agency of key actors of the company in direct contradiction to at least one of the major shareholders.

5.4.4 Strategy, increased cost and profit awareness within an increasingly pure, market-based system (2000-2010)

In the new millennium the regulative level further pushed for both increased competition and nationalisation of GreenlandAir. Greenlandic politicians were working on a proposition that would make GreenlandAir a 100% state-owned enterprise in order to lower prices:

“The primary purpose for this proposition is to be able to set tariffs, and fare prices politically” (Minister of finance and treasury).

At the same time, the director for Department of Traffic and Infrastructure argued “...we must examine all options for the provision of all routes in the bidding of contracts, so we can insure competition”. The Greenlandic parliament also formulated an action plan stating that the home-rule government shouldn't own any SOE that could sustain itself as a functional and profitable (Strukturpolitisk Handlingsplan, 2000). The contradictions between market and state capitalist ambitions were evident at the political level. The ownership of GreenlandAir remained unchanged.

To increase transparency and competition a number of regulative changes followed. The government worked to achieve more transparent pricing in the air traffic sector in general so both commercial and loss-making routes would reflect actual costs. In order to achieve these objectives the government changed the whole structure in terms of subsidisation and abandoned the uniform pricing system that had operated up until then. Therefore, the prices of flights in remote areas increased markedly.

Based on these developments the government made a service contract system to increase competition and eliminate cross-subsidisation on unprofitable routes. Service contracts removed the need for block grants and provided subsidisation to operate in areas where there was no commercial basis for these services. Roughly speaking, the passenger paid 1/3 of the ticket and the government paid 2/3.

New identity and taking over the transatlantic route

About the time of the millennium GreenlandAir went through a cultural change process. The new CEO had worked as Greenland Country Manager for SAS and was by some characterised as a tough businessman, a mechanic argues: "...the CEO was headhunted to create results – he was specifically hired to turn the deficit into profits... This increased financial focus built on the developments from the late 1990s.

The CEO also strove to change the identity of GreenlandAir. This transformation was commenced on 18, April 2002 when the company name changed from GreenlandAir to AirGreenland and a new graphic identity was introduced with the purpose of correcting the tattered reputation and sharpen the profile of the airline: *"The new CEO really turned things around, he started some kind of revolution in the company, with a new name and new graphic design"* (interview former station manager). The newly designed corporate identity should signal a new era. The management team of AirGreenland also deemed it necessary to obtain detailed knowledge of the cost of individual operations to ensure proper use and implementation of service contracts. Due to this the company was divided into a service contract and a commercial part, though with marginal effects on management accounting until later (see below).

AirGreenland however did not have “route accounts” due to lack of cost allocation. The high cost and profit interdependence on the different routes in e.g. West Greenland meant that it would be “*allocations of allocations*” (Chief financial officer). Profitability was therefore relevant for specific geographical areas and for business units such as service contracts. The new CEO was focused on winning the transatlantic route from SAS. A manager of AirGreenland argued:

“...The only thing that interested him was to win the transatlantic route from SAS...he was quite focused on generating profits and no decision was acted out, if it was not cleared with the finance department”. (Former CFO 2)

The new CEO focused on profits and winning the transatlantic route that would be an important step to improving the bottom line. An executive and board member reported on the effects on the board:

“...The majority of the board decided that we could take the competition up with SAS. We were at that time only flying on the Narsarsuaq route, as we bought our Airbus 330 and put it into operation only flying those days that SAS wasn't out of Kangerlussuaq. Then it all changed as the majority wanted to fly on the profitable days. This created a dogfight in the boardroom and I must admit that it was one of the worst board meetings that I have ever been part of.” (Former CFO 2).

SAS didn't have the support of either government anymore and the majority of the board was also in favour of allowing AirGreenland to increase earnings through the transatlantic route. SAS soon gave up their concession after initialing seeking to stall development. This resulted in conflicts between the owners on the board. AirGreenland was now the only operating airline on the transatlantic route. It now seemed that the strong wish for competition on the transatlantic route, to decrease prices, was less urgent. In this contradictory space new corporate identities were crafted and there was an increased cost and profit focus.

Implementation of AirGreenland's first strategy plan

In 2007 AirGreenland developed its first official strategy, which included the entire organisation. The cardinal impetus for implementing Qarsoq 2012 was that AirGreenland had left its safe position as a protected monopoly on internal routes and was to act as a competitive aviation group creating profits.

With the implementation of Qarsoq 2012 the organisational structure also changed. The organisation was divided into business areas befitting strategy as well as operations. The business operation of AirGreenland was divided into four main areas: Commercial Airline Operations, Capacity Provider Operations, Service Contract Operations, and Other Business Areas (i.e. hotel, incoming, travel agency, shipping, and airline). The different units were controlled via budgets and the CFO only interfered if budgets were not met. Controllers were decentralised.

Values were also about to change. The strategy focused on collaboration and transparency and knowledge sharing should lead to increased competitiveness and profit focus. The purpose of the new organisation was to focus on strategic prioritisation and ensure that the operational part of the company increased its commercial focus. The CEO argued:

“We have the last five years trained ourselves to run scenarios and calculations, so we can simulate the outcome, among other things. This is now feasible after the implementation of our business unit system, which is a support system to our regular management accounting system, that have given us the ability to do much more refined calculations and create material for our financial system...The board of directors has been professionalized, which means that anything which passes the board getting approval has been calculated and thoroughly processed”.

Increased ability to calculate the effects of various alternatives (e.g. bidding on service contracts, pricing seats to internal and external travel agencies, calculations of larger investments such as new aircrafts) and run scenarios was an outcome of the process.

Management accounting calculations were increasingly incorporated in domination and legitimisation structures, as suggestions now had to meet a profitability criterion. Uncalculated initiatives were rejected, i.e. the rules for making decisions had changed and management accounting information was becoming a powerful resource for top tier management. Several Interviews with staff, e.g. controllers and management from the financial unit confirmed this:

“...it is my understanding that the employees in AirGreenland think that the company is operated only on the basis of financial and management accounting control... When I started 12 years ago, things were being handled quite strictly in terms of finance and the use of resources, but this was dependent on the CEO in charge. Today we are more precise and thorough in our calculation, as we now can benchmark both internally and externally.” (Former CFO 2)

This statement indicates that the management system was evolving leading to greater emphasis on improving estimates in order to ensure better decision making in terms of investment alternatives and not just cost reduction. The organisation also benchmarked the cost per seat kilometre and compared with other operators such as Jettime, SAS and Icelandair. A chief accountant argues:

“earlier, we were looking at the overall budget and ensuring that we didn’t create losses. Today we are very strict on the profitability of each department and project. KPIs are enforced more strictly across the organization, as individual budgets and estimate are challenged and handled more detailed”. (chief accountant)

The evaluation of budgets was now more profit than cost focused. Furthermore, the controller function was decentralised, so calculations of business cases could be done onsite within the department. AirGreenland was becoming increasingly profit conscious as a result of cultural changes, implementation of responsibility accounting and strategy development.

Battling nepotism: Contradiction and conflict between AirGreenland and politicians

During 2007 relationships between government and state-owned enterprises were moving towards a more arm’s length approach; all decision-making was moved from the political level to the corporate boards and management (Naalakkersuisut, 2011; pp. 13).

Despite the fact that an arm's length principle was sought implemented, AirGreenland felt the need to solidify the company's social legitimacy (interview with Chairman). The government was by far the biggest customer for the airline as well as the authority responsible for regulating concessions in various contexts. The government also appointed board members to the SOEs and regulated the pricing structure for the main infrastructural services, moreover being the administrator of funds through the service contracts – producing a complex relationship.

The contradictory structures of an increased focus on profit maximisation and the old system of frequent intervention and political favours were taking their toll and leading to conflicts between AirGreenland and the government, and it prompted the CEO of AirGreenland to publically announce that he wanted to put an end to all forms of corruption and interference in the management of SOEs. He argued that this opinion was not just an attack on the Greenlandic political establishment but also a wake-up call for all Greenlanders. According to the CEO it was a 'huge problem' for Greenland that party members or political friends are assigned central positions for which they are unqualified. SOEs should operate efficiently and governmental shareholders should facilitate this: "If we have to ensure economic independence, we need to have a professional businesses operating on professional terms. Not after how the political winds are blowing". He further stated that:

"...every time the government coalition has changed ... – there has subsequently, in the general assembly of the large SOEs, been replacement among board members to reflect the party colours in the parliament" (Johansen, 2008; 13).

In April of 2009 the potential contradiction between AirGreenland's new focus on transparency and the needs of the political classes turned into a head-on confrontation between politicians and AirGreenland. Chairman Julia Pars was dismissed from the board. This happened despite the fact, that in 2008 AirGreenland had turned a profit of DKK 83.1 million before taxes (approx. 11 Mill EUR), an improvement of DKK 9.9 million (AirGreenland, 2008: 42).

Former Prime Minister Lars-Emil Johansen was appointed chairman of the board and according to the Minister of Transportation and Infrastructure "...Lars-Emil Johansen is chosen and instated because of his long experience in the political system" (Nyborg, 2009). The appointment did not go unnoticed by the public, as citizens commented on the National TV Station, Kalaallit Nunaata Radioa (KNR) web news:

"...why is it that Greenlandic politicians always have to intervene in things that they absolutely don't have a clue about – I can be so embarrassed of being a Greenlander".

And

"...I despise this! What is next, that the CEO is fired because he has a clear and open opinion about nepotism and corruption".

The change of the chairman was highly controversial. At this point the CEO issued an internal memo regarding the change of chairman:

"...the past 48 hours in AirGreenland's history has been very exciting and challenging... It is incomprehensible that the cabinet has decided to replace our chairman during the last two years, Julia, who so far has stood for innovation and has pushed hard to achieve our five-year strategy....Nevertheless, it's business as usual".

The CEO directly opposes the government selection of board members. Lars-Emil Johansen was appointed chairman on 19, April 2009 but three days later he announced; "... he didn't want to be chairman or board member because he wouldn't want to be in a place where employees were angry towards him". Allegedly, the board members appointed by the employees in AirGreenland had opposed the decision to appoint Lars-Emil Johansen.

These reactions lead the Greenlandic Parliament to ask Julia Pars to re-join the board as chairman. The development and change in AirGreenland is drastic, from a non-transparent, non-accounting setup totally subservient to external stakeholders and SAS to an increased profit consciousness and direct opposition to political intervention.

Change of government

Mid-2009 the government changed in a general election. The political party Siumut lost the election in June 2009 after 30 years of complete control of Greenlandic politics. This happened two months after the public debate about the appointment of a board member to AirGreenland, supposedly pegged on the basis of political favours rather than competence.

In sum, the home-rule government was formulating economic policy and control with more and more focus on commercialisation and liberalisation. The service contracts increased competition and created impetus for more detailed responsibility accounting, allowing for the calculation of cost and profits of business units and geographical areas. AirGreenland took over ticketing and accounting systems. AirGreenland increasingly had a focus on profits and competition as illustrated in the successful procurement of the transatlantic route.

Strategic planning and long term investment plans were gaining ground and marked changes in signification and legitimation structures. Managers now had to measure potential investments against economic, social, environmental and internal priorities. When politicians in contradiction to the new legitimation and signification structures in AirGreenland sought to elect board members allegedly for political favours, AirGreenland went on to fight politicians. Following this the government lost the election. This was part of greater societal changes but AirGreenland played a significant role in fuelling this movement.

5.5 Discussion

The developments in the case are summarised in the figure below:

	1960-1979	1979-1990	1990-2000	2000-2010
Turnover	4-119 mio. DKK	120-399 mio. DKK	418-651 mio. DKK	668-1.134 mio DDK
employees	67-306	365-350	355-502	538-664
passengers	9.000-61.000	70.000-180.000	190.000-308.000	260.000-393.000
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Airplanes (O)wned/(L)eased	6 (O)	7 (O) 1 (L)	1 Boeing (L) 8 (O)	13 (O)
Routes	Domestic	Domestic	Domestic – Transatlantic – Iceland	Domestic – Transatlantic – Iceland
Subsidiaries		GLA Hotel Arctic A/S Gr l Rejsebureau A/S GLACE A/S	Hotel Arctic A/S Gr l Rejsebureau A/S	Hotel Arctic A/S Gr l Rejsebureau A/S WOG A/S WOGAC A/S AUL A/S
Subsidies	Deficits covered	Deficits covered varied app. 15 mio. DKK	Subsidy 61 mio. DDK	Service contracts 115 mio. DKK

Table 3 – Development within Air Greenland summarized key figures.

By and large, the figure mirrors Uddin and Hopper's model moving from colonial rule to state and market capitalistic forms that, as predicted, are politicised. However, the paper introduces a number of extensions to this development pattern and in relation to our understanding of development and management accounting change.

The development of AirGreenland is difficult to comprehend exclusively through a governance perspective focusing on how changes in governance, such as privatisation bring about increased efficiency and development through private sector monitoring or removal of political influence. The composition of the AirGreenland board was stable over the periods studied in the paper and the shareholder composition was a mix of SAS, Denmark and Greenland.

Yet, regulatory and governance changes affected changes. The change from a deficit guarantee to a subsidy and the financial crisis of the 1990s was key in making the organisation more cost focused. The introduction of service contracts facilitated responsibility accounting, which increased AirGreenland's ability to calculate the profitability of business units. These changes affected the development of an increasing profit consciousness and accounting use.

Despite these measures the governance perspective cannot exhaustively explain developments. The regulative level emphasised social concerns and intervened in operations. Priority changes came from management repeatedly seeking to secure the transatlantic route over the years. Thus, management was also an actor actively seeking to change the airline in direct contradiction with the board. Principal-principal problems (Berglöf and von Thadden, 1999) where owners disagree about key issues – such as the transatlantic route – hindered domination by the private shareholder SAS and the board's ability to generate impetus for change was mired.

The paper also extends institutional theory, which argues that changes in organisations and to management accounting come about when an organisation enacts institutions and routinizes institutional changes into practices. For AirGreenland, however, this impetus was sought implemented through a mix of regulations, and Greenland society as well as the board was marked by structural contradictions. Three types of structural contradictions were particularly pronounced. Firstly, the period from 1979 and onwards was marked by a strong push for independence from the Danish state and SAS. Yet, SAS was owner of AirGreenland and later controlled ticketing financial accounts, and Greenland received substantial subsidies. Secondly, the government and society in general pushed AirGreenland to think in terms of efficiency and at the same time AirGreenland was expected to take considerable social concerns into account and politicians reverted decisions that aimed at improving efficiency. Thirdly, there was a contradiction between a drive towards more market-based reforms as evidenced in the call for 'open skies' and the use of service contracts from 2001, which increased competition for AirGreenland while politicians kept intervening in AirGreenland, allegedly for political ends and favours. Thus, the institutions affecting AirGreenland rested on contradictory signification, domination and legitimation structures.

Here, a different strand of institutional theory argues that decoupling is the observed response in such instances. While decoupling probably was an important explanatory factor in stalling accounting and organisational change, profound changes, nevertheless, took place as a result of actors seeking to change the organisation.

The paper extends the critical literature in two ways. The critical literature based on Uddin and Hopper's (2001) model, which largely predicts that development, is unsuccessful leading to politicised states of market or state capitalism. It further argues that actors have "low institutional capacity to deliver change" (Hopper et al 2009; 496). The unique case of AirGreenland illustrates different development patterns and the paper's analysis extends the critical perspective in two respects.

Firstly, actors sought to affect the political and institutional level. The contradictions between transparent market-based reforms and political intervention lead to conflict as the modernisation and development of AirGreenland had installed more profit conscious and meritocratic structures within the company. In the 2009 election the attempt by the governing party to install one of their members on the board was hindered by employee representatives on the board, the CEO and public uproar, which eventually lead to the politician's resignation.

How much this incidence affected the election, which was in progress at the time, is difficult or impossible to discern. However, it is clear that it was part of the broader social debate about nepotism within society, which was a key factor in the change of government. This finding extends critical research through illustrating how actors may affect developments. It furthermore supports Uddin and Tsamenyi (2005) argument that power is dialectic (ie. That power always is a relation where the weaker part has influence on events) and extends it through illustrating how the SOEs not just may control own management accounting procedures but may also affect the governance structure (choice of chairman) and macro institutional level (fighting nepotism and affecting elections).

Secondly, the case lends some justification to a positive view on development. In the period analysed changes towards more transparent, profit conscious and efficient operations were taken and fight against nepotism was evident. These developments seen from a governance perspective are likely to benefit the Greenland society as they may reduce subsidies and resources allocated to the sector. The development, however, is not clear-cut. Events following data collection for this paper indicate that things haven't changed fundamentally. The former head of the Greenlandic government had to resign due to the misappropriation of public funds and the former CEO of AirGreenland at the time of the fight with politicians had inappropriately improved his CV through listing exams that were not completed. For this reason any developmental optimism is based on the changes to legitimization and signification structures pointing towards modernisation rather than an actual change towards a modern (welfare) capitalistic system.

These discussions point to change and development being a process that neither flow from the institutional level and then becomes institutionalised nor are change solely dysfunctional or ascribable to actors circumventing and producing structures. Change is rather a complex process where contradictory institutional input creates a space where actors are able to develop and change systems and structures. The development of management accounting thus seems to necessitate that change is analysed on a structural, institutional level as well as through the actions of actors seeking to affect development – i.e. through the duality structure (Giddens, 1984) where both (contradictory) structures and institutions as well as actors' enactment and production of structures are analysed.

5.6 Conclusion

The impetus from the institutional level is not unidirectional nor is it unambiguous. Market based reforms and norms of efficiency were contradicted by the simultaneous interference by politicians to keep uneconomic routes and in this way take on social concerns or carry out actions, perceived to be nepotistic and self-serving to the political elite. The contradictory institutional influences created a contradictory space of options, which enabled actors in AirGreenland to affect development. Neither politicians, CEO nor board members controlled the process of modernisation.

In many respects the Greenlandic case is unique. Greenland is a former colony and has independence, but the Danish state has been a relatively benign colonial ruler and Greenland is still part of the Danish realm receiving considerable subsidies and has access to regulation, expertise, the Danish educational system, etc. The contradictions between structures of transparency, efficiency and markets versus political intervention, nepotism and social concerns, however, are also found in extant research (e.g. Uddin and Hopper, 2001; Hoque, Siddiquee and Hopper, 1994) and our findings are not inconsistent with extant research. The uniqueness of the case restricts generalizability but it is our hope that the ability to study relations between action and institutions in the close-knit and small Greenlandic society in more detail will spur interest in analysing how contradictory institutional structures, actors, and management accounting change interrelate over extended periods of time.

6 Paper II - Multiple references of fairness in pricing: an analysis of two competing logics and their enactment of how to set fair prices.

Abstract

This paper analyzes the perceived fairness of pricing practices in Air Greenland. The paper analyses how two competing logics – Airline logic and Tourism logic – enacted the reference point for fair prices and how these enactments affected the micro interactions and negotiations between Air Greenland and customers. We illustrate that disputes concerning prices arose because participants enacted reference points differently to advocate for the fairness of prices, and that the enactment were embedded in competing institutional logics. The paper develops three contributions. First, the paper illustrates that contrary to extant pricing research, where one reference point (e.g. price, profit or costs) are referred to at a time in arguing for fair prices, many reference points, some not mentioned in extant research, were mobilized simultaneously in discussions of the proper price. Furthermore, often the same reference points were mobilized by the different actors but with different content. Secondly, the paper argues that the use and interpretation of specific references points of fairness were embedded in two different institutional logics that were both following a business logic. Finally, the paper shows that the different agent's enactment of what a fair price should be created conflict even though they both adhered to the general logic of yield management.

6.1 Introduction

This paper analyses how pricing practices are shaped by fairness concerns that are embedded in competing institutional logics. The paper shows that pricing is both an optimization exercise where firms seek to set prices that optimize demand, capacity and cost, but that it is foremost a practice where different types of fairness concerns affect interactions and negotiations between internal and external customers. These fairness concerns are shaped by and embedded in different institutional logics that enact ideas of fairness differently. Like in extant research the paper illustrates that fairness concerns influence price negotiations and affect firms' ability to complete a sale.

The impact of fairness concerns in pricing has been analyzed in different ways in extant literature. The behavioral accounting literature documents that concerns about an equitable distribution of profits affects price negotiations, leading to lost sales; reduction in propensity to share cost information (Drake and Haka, 2008; Van den Abeele et al., 2009); and changes in transfer prices (Luft and Libby, 1997; Katchelmeier and Towry, 2002). The institutional accounting literature focuses on how cost plus pricing is used to derive fair prices in a context of regulation (Ahmed and Scapens, 2000; Covalenski et al., 2003). The behavioral and institutional literature thus argue that pricing is affected by fairness concerns, but they disagree on the extent to which cost or an equal sharing of profits is the more important reference point for the setting of fair prices.

The two streams of literature both focus on a single reference point for fair prices (sharing of profit or cost plus) that is enacted by the actors in the practice of pricing. Such a view, however, may be challenged from the perspective of competing institutional logics. The institutional logics perspective draws attention to the possibility of disagreement between actors on the enactment of a pricing practice such as yield management. Extant literature has studied how different types of logics compete in the interpretation of the use of business practices such as budgets, yield management or performance management in sports clubs (Carlsson-Wall et al., 2016) schools (Ezzamel et al., 2012), or theatres (Amans et al., 2015), which often result in conflicts. The competing logics perspective suggests that actors employ different rationalities based on identity, focus of attention, and sources of legitimization that affect the reasoning of what is at stake in a particular conflict, negotiation or interaction (Friedland and Alford, 1991; Thornton et al., 2012). Based on the institutional logics perspective we suggest that deriving

prices that are perceived as and fair is more multifaceted and dynamic than posited in extant pricing literature. These deliberations have led to the following research question:

How do different logics' enactments of reference points affect discussions and negotiations about prices?

The research question is analyzed via a case study of Air Greenland's discussions and negotiations about prices with internal and external customers that evolved into conflicts. The conflicts between the competing logics were not a clash between a business logic and a non-business logic, which is often the story in the literature applying competing logic theory (Townley, 2002; Mattimoe and Seal, 2011; Ezzamel et al., 2012; Amans et al., 2015; Townley, 2002; Carlsson-Wall et al., 2016). The overall business approach and pricing practice – yield management – was not opposed by any of the two logics, and both of the logics accepted that calculating fair prices involved finding relevant reference points as the pricing literature suggest. These reference points were the price other customers pay or could pay, or the price that would result in a split of profit relative to the contribution of the trading parties. Both of these reference points are often mentioned in the literature (Ahmed and Scapens, 2000; Kahneman et al., 1986; Fehr and Schmidt, 1999; Luft and Shields, 2009; Xia et al., 2004). But also concerns for equality, which is not mentioned in the pricing literature, for different customer segments “needing” cheap tickets (Rawls, 2009) affected interactions. The intriguing part is that we document that actors did not just employ one reference of fairness but used multiple references dynamically to argue for the fairness of particular prices in negotiations. The paper illustrates that the arguments are embedded in the different logics identity as an Airline company respectively travel agency, which both influenced their focus of attention as well as the way legitimized the pricing according to their role in the Greenlandic society. The analysis more specifically contributes to research in three ways.

First, the paper contributes to the pricing literature through analyzing how the two institutional logics invoke several reference points in their sense making and motivation for setting prices. In the behavioral and institutional accounting literature each party mobilizes one reference point (profit or costs) to reason for a fair price, and focus is on how one reference point dominates interactions (Bloomfield and Luft, 2006; Luft and Libby, 1997; Fehr and Schmidt, 1999). We extend this literature by showing that several (as opposed to one) reference point were

mobilized; that the same reference points were enacted differently; and furthermore we show that additional reference point not mentioned in extant literature - such as equality for different segments of customers – was mobilized in the perception of what a fair price should be.

Secondly, though several papers have shown how organizations react to contradictory institutional pressures (Amans et al., 2015; Townley, 2002; Carlsson-Wall et al., 2016; Ezzamel et al., 2012; Lounsbury, 2007; 2008; Reay and Hinings, 2009) extant research often see conflict arising when organizations are exposed to both a market or business logic and a different logic such as art, sports, or a professional school logic, which is in opposition to the business logic (e.g. Amans et al., 2015; Townley, 2002; Carlsson-Wall et al., 2016; Ezzamel et al., 2012; Mattimoe and Seal, 2011). Our analysis illustrates that the conflict in Air Greenland not is caused by the introduction of the business yield logic, since both of the competing logics accept the general logic of yield management. Conflict arises because the practice is enacted differently. By investigating this difference, the paper responds to recent calls for more specificity in the analysis of how multiple institutional logics compete: ‘In terms of future research, we see a need for more studies investigating whether, and to what extent, multiple institutional logics do indeed compete with each other in specific decision-making situations within organizations.’ (Carlsson-Wall et al., 2016; p. 59). The specific decision-making situations are in our case the mobilization and enactment of information of reference points to calculate fair prices. The paper shows that the enactment of information of reference points is embedded in the institutional logics. The variation in practice we study is thus not for or against a business logic, but is variations of business logics, that are hybridized (Kurunmäki, 2004; Pache and Santos, 2013) through taking fairness concerns into account that are enacted according to their logics that we call the Airline and the Tourism logic.

Thirdly, we show that actors respond actively to institutional pressure, which can evolve into conflict. The interpretation of the yield management practice creates conflict, because actors have different interests. In our case study the interests are manifest in the quest for favorable prices, but we illustrate that the active pursuit of interest is an example of embedded agency (Thornton and Ocasio, 1999; 2008). The embeddedness of agency underlines that the practices used to pursue self-interest are embedded in the institutional logic they act within. In our analysis we show that different and multiple reference points are mobilized by the competing logics and are sources of conflict.

The rest of the paper is structured as follows. First, we discuss extant literature on fair prices. Second, we explain the methods used in the paper. Third, we develop ideal types, analyze discussions about pricing and analyze the logics in action in an embedded case. Finally, we end the paper with a discussion of findings and conclusions.

6.2 Review of literature on fair pricing

Fairness is generally conceptualized in relation to a reference point (Kahneman et al., 1986; Fehr and Schmidt, 1999; Luft and Shields, 1999). One type of reference point is a 'reference transaction', which is a transaction by which the fairness of a specific price is judged. A customer can perceive a price as unfair, if he or she pays a price, which is higher than e.g. posted prices, the price other customers pays or the price paid in previous transactions with a seller (Kahneman et al., 1986; Xia et al., 2004). Fairness is thus a constraint for price discrimination, which is prevalent in the airline industry, and therefore obscuring price discrimination and hence price references has been seen as ways to mitigate perceived unfairness (Kimes, 2004).⁹ In the accounting literature two types of references points are stressed namely profit (behavioural accounting literature) and cost (institutional theory). In the following these two streams of literature are reviewed.

6.2.1 The behavioral approach to pricing.

In the neoclassical perspective, pricing is seen as a technical, rational practice conducted by profit maximizing decision makers, who are totally detached from the social context in which s/he operates, and sets prices based on full knowledge of production cost, customers demand curves and competitors supply and prices (Rabin, 1998; Hodgson, 1998). In the neoclassical world conflicts over prices cannot arise, since buyers and sellers simply accept the best price they can get. Behavioral economics on the other hand suggests that people depart from pure self-interest (get the best price compared to alternatives) and take into account "other-regarding" goals such as fairness (inequity aversion) in their pricing practice (Fehr and Schmidt, 1999; Luft and Shields, 2009). If a firm's price setting is perceived as unfair the customer will disregard the

⁹ According to Kimes (2004) this can be done in several ways. Airlines can increase the full-rate fare, and give everybody a discount; sell discounted tickets as part of a package, and thereby 'obscure' the (reference) price of the service; or have restrictions on the ticket, which may include (1) booking a certain length ahead of time, (2) staying for a minimum length of time, (3) staying over a particular night, (4) having a change or cancellation penalty, and (5) having a nonrefundable reservation, which transform a ticket into a bundles of feature, which makes one it difficult to compare tickets with each other.

narrow self-interest (getting the cheapest price) and punish the selling firm by e.g. purchasing the product elsewhere even at a higher price (Kahneman et al., 1986).

The behavioral accounting literature has focused on an equal share of profit as a reference for a fair price. Actors have an aversion to inequity in profits that affects their behavior. The literature documents that information on cost affects fairness through making profits more transparent. Luft and Libby (1997) document that fairness concerns affect negotiations about transfer prices, when subjects have access to both market and accounting information. While the market price according to neoclassical theory should dictate prices, Luft and Libby (1997) show that knowledge of accounting profit spurs concerns for fairness and variation in estimations of reservation price and final price increases due to concern of fairness. Kachelmeier and Towry (2002) further substantiates Luft and Libbys findings but show that fairness (based on reference cost and profit) only affects negotiation when participants engage in face-to-face negotiations with unrestricted communication.

The incentive to share information is also affected by fairness and profit concerns. Drake and Haka (2008) found that sellers and buyers with ABC information were less willing to share cost information than sellers with full cost information due to the presence of inequity aversion. If inequity adverse buyers through the more accurate ABC-information perceive a given sharing of profit as unfair then sellers anticipating this perception may not be willing to share the cost information, which reduces the ability to arrive at the Pareto optimal solution of full sharing of cost information. Van den Abele et al. (2009) similarly found that ABC information might not be used to optimize results if sellers are powerful, as they will attempt to maximize their own outcome (and hence violate the inequity aversion norm).

The behavioral literature thus documents through experiments that fairness is an important social goal, but since experiments is conducted in a highly restricted context, they do not take into account the complexity of real world social contexts. The institutional literature on pricing provides some insight to how the context influences pricing practices. We therefore turn to the institutional literature in the following section.

6.2.2 Institutional perspective on fair prices

The institutional perspective on pricing studies the institutional embeddedness of pricing decisions, often in case based qualitative research. Several accounting papers (Mattimoe and Seal, 2011; Lucas and Rafferty, 2008; Ahmed and Scapens, 2000; 2003; Covalski et al., 1993; 2003; Hodgson, 1998) have investigated the practice of pricing and linked it to the broader institutional environment. In contrast to the behavioral papers a common theme in the accounting papers is that cost often is the reference point for a fair price, since it functions as a proxy for the participant's contribution (see also Adams, 1965).

The institutional perspective has predominantly investigated regulated industries focusing on cost based pricing policies. The papers by Ahmed and Scapens (2000, 2003) and Loft (1986) illustrate how full cost calculations were used by the State as a regulating tool to establish a price ceiling in war time, where the State was the only buyer of goods. The cost ceiling functioned as a reference point 'for restricting unfair price competition' in terms of monopoly pricing and price discrimination (Ahmed and Scapens, 2000; p. 171). In a similar vein Covalski et al. (2003) e.g. suggest that the use of cost-plus fair rate of return to de-regulate the utilities industry in the State of California served legitimizing purposes. Cost-based prices allowed public utilities to be privately owned, thus avoiding the charge of inappropriate socialism, and at the same time the transactions could be kept under control and thereby preventing that the transactions were priced unfairly high (Covalski et al., 2003; p. 428).

The institutional papers emphasize that accounting costs often are seen as reference points for fair prices. However, these papers focus little on potential conflict and competing interpretations in relation to the calculation of prices, and there is little room for practice variation in these account, for example in terms of how individual actors enact the cost calculations.

6.2.3 Institutional logics

The competing logics approach directs the attention to the possibility of several logics affecting a particular setting through divergent institutional pressure, where the logics may compete or/and contradict each other. The fairness of prices and accounting calculations could therefore be interpreted through the enactment of different institutional logics. The institutional logic perspective places actors and their use of reference points, their way of legitimizing and arguing for the fairness of certain prices, at the center in understanding how prices are

perceived, negotiated and set. Much focus in the literature has been on defining the specific logics and uses these logics to explain practice variation. The concept practice is used to link broader institutional structures to individual actions: ‘Practices refers to forms or constellations or socially meaningful activity that is relatively coherent and established’ (Thornton et al., 2012; 128). According to Thornton et al. (2012) activities involve acts that are generally devoid of deeper social meaning such as pounding a nail, whereas the practice of professional carpentry provides meaning to a set of activities that in isolation are banal (Thornton et al., 2012; p. 129). In this sense yield management is an important practice whereas the specific activities of investigating capacity levels and alternative sales opportunities are activities that in isolation are rather meaningless. Thornton et al. (2012) define institutional logics as:

“Institutional logics represent frames of reference that condition actors’ choices for sense making, the vocabulary they use to motivate action and their sense of the self and identity. The principles, practices, and symbols of each institutional order differentially shape how reasoning takes place and how rationality is perceived and experienced’ (Thornton et al. 2012, p. 2).”

The institutional logics approach draws on all the three institutional pillars - the regulative, the normative, and the cultural cognitive – which has dominated institutional analysis, and indicate that they are interrelated.¹⁰ Institutional theory stresses the importance of cultural-cognitive elements of institutions. (Scott, 2008; p. 57), and an important feature of the cultural-cognitive element is the creation of a collective identity among a group of people, who interpret episodes and actions in the same way. These identities are shaped by the institutional environment, and the identities form their own institutional logic (Thornton and Ocasio, 2008; p. 111).

The competing logic perspective holds that while individual and organizational actors may seek power, status, and economic advantage, the means and ends of their interests and agency are both enabled and constrained by prevailing institutional logics. This assumption has been

¹⁰ Giddens (1984, p. 28) emphasizes for example that the separation between the communication of meaning related to structures of signification (cognitive) and the operation of normative sanctions is separable only analytically. Giddens further states that the idea of ‘accountability’ “in everyday English gives cogent expression to the intersection of interpretive schemes and norms” (1984, p. 30). Being accountable for one’s action is both to reason for them and ‘justify’ them based on normative grounds. Scott (2008, p. 60) argues with Berger and Luckman (1967, p. 92-93) that legitimation gives ‘moral dignity to cognitive structures’. Similarly, the ability to regulate and thereby the sources of authority cannot be seen as separated from legitimation and cognitive structures (Burns and Scapens, 2000; Scott, 2008; Giddens, 1984, p. 31-32). Power and agency and hence the ability to regulate others are embedded in the institutional context.

labeled embedded agency, and is one of the main characteristics of the competing logic perspective (Thornton and Ocasio, 2008). According to this view, while power and politics are present in all organizations ‘the sources of power, its meaning, and its consequences are contingent on higher-order institutional logics (Thornton and Ocasio, 1999; p. 802). Mattimoe and Seal (2011) have illustrated that yield management on the one hand constitute a new identity and hence new resources of power for some, and on the other hand is the precondition for this agency.

The institutional logics perspective thus departs from earlier neo-institutional theory’s idea of isomorphism that indicates a harmonization of the institutional environment. Friedland and Alford (1991) were especially critical towards those branches of economic theory (public choice, agency theory, etc.) that see society as increasingly consisting of instrumental rational individuals, who exchange goods in a capitalist market.¹¹ The reservation towards economic theory’s idea that society consists of instrumentally calculating individuals is repeated in Thornton et al. (2012): “...*the institutional logics perspective is fundamentally about how to specify the countervailing and moderating effects on self-interest and rationality and, for that matter, to realize...the professions cannot be completely dominated by markets*”. We suggest that the sensitivity towards variation instead of harmonization makes institutional logics suitable to investigate variation in pricing and yield management.

As a somewhat logical succession of the original critical approach towards the economic rationalization of society, the focus in many studies has been on how a general economic business logic (sometimes called a market logic) is invading many spheres of society and collides with other identities and logics. Thornton & Ocasio (2008, p. 108) argues e.g. that the invasion of the market logic during the last 30 years is found in several studies in various settings, including health care (Scott et al. 2001), in higher education publishing (Thornton & Ocasio, 1999), in equity markets (Zajac & Westphal, 2004), and in public management (Meyer & Hammerschmidt, 2006), and often this invasion has resulted in conflict.

The study of the link between different logics enactments of practices has been prominent in the literature. Townley (2002) e.g. illustrate the clash in cultural institutions between cultural and

¹¹ According to Friedman and Alford (1991) capitalist society consists of several institutional orders – capitalist market, bureaucratic state, nuclear family, and Christian religion – which shape the individual preferences.

the economic logic's enactment of the practice of performance management. Ezzamel et al. (2012), examine budgeting practices in UK schools and identify three institutional logics: A business logic according to which schools should operate efficiently and engage in competition with other schools; a governance logic that emphasize the political accountability of schools; and a professional logic that relates to the expertise and norms of the teaching profession. Ezzamel et al. (2012) show that these logics enact the budgeting practice differently. While the illustration of a conflict between a business logic and other logics is helpful in sketching key differences between general logics in sectors such as art institutions and schools, the sharp contradiction between business logics and other logics seem less relevant when analyzing pricing where a key focus is likely to be on "business" but what business means may be shaped by the competing logics identities and way of justifying their actions. In a pricing context logics are therefore likely to be hybridized (Kurunmäki, 2004).

Recently there has been much attention on how different competing logics can functions together and reduce conflict (Pache and Santos, 2013; Amans et al., 2015; Chenhall et al., 2013; Besharov and Smith, 2014; Reay and Hinnings, 2009). In this literature there has also been focus on how the specific practices can foster compromise between competing logic. Pache and Santos (2013, p. 975) illustrate how prices can be set at a compromising level. In microfinance organizations are often caught between the banking logic demand to set interest rates at a level that maximizes profit and the development logic demand to set low interest rates to reduce the financial pressure from poor customers. A compromise is to set the interest rate somewhere between the high banking logic rate and the low development logic rate.

Carlsson-Wall et al. (2016) identify two institutional logics - a business logic and a sports logic - in the soccer industry. The sports logic is associated with institutional demands for success in sports, whereas business objectives relate to demands for financial performance. According to Carlsson-Wall et al. (2016) the logics are sometimes in conflict and sometimes not, and performance management systems is a practice that sometimes can mitigate conflicts between two institutional logics. Amans et al. (2015) in their study of budgeting in French not-for-profit theatres identify the artistic logic and management logic, two logics that often are in conflict. However, sometimes and under certain funding systems budgeting actually help the theatres to achieve artistic ends, and the budget helped to reduce conflicts in an organizations exposed to multiple logics. Our case study does somewhat surprisingly not illustrate a compromise between

two logics, even though both accept yield management as a rational pricing practice. The conflicts arise due the difference in enactment of reference points, which are embedded in the logics identities and the way they justify their actions, which in Air Greenland provided little room for compromise.

In summary we have highlighted that fairness is central in price setting, that the literature tends to view the reference points for fairness as either profit or costs. The competing logics challenge the one dimensional analyses of fairness and that competing logics in pricing context are likely to be hybridized in the since that the enactment of what fair prices are is done by mobilizing economic and business argument but that these arguments are embedded in the actor's identities and way of justifying their actions. In the following the methods used to analyze fairness and competing logics is presented.

6.3 Method

6.3.1 Data collection and analysis

This paper employs multiple methods in a case study of Air Greenland, its subsidiaries and partners. We conducted 38 interviews of which 16 focused on this particular paper. The other 22 interviews have served as background knowledge and have when relevant also been used in the analysis. We have had access to most documents within the organization, with the exceptions of board meeting resumes and the actual revenue calculations. We furthermore performed archival analysis of government records, newspaper articles and company files. All interviews were transcribed verbatim to facilitate the analysis. Drawing on these interviews as well as observations in the case company, this study considers: (1) how the yield calculation is utilized in the airline industry and more specifically the case company, its subsidiaries and customers (2) how the two ideal types identifies different reference points in their negations (3) the extent to which competing institutional logics affect pricing negotiations.

The analysis of data occurred in an iterative process. We started by reading the relevant literature, conducted interviews and coded interviews. As the analysis developed more detailed literature studies were performed, coding categories developed and data were recoded. The authors read thoroughly through all transcribed interviews to engage in discussion with the existing behavioral and institutional literature within pricing. We then created the ideal types based on the key conflicts between the Air Greenland's Network Revenue Management group

on the one hand and Albatros Travel and Greenland Travel on the other. The development of ideal types occurred in a dialogue with the literature on both pricing and institutional logics within the management accounting field, to facilitate the analysis of the negotiations between Air Greenland and Albatros Travel.

In order to specify the competing logics, which we use to explain the variation in the practice of pricing, we choose to use ideal types. Ideal types constitute a method for fleshing out the core characteristics of e.g. competing logics. Ideal-types are constructs, which seeks to illustrate the essential features and motives of an action. The construction of ideal types focusses on heuristic value, consistency and clarity of exposition (Weber 1980; 1988).¹² The ideal type therefore in principle is not a precise description of reality, but is a simplification that allows us to compare competing logics (Thornton and Ocasio, 2008).

We choose to divide the analysis in to four parts. First, we specify the two competing logics in the field. Then we use the logics to explain the variation in the enactment of yield management in terms of two reference points: reservation price and reference profit. Then we conduct an analysis of the embedded case of Albatros Travel (external customer), which illustrates how competing logics not just affects general views on pricing but also can be used to understand the outcome of a specific negotiation.

The constructing of the ideal types is based on our empirical analysis. During our interviews we again and again encountered difference in the perception of how to set fair prices. It was also obvious that the differences could be structured in two opposing logics. However, at first sight there were more similarities than differences between the two logics. Both of the logics adhered to the pricing practice of yield management, and both of these logics used arguments of fairness and hence reference point in their discussions of how to set fair prices. Furthermore, both of the logics linked the pricing practice to larger discussions of legitimacy in terms of economic growth in relation to the Greenlandic society. Finally, the conflicts could not be explained by the fact that the two logics were exposed to different evaluation criteria. Albatros as well as Greenland Travel (measured on revenue) was obviously interested in a as low price as possible, but since NRM is measured on yield, which is not naturally in conflict with revenue, they would

¹² See also Freund (1994, p. 482), Hearn (1975 p. 534).

be interested in any pricing strategy that maximizes yield. As the analysis illustrated the Tourism pricing strategy with a high degree of price discrimination potentially has the possibility to increase yield (which is the Tourism logic's argument). Given all these similarities of the parties, we looked more specifically at the way the opposing parties enacted reference points, and came to the conclusion that the different enactments could best be understood if the enactments were embedded in two competing logics' difference in identities and sources of legitimization.

The choice of pricing practices in Air Greenland and subsequently Greenland as an object of study are interesting because it provides us with an opportunity to study the enactment of a business practice such as yield management in a context, where pricing is related to general debates of Air Greenland's role in the development of Greenland (see below). In that sense Air Greenland provides an ample opportunity to study hybrids, since both of the competing logics contain business elements as well as elements that relates to societal norms and values. Arguable a possible limitation of the study is the generalizability of our findings. Given that Air Greenland is situated in a context where business decisions to a large extent is embedded in an institutional setting then maybe we would expect to find less hybridized logics in most other context. However, we suspect that many business decisions such as pricing both in profit and non-profit organizations are embedded in institutional logics that are not only business, and in that sense or study do have generalizable value.

6.4 Analysis

6.4.1 Case introduction

Greenland, the world's biggest island, is an autonomous region within the Kingdom of Denmark with 55.984 (2015)¹³ inhabitants. Greenland is a country with big social and economic problems, and is heavily subsidized by the Danish Government. Tourism has for many years been seen as a potential for future income. Despite this, in 2014 Greenland only received a meager approximate 40.000 tourist.¹⁴

The case company is the national airline that operates as a semi-public, semi-private state-owned enterprise (SOE). At the time of the case study Air Greenland had three shareholders, the

¹³www.stat.gl (Greenland statistic)

¹⁴www.stat.gl (Greenland statistic)

Danish State (25%), the Greenlandic Government (37.5%) and SAS (Scandinavian Airlines) (37.5%). In 2015, there were 634 employees in Air Greenland, which were scattered amongst different divisions in Greenland. Air Greenland's fleet consisted of 27 aircrafts and helicopters – from large Airbus 330-200 to small AS 350 helicopters. Air Greenland had partial or natural monopoly on its direct route to Denmark as they were the sole operator on the transatlantic route. The only direct competition was Air Iceland's route flying from Denmark via Keflavik, Iceland to Greenland. Air Greenland also controlled most internal flights in Greenland.

Air Greenland owns a line of subsidiaries that operates as individual privately held companies in which Air Greenland had complete or minority ownership. The ownership of subsidiaries is a part of the Qarsoq (strategy in Greenlandic) strategy to support the organization main function as airline and to support the development of tourism, (i.e. hotels, airline, ferries, travel agency and tour operators). Air Greenland generated revenue in 2011 of DKK 1.23 billion, with a return on equity of 7.1%. The financial results have always been the object of heavy debate in Greenland regarding whether the profit is a consequence of its monopoly status or the result of the efficient operation of Air Greenland.

Since Air Greenland is an important company in Greenland, and generates approximately 10% of Greenland's GNP, Air Greenland and its role in the development of the Greenlandic economy and as an important part of the infrastructure, is a constant source of debate and criticism. Due to the size of Greenland there are no roads between the cities and all transportation therefore has to take place either by sea or by air. The route network, fares and the strategy of the organization is a constant object of discussions. As such, Air Greenland could be viewed as a company with a strong institutional environment (Scott, 1992, p. 132-133), which will be elaborated in the next section that analyses the competing logics within Air Greenland and its environment.

As many other airline companies Air Greenland applied yield management to price its tickets, and a lot of the debates and conflicts concerning prices relates to different perceptions of how to optimize of yield. Yield is calculated:

$$\frac{\text{Actual average price} * \text{capacity utilisation}}{\text{Maximum average price} * 100\% \text{ capacity}} = \text{Yield}$$

Figure 1 – Yield equation used in the airline industry

This basic price-quantity calculation for profit maximization is at the heart of pricing strategies in most airline companies. Yield management often works through a huge degree of price discrimination (Kimes, 1989; Belobaba and Wilson, 1997; Huefner and Largay, 2008), and many companies use yield management to pursue a pricing strategy where they forecast demand by passenger type and then divide the available capacity into discrete segments (fare classes) and focuses on filling up capacity with low fare customers first, while reserving capacity for passengers booking late that are willing to pay the full price (Belobaba and Wilson, 1997). Airlines can improve yield if they increase capacity utilization and maintain a high actual average price. In order to increase actual average prices, it is often necessary to have capacity close to departure for last-minute high paying customers. On the other hand, if forecasts indicate that capacity utilization will be low, capacity may be sold at a lower actual average price and yield may be improved through increasing capacity utilization if the price discrimination not is perceived as unfair. Subsequently, given full information, any company would easily find the proper price/quantity mix that would maximize the profit of the company.

However, in our case study of the use of yield management in Air Greenland, two conflicting logics – the Airline logic and Tourism logic – disagreed on the setting of prices for package tourists. The disagreement were the source of dispute and conflict, since both parties accused the other party of demanding unfair prices, which harmed the overall yield and subsequently the development of Air Greenland and Greenland. The Airline logic saw price discrimination in favor of package tourist that would increase capacity utilization as unfair towards regular customers, which could result in problems with this group. The Tourism logic on the other hand saw a huge potential of synergies between tourism and transportation (Haxton, 2015), and price discrimination as a vehicle in this respect without destroying the market for regular customers. Much of this conflict evolved around fairness concerning the relevant reference point to use and how to use them.

6.4.2 Defining institutional logics

In this section, we present the two ideal types of competing logics in Air Greenland: The ‘Airline logic’ and the ‘Tourism logic’. Air Greenland is a company exposed to competing institutional demand that are embedded in two different industries as well as stakeholders in society. Part of Air Greenland is an airline, which is aimed at maximizing profit through transportation services. We call this logic the Airline logic. The other institutional logic is related to the tourism industry and focus is on using Air Greenland to drive tourism. Like in other studies investigating multiple institutional logics in organizations (e.g. Carlsson-Wall et al., 2016) the different institutional logics were to a large extent located in different organizational units within the company. The ‘Airline logic’ was concentrated around Network Revenue Management (NRM), which was the department that decided on prices and capacity in Air Greenland. The ‘Tourism logic’ was centered in the marketing department Air Greenland’s travel agency, and the independent travel agency Albatros travel. We use the elaboration of the logics through ideal types and the accompanying attributes as a tool to explain the variation in pricing practices we analyze in the following section.

Table 3 illustrates that the two logics have different frames of references that condition their sense making in terms of ‘sources of identity’, ‘focus of attention’, and ‘sources of external legitimacy’. Finally, the institutional logics have different ‘sources of authority’.

	Airline logic	Tourism logic
Sources of identity and focus of attention	Airline company transporting Greenlandic people and Danes working for the home rule.	Travel agency serving tourists.
Sources of external legitimacy	Cheaper tickets to the Greenlandic people through increased efficiency and cost cutting.	Growth of tourism through cheaper tickets and price discrimination will develop tourism and society.
Sources of authority	Calculation expertise and access to information about capacity and responsibility for setting prices.	Access to alternatives (e.g. Air Iceland) flying to Greenland via Iceland.

Table 4 – Two institutional logics examined in this study

The Airline and Tourism logic differed in their source of identity and way of legitimating actions. The Airline logic had an identity, which was linked to their role as an Airline that transported people from one place to another.

The Airline logic justified its' actions in terms of cheaper tickets to the regular traveller. During our interviews it was often emphasized that harmonization of the fleet and adjustment of the routes were the way to achieve the aim of lowering prices, which underlines that the focus of attention of the Airline logic was on lowering cost and hence the price of the tickets not on expanding tourism. The identity as an Airline company and the focus on lowering prices through efficiency improvement was also perceived to be their source of legitimacy:

"..the customers' need is that we fly as cheap as possible.....of course we need to make a profit, but we have to work for it...the most important thing is that we keep promising the market that we can give them lower prices. If we cannot do that we have no long term legitimacy." (Manager of NRM).

The Tourism logic on the other hand focuses of attention was on tourist and had an identity as a travel agency. The Tourism logic perceived that Air Greenland was responsible for increasing economic growth in Greenland through the expansion of tourism. Increased tourism would, according to this logic, benefit not only the parties in the value chain (Albatros travel, Greenland travel and hotel subsidiaries) but also supermarkets, restaurants, souvenir shops in other parts of Greenland. According to this logic Air Greenland's source of legitimacy was to further an increase in tourism in Greenland the CEO of Albatros argues:

"When Michael Binzer became CEO, he argued that Air Greenland should be a driver of tourism."

A former sales manager further argued that Air Greenland's market was global and Air Greenland should focus accordingly:

"The market is Europe and the world, so you need some market intelligence, and you need to acquire that.....You need a department for it." (Former sales manager)

In this logic tourism was enacted as the primary source of growth, and therefore more focus should be on developing that market. The different logics also had a different source of authority. Yield management as such did not meet resistance in Air Greenland, but the specific way it was calculated and the way it equipped NRM with a source of authority to actually calculate the reference points created tensions between the two competing logics:

“They (NRM ed.) where right in some of their dispositions and therefore they became very dominant... they could always produce a calculation that illustrated what they wanted to argue for.” (Former sales manager)

The former sales manager explained that a lot of the functions – long-term pricing, short-term pricing on the specific route, utilization (e.g. cargo versus passengers) of the specific planes, etc. – which in other airline companies (e.g. SAS) are located in different departments, in Air Greenland were centralized in one department (NRM). The access to different types of calculations provided NRM with a extensive power, and in the next quotation the former sales manager highlights the embedded feature of this power and authority:

“They (NRM) thought they were doing what was right for their job and I did what I thought was right... but they were extremely dominant, partly because they could take on the “planning hat”, the “use of the airplane hat”, and the “what is the price of fuel hat” on.”

According to the former sales manager NRM was able to dominate other parts of the organization adhering to the Tourism logic through coming up with different types of calculations showing reference points that furthered their ends. The quotation indicate that NRM's decisions were embedded in the competing logic, and they believed they were doing the right thing for Air Greenland and maybe even Greenland, which indicates that identity and authority were linked, and that their power was embedded. The Tourism logic main power source was the ability to take in bids from other airlines. Obviously, the independent travel agencies were free to use other airlines, but even their own travel agency - Greenland travel – was able to do so.

In the following we will illustrate how the two competing logics disagreed on what a fair price should be. We have structured the remaining part of the analysis in three sections. In the first two sections section 4.3 and 4.4 we analyze discussions between proponents of the Airline Logic and the Tourism logic first concerning reservation price followed by a discussion about the distribution of profits. We illustrate that both of the logics on a general level drew on the same reference points, but enacted them differently, due to their embeddedness in different institutional logics. In section 4.5 we show how the competing logics affect a specific negotiation in order to move from general discussions of fairness to the level of actual decision making.

6.4.3 Fairness and reference reservation price

In the literature a reservation price is the best alternative price a product can be sold for. Since a price can be perceived as unfair if there is gap between the price and the reservation price companies can have an interest in hiding the reservation price (Kahneman et al., 1986; Kimes, 2004). In Air Greenland there were disagreements between NRM and the travel agencies of what the prices for package tourist should be and whether it was possible to hide the reservation price for the customers. As the analysis will illustrate both of these disagreement can partly be understood through the perspective of competing logics.

As indicated above the Tourism logic saw a big potential for Greenland and Air Greenland in a price discrimination strategy, where package tourists were used to fill up the planes, at a price, which should be close to marginal costs (airport taxes, food, etc.), since they perceived that there were no alternative sales opportunities. In the following quotation, ‘milk’ is used as a metaphor for an empty seat:

“...try to listen! When the milk has expired (exceeded the sale date), it will be thrown out, it is used. When the aircraft has flown, the cost is added! It is elementary.....We both sell with yield in mind, but we also do price discrimination and that is where we can't agree on the parameters” (Distribution Manager at Albatros).

According to the Tourism logic the reservation price for ‘expired milk’ is zero, since it has no alternative use and the reservation price for an empty seat is therefore close to marginal cost.

But NRM (the Airline logic) did not share the Tourism logic's perception of the calculation of the relevant reference price, which created conflict. A board member of Greenland travel argues:

"...there is a lot of frustration here because you do not feel understood.I couldn't get the tickets at the requested dates even though that we knew there were empty seats, and when I asked for an alternative date, I got tickets for a price and with conditions that I could not sell. I think it is the lack of understanding of what it is we do and why. I think this is very frustrating and if it were my own business, I would have given everyone a firm talk through and fired them!"

The two points 'conditions' and 'the price' of conflict are mentioned in the quotation both relate to competing view on the reference reservation price of 'free seats'. The central question in 'conditions' concerns the payment of a fee, which is a normal practice when travel agencies buy tickets from airline companies. If the travel agencies do not use the tickets they book, they have to pay a reservation fee or a 'fine' to the airline company to cover the loss (reservation price) the airline company incurs for not being able to sell the tickets to an alternative customer. The size of the fee is dependent on the size of the lost opportunity, which functions as the reference point for a fair fee. For the travel agencies the fee is an increase of the average ticket price, since the fee of unsold tickets has to be covered by the tickets that are actually sold. The fee can be seen as a cost of being able to have access to the tickets well ahead of time of the use.

For the Tourism logic the calculation of reservation price of both the tickets as well as the fee was not considered fair because Air Greenland in their perception had a reservation price close to zero – according to them the seats would be empty and not derive any revenue if they were not sold to the package tourists:

"We cannot understand how they make their decisions.... Last year for example Network Revenue Management (NRM) said at a manager meeting that they had 11000 available seats. We raised our hands and said we would very much like to help selling them. And then we were proactive and said you know statistically – because you can see it in the systems – when the available seats are there, then please tell when it is, give us a good price, then we will go out and play with them. But we cannot get that" (product development manager in Greenland Travel).

The question of the size of the fee created conflict between Air Greenland and Greenland Travel. The board member of Greenland Travel mentioned in an angry tone a specific episode where Greenland Travel was fined with 150 thousand DKK for not selling the allocated amount of tickets, and labeled the system the ‘punishment system’, and perceived it to be unfair because there in their view were lots of free seats, and hence no need to have a ‘fine’ to cover the loss. The fee would according to the Tourism logic inhibit the pursuit of a sensible price discrimination strategy and be unfair, since the seats would be overpriced.

In terms of the price of the ticket the travel agencies had to pay the logic is the same as with the fee. A fair price should mirror the reservation price, which according to the Tourism logic is close to zero, because of the available capacity. According to the Tourism logic there was even a growth potential in tourism. To the extent that the company would pursue a penetration strategy the reference price could even be below marginal cost

In the following we will illustrate that the conflict concerning the fee and the price was deeply embedded in the fact that two institutional logics existed and not necessarily as the board member argued above a ‘*lack of understanding of what it is we do and why*’. The logics had different focus of attention due to their identity and hence enacted the alternatives and thereby the reservation price of the ‘free’ seats differently:

“It is obvious that if we have a period, where we historically know that we cannot sell the seats, then off course we are willing to take a different risk and give another price. But the story with the classical month of May, where everybody is screaming and shouting ‘we can’t get any seats, and we know that the plane is empty’, I have to reply ‘I simply do not know what you are talking about. If we give you these tickets, then you let them go 30 days before because you can’t sell them, and we could have sold them to a complete different price, to a demand which is actually there.’ There are a lot of twisted expectations and a twisted perspective on things” (Commercial director).

The quotation illustrates that the Airline logic due to their identity as an airline company competing with other airline companies for regular travellers had a focus of attention on the potential loss in these markets and the reservation price and hence the reference price was

enacted based on these potential losses. In this perspective the reservation price of ‘a free seat’ was considered to be much higher than marginal cost:

“We have a completely clear strategy, saying that it’s okay that we are a bit more expensive than our competitors close to departure, because it only takes 6 hours, and we know that those people who travel via Keflavik (Iceland ed.) typically are not business people. Business people don’t want all the hassle involved in going via Keflavik, but if we are completely sold out then maybe they have to do it, and then we lose a high-end ticket to the competitors. We don’t want that, and therefore we try to have tickets available, and then it is better to say no to someone in the low end” (Commercial director).

The partial monopoly allowed Air Greenland to charge higher prices than the competitor Air Iceland close to departure and it was according to the Airline logic important to have available seats to be able to charge these high prices. Therefore, *“...a full airplane is not necessarily the best outcome”* (NRM manager). According to this logic the reservation price and hence the reference point for the free seat, was therefore the high price for the ticket times the probability that a business person would actually buy a seat in the last moment plus an amount that covered the risk of losing the customer on a more permanent basis. The quote also makes clear once more that the focus of attention from the Airline logic was on business people and regular customers and not tourist, when calculating a reservation price.

Finally, the Airline logic pointed during the interviews to freight as another factor that affected the levels of free capacity and thereby reservations prices. The argument is that even though there is a seat without a passenger, it is not always free because the plane can be so heavily loaded with freight that an extra passenger moves the total weight beyond the allowable level for the plane. In this line of reasoning the reservation price for an empty, but not free, seat is the lost revenue from freight.

Another issue that highlights the two logics difference in perception relates to whether it was possibly to ‘obscure’ (Kimes, 2004; p. 24) a potential lower price given to the travel agencies by including the price in a package. The ability to obscure prices is important in relation to prices, because even in a situation where there actually are free seats and hence arguable a reference

price close to zero, price discrimination would still be a problem if regular customers perceived a lower price to tourists (as compared to what they pay) as unfair. The perceived unfairness could result in decline in customer loyalty, etc.

However, if the price for tourist is hiding in a tourist package the regular customers would have no access to the price the tourists pay for the tickets (the reference price), and price discrimination would therefore not be a problem. The different logics enacted whether it was possible to obscure the prices differently. According to the Tourism logic there was no problem in hiding cheap tickets to the package tourists:

“As an airline company you need a base load of a kind, and you need to make it with a partner, who can hide the prices, and can add some parts to the tourist part, without it destroys the normal sales...apparently in Air Greenland they don’t think that they need that (the base load ed.)” (Distribution Manager in Albatros).

However, the ability to obscure (or hide) the price of the airline ticket in the tourist package was not shared by the manager of NRM:

“We have a transparent market, a homogenous market. If we do something in the market, then after 10 nanoseconds everybody knows. Therefore, we cannot say that these people do not talk to these people. It is a completely transparent market it is like an aquarium. That is why there is no reason to try to hide anything.”
(Manager NRM)

According to the Airline logic if price discrimination in favor of package tourist were used to generate a base load and if it became public knowledge, it would potentially be considered illegitimate in relation to regular travellers. Therefore, the Airline logic subsequently follows what they call a conservative (and solidary) pricing strategy:

“We have a very conservative price policy in the company. We have what is called a solidary pricing policy, which means that the prices are not up for discussion..... Terms and conditions can be discussed but often not prices.”
(NRM manager)

The interesting part is that the concept ‘solidary’ have a highly extended meaning, which goes beyond the traditional discussions of fairness mentioned in the literature:

“...I am not a big fan of low prices for package tours. Because you are aiming at getting a higher volume, but it is not always that a lower price means more volume...I have a feeling that you deceive the local Greenlandic person, who purchases the ticket on the internet. I think you would achieve more, e.g. in terms of image, if you focused more on pricing for the local Greenlandic person, instead of focusing on package tours.” (Controller NRM)

The ‘image’ that is mentioned in the quotation refers to the inherent tension in Greenland between Greenlandic people and Danes, and thereby the discussions of legitimate price discrimination introduce a historical and ethnic dimension, which moves the discussions of how to justify prices into even more sensitive and normative areas than what is normally highlighted in the literature. The history of Greenland has created a somewhat tense atmosphere between (assumable rich) Danes and (poorer) Greenlandic people, and providing rich Danish package tourists with tickets that are much cheaper compared to those provided to (assumable poor) local Greenlandic people could in the Airline logic be seen as a highly illegitimate extension of the unfair colonial power, where the Greenlandic people has had a less favourable social position compared to Danes.

However, even the Tourism logic enacted the Greenlandic person to justify price discrimination. The sales manager of Greenland Travel argued in favour of price discrimination serving Tourism in relation to creating a new market by setting low prices for Greenlandic package tourist, which normally does not travel so much:

“It would be nice, if we once in a while, could make a package for people who could really benefit from such a package, who maybe should use a couple of days to collect these 5000 or how much it would be... it could be great if there was something for them, because they often pay full price” (Sales manager Greenland travel)

However, there were limits to the price they would as their reference was other travel destinations:

“...you've saved up 20 thousand Danish kr. (2900 euro), one can't get far in Greenland [for that], but you can fly with your wife and two children to Thailand for the same money.” (CEO, Albatros)

The reservation price of end tourist consumers was affected by the general tourism market. This section has indicated that calculating the reservation price for empty seats is highly contested and enacted differently by the two competing logics. The discussion about reservation price both logics had traditional elements related to calculating fair prices– have the planes got free capacity in the months immediately before and after high season, can tickets be sold too much higher prices at the last minute, will low prices just mean that tourists pay less and not that demand is increased? These discussions however were embedded in the institutional environment and dealt with the extent to which the airline should focus on necessity travellers or growth in society through tourism and it entailed discussions about legitimacy: should the Greenland people pay the high prices while Danish tourist through the intermediation of travel agencies should pay lower prices? Discussions about reservation prices therefore both entailed technical and traditional elements (and diverging interests) discussions concerning fair reservation prices, but these discussions were embedded in the two competing logics sources of identity focus of attention and sources of legitimization.

In terms of legitimization it is interesting to see that the ‘need’ of the Greenlandic person was enacted by both of the logics to argue for and against price discrimination. In terms of the discussions of whether an empty seat is free and subsequently what a fair reservation price should be, we also conjecture that the disagreement is embedded in the different logics cognitive structures in terms of identity and focus of attention. The Airline logic focus on regular customers and potential losses if there e.g. are no free seats for last minute business people. These potential losses – the reservation price – can according to this logic be very high if the company loses regular customers to other airlines. The focus of attention of the Tourism logic on the other hand is on the free seats, and the losses due to ‘milk that has expired’ by not selling the ‘free’ seats to the tourist. Even a fairly ‘technical’ question, whether it is possible to obscure

price discrimination, where enacted differently by the two logics arguable due to their focus of attention.

6.4.4 Fairness and reference profits

The discussions of a fair price between Air Greenland and the travel agencies did also include the proper amount of profit that Air Greenland respectively the travel agencies should uphold. This is in line with the behavioral and institutional literature that has shown that profits and costs are important reference points for the calculation of fair prices (Luft and Libby, 1997; Kachelmeier and Towry, 2002; Ahmad and Scapens, 2000; 2003; Luft and Shields, 2009). Our analysis illustrates that the discussion and disagreement of what constitutes a fair profit and hence a fair price was dependent on points of profit references. The interesting point is that the quarrel did not concern whether profit is a proper reference point for fairness (as opposed to e.g. the market price), but what the proper reference for a fair profit should be. Furthermore, the choice and enactment of profit references were embedded in the two competing logics.

According to the Airline logic Albatros' profits were too high compared to what Air Greenland earned:

"I can see how much Albatros makes a year, they actually earn about the same as us but with 20% of the volume. They have a very high margin. I know they sell cruises starting at 24-25.000 Danish kr. (3300 Euros) and then it makes no sense that they want the tickets at a very low price. They make more than a million on these cruises." (NRM Manager).

The comparison of the earnings of Air Greenland and Albatros is a good example of the inclusion of accounting information in a discussion of what a fair price should be (Luft and Libby, 1997; Drake and Haka, 2008). Air Greenland's point of reference for a fair sharing of profit was that profit should be shared proportional to 'volume' (revenue). Since Air Greenland's volume was five times that of Albatros, and the two companies made the same profit, 'it made no sense' according to the Airline logic's reasoning that Albatros demanded a price that would split profit equally and not proportional to revenue.

The perspective from Albatros was different. According to the distribution manager of World of Greenland Arctic Circle, who worked together with Albatros on tourism in Greenland in

Albatros' perception 'there is too much trouble' doing tourism in Greenland, which indicate that the ratio between contribution and profit in their perception is too low, and therefore they are less inclined to 'use their energy' on Greenland. The distribution manager, argued:

"...Albatros is tired of selling Greenland, there is god damn it - excuse me – too much trouble, they don't want to make an effort because they can't earn enough money. They can't multiply with that factor...they can't make a profit, and then there is too much trouble. Because, when they can take a lot of different destinations and make it work and multiply with that factor, then they want to use their energy on that."

Albatros' reference point for calculating a fair profit and hence a fair price, was not based on a comparison of volume with Air Greenland, but of what they earned on their other destinations. In Albatros' perception of rationality a fair profit and hence a fair price for the tickets, should be calculated in such a way that their profit on cruises in Greenland should be approximately the same as they earn on their other destinations around the world. The problem from their perspective was that the profit on cruises in Greenland was too low, and therefore they would not expand their business in Greenland because they could not maintain their (fair) reference profit, which they were able to make on other destinations.

The distribution of profits was also an object of conflict in the price negotiations between Air Greenland and Greenland travel. The manager of NRM states his version of the conflict between the two logics:

"There is a huge communication problem in relation to the subsidiaries...and I know that some of them are tired and disappointed, but we cannot sell everything for half the price, so they can make a profit." (NRM manager)

The NRM expectations to what a reasonable profit should be when Greenland travel used their tickets in products for package tourist included references to Greenland travel's work (contribution) in selling the packages:

“If a travel agent is working with packages, then they must still provide the same revenue plus new revenue....Therefore we have kind of like a sticker price that we would like them to follow, as we see no need for them to advance with profit that high, when buying a ticket from us for kr.1.000,- and selling it to the customer for kr. 8.000,-. Our reasoning is that they should have profit that resembles their actual work of selling the individual ticket, which is most reasonable.....if they say: ‘Give me 1000 tickets for 1200 DDK each’, but it turns out that they are actually moving sales they have in other segments, and then they optimize their own revenue, that is no good for us.” (NRM manager)

The manager’s argument highlights that a ‘traditional’ pricing issue is linked to fairness issue and made sense of through the Airline logics frames of reference. The ‘traditional’ part of the argument relates to potential “buy downs” a central obstacle for a price discrimination strategy (Kaplan and Atkinson, 1998; Salvatore, 2015). A buy-down takes place if cheaper tickets intended to increase overall capacity utilization moves tourists willing to pay high/full prices from expensive to cheap tickets without creating extra demand. The second part of the argument relates to argument also discussed above that many people take into account the relative contribution when discussing the sharing of profit – *‘they should have profit that resembles their actual work of selling the individual ticket’* (Luft and Shields, 2009; Adams, 1965). The buy-down problem is linked to the fairness discussions, because the travel agencies ratio between the profit and their contribution (‘actual work’) according to the Airline logic changes in favor of the travel agencies, due to the perception that lower prices resulted in buy-downs,

The manager in Greenland Travel did not share the Airline logics’ perception that a low price from Air Greenland should be followed by a low price to the customer and subsequently a lower profit to Greenland travel:

“... it’s the strangest thing I have heard, when the airline argues that if we want a low price then we shall decrease our profit...Where did that come from? Please deliver the seats, calculate the price of the seats, and then we will calculate our price. I mean Airline must have an idea of what they can do it for, and then we must have an idea of what we can do it for. None of us are rubbing our hands because we are making a fortune.” (Manager in Greenland Travel)

The quotation from the manager of Greenland Travel highlights that they don't share the perception of the Airline logics that they receive an unfairly large share of the profit since 'none of us are rubbing our hand because we are making a fortune'. The manager in Greenland Travel further argues that due to slow calculation of prices in NRM they lose several orders:

"I think we make many offers to tourists that we do not close, because we cannot deliver....one of Air Greenland biggest problems is the response time. The customers blame me for long response time. If you ask Air Iceland they answer within 48 hours."

In the manager's perception Greenland Travel actually are doing a lot of work (contribute) without selling anything. In this way of enacting the contribution of NRM and comparing it with their own contribution, the prices they request is not too low vis-à-vis their contribution, on the contrary the manager conceive NRM contribution to the sales as the problem. Again the Airline logic enacts the situation differently:

"Greenland Travel is just in another age. They are fiddling with individual persons and special packages, which takes too much time and resources because it is not standardized, which means that they cannot make money on it and therefore they lose contribution margin" (Commercial director).

Summing up the analysis it has been illustrated that the discussions of fair prices for package tourists also enacted references related to distribution of profits. The conflicts between the Airline logic and the Tourism logic (Albatros as well as Greenland travel) illustrate that they both adhered to the idea that contribution is a relevant reference point for the sharing of profit and subsequently price setting. However, the competing logics enacted contribution differently. In the discussions with Albatros the Airline logic enacted volume (revenue) as the reference point for sharing of profit and hence price setting. Since Albatros earned the same as Air Greenland with 20% of Air Greenland's volume the prices were perceived to be too low. Albatros on the other hand being in the tourism industry, reasoned that the relation between contribution, profit and hence price, should be the same as in the other destinations they were doing business in.

In the discussion with Greenland travel the conflict also arise due different enactment of contribution. The Airline logic is sceptical towards lower prices to package tourists since they reason that it will result in buy-downs that subsequently will provide Greenland travel more profit without contributing more. This way of enacting buy-downs underlines the Airline logics little focus of attention on package tourists, and the idea that there are no growth opportunities in tourism, otherwise there would be no reason to argue for that low prices would result in ‘buy downs’. Greenland travel on the other hand perceive that they are working hard to further tourism and thereby contribute to creation of profit, but the problem in their perception is that NRM does not deliver the prices in due time. In the following, we analyze a particular negotiation about prices between NRM and Albatros travel in order to illustrate how competing logics and views on fairness affected concrete interactions.

6.4.5 Embedded Case – Albatros Travel A/S

Albatros Travel A/S (further on named Albatros) is a Danish travel agency that was established in December 1985. Today Albatros operates all over the world, selling the “Albatros Travelling concept”. There are 100 full-time employees in Albatros. Albatros has had a partnership and joint venture with Air Greenland as customer and co-owners of a joint incoming company. This joint venture, World of Greenland - Arctic Circle (WOGAC) supported Albatros’ own cruise ship operation in Greenland with embarkation and disembarkation from Air Greenland transatlantic flight in Kangerlussuaq to their ships at the harbor.

The embedded case will look into the price negotiation between the NRM department in Air Greenland and the management in Albatros. Specifically, we will analyze how they disagree to the pricing of airline seats on the transatlantic route for the passengers for their summer cruises. The negotiation was a recurring exercise, which had taken place for several years. According to Albatros, the negotiation usually stalled due to the long response time and lack of communication from Air Greenland. The case will illustrate that the choice of reference points and the conflict are embedded in the institutional logics.

Albatros had due to their deadlines for the summer cruises though the years engaged in negotiations with other airlines and the prices from these airlines generated a new reference point for the price of an airline seat. According to the CEO of Albatros, Air Greenland often replied in the last minute, with an offer that was lower than the other airlines prices, which

would make Albatros abandon the additional offer and accept Air Greenland's offer. The CEO of Albatros explains:

"...yes, every year - the same thing has happened. We ask for a price and it is always a very high price and always somewhat bad terms about the sales of them. That is high commitment and high price and it is always with a little grin behind, saying 'ha, but what else could you do?' Even this year the grin was there and where else should you get the seats? And this provokes my staff enormously."

Albatros was convinced that Air Greenland's price was much too high and their monopoly status was the reason for this. According to Albatros the high price contradicted stated objectives from Air Greenland to increase tourism and further the general development in Greenland. According to the CEO of Albatros it had (or at least that was his perception) always been part of Air Greenland's mission to improve tourism:

"Air Greenland has since I started getting involved in Greenland, talked about their responsibility for furthering tourism in Greenland. It is clear that if you have a company, which is partly owned by government, then you need to adapt to the State's interests. That means that you focus on the local population need for travelling but also the general development."

The prices offered by Air Greenland were seen as an obstacle towards achieving this objective. Another main problem was that Air Greenland according to Albatros acted almost arrogant in the negotiation process:

"It is so stupid. Human feelings plays a big role and that I can hear on my staff – I was not at the meetings myself, so a lot of this I have second hand. My staff was furious and when I am at meetings with other colleagues from other travel agencies, even Greenland Travel, they are furious. There is absolute consensus about this. Everybody agrees that the treatment we receive is terrible. We get these high prices and really bad treatment and then we say 'ok' we have to try other solutions. We then find a charter solution, which is much, much better. We did this with Norwegian for the first time a few years back and then Michael Binzer

(former CEO Air Greenland) comes in and says, “you cannot treat us like that, we will be forthcoming and we will match the price.”

Negotiating with competitors generated a market based reference price, which in Albatros’ view reduced their dependence on Air Greenland and therefore improved their negotiation situation. The fact that Air Greenland through the CEO’s counterbid could actually match the external bids was interpreted by Albatros to be a strong indication that Air Greenland’s prices were much higher than their production costs, and hence a clear confirmation for them that Air Greenland’s original prices was unfair.

The Airline logic enacted the situation quite differently, as they saw the price that Albatros had received in the past as far too low compared to the reservation price. According to the NRM manager Albatros’ relation with Air Greenland’s CEO had resulted in an artificial low price. The result is according to NRM’s perspective highly problematic and unfair:

“...Albatros comes with a request for some seats and they have said they wanted some prices and this and that. They have done this before ‘doing the trick on us’ and back then they got a two year deal with prices that was extremely low for that time of the year (May). I know we can sell them to others at a higher price. It makes no sense when they ask for a price, which is below production cost... I will not be part of selling at that price at that time of the year. Either they give us something else at other times of the year, or they have to do something else to compensate for the low price.... we know what we can rent the airplane for at Jet Time and the price that we can produce it for. They want a price, which is below what we may produce it for in this period. If they think, they have somebody who can produce at this price, then ‘fine by me’.” (NRM Manager).

In the quotation two-reference point are mentioned, which both in NRM’s perspective ‘prove’ that the prices that Albatros received were unfairly low. First, the reservation price on the seats was much higher than the price Albatros paid (‘I know we can sell...’). Secondly, according to the NRM, Albatros and the chartered airline companies were not sufficiently informed on cost, which created an incorrect, unfair cost reference.

The competing logics and different reference points in the negotiation process had frustrated both the upper management of Air Greenland and the management of Albatros. The CEO of Albatros said that they several times had taken the last minute offer from Air Greenland, since they felt they were obligated since they were partners¹⁵:

“...fine, then we do as usual, going with Air Greenland’s offer, as we have done a few times. But, we cannot keep doing this, treating other suppliers we negotiate with bad, abandoning a deal we are about to sign, choosing Air Greenland. That means that the other supplier has made a lot of work and then we bail on them every year and say we will not deal with you anyway. We cannot only use them to put pressure on Air Greenland.”

The quotation illustrates that the use of prices for other airlines as reference points to pressure Air Greenland to lower their prices however was beginning to be problematic. It was perceived as “unfair” to the other suppliers to just use them for making market based price references as they incurred a cost in making an offer which Air Greenland then was allowed to outbid.

A short time prior to our case study Albatros had obtained a new offer from Atlantic Airways. Air Greenland argued that the price of this offer was unrealistically low and that Atlantic Airways would lose money flying Albatros’ passengers to and from Kangerlussuaq where the passengers would board the cruise ship. According to NRM there were several reasons for the low cost figures:

“What we know about the prices they got from the competitor is; either they are lying to us, or, someone at Atlantic Airways has overlooked the actual costs of fuel in Greenland. We can at least match these fuel prices, but someone has had a need to get rid of us..... Maybe they are hungry and think that they will earn some money in the future in a different way and that is also fine” (Manager NRM).

¹⁵ The CEO from Albatros argues “...well, we have for many, many years, had a good and close relationship with Air Greenland, it has changed a bit with different CEOs of the airline throughout time, but in recent years, we have always had / I personally have had a very close relationship to the top management. For many years I been able to pick up the phone, and take care of things behind the scenes, which of course are a very typical Greenlandic phenomenon”.

For NRM the, in their perception, too low (below actual cost) transfer price was made sense of in ways that illustrated that Air Greenland was exposed to unfair competition. The ‘need to get rid of us’ and ‘think they can earn money in the future’ remarks illustrate that NRM perceives the prices as unfair and was indication that the other companies were pursuing an anticompetitive ‘predatory pricing’ strategy aiming at driving Air Greenland out of business. Albatros saw the negotiation process quite different:

“... We had dialogue with other airlines in the past. We were first able to negotiate price and conditions with Air Greenland, when we mentioned a second offer from a competitor and that we wouldn’t fly with Air Greenland, if we couldn’t get a fair agreement. But there’ll come a point where you - if you want to see yourself in the eyes - have to go with the partners who you talk to year after year after year and disappoint them and take a decision, as they say; why should we make you an offer, when you every year fly with Air Greenland anyway. We also, have to think about the process and our partners. Another thing is that we with other partners get better condition and flexibility, as Air Greenland will just refer to paragraphs and conditions on how they want it ... Now we have made a deal with Atlantic Airways for the next four years.”

The episode with the introduction of price from other airline companies as a reference point illustrates that even the same reference points, the bids from other airlines, could be enacted differently and thereby be a source of fairness discussions and conflicts. In Albatros interpretation (Tourism logic) of the series of episodes the fact that Air Greenland in the past had lowered their prices after being presented from the price from other airlines was a clear signal that Air Greenland’s original prices were unfairly high, and showing that Air Greenland is charging unfairly high prices due to their monopoly status. Air Greenland on the other hand perceive that Albatros historically has been ‘doing the trick on us’ and forced Air Greenland to propose prices that are below production costs and they can sell to other passengers for a higher price, and the other airlines prices had been so low that ‘either they are lying’ or they have made some errors.

Though some of the quarrel maybe can be explained by different cost structures in Air Greenland respectively the other Airlines, we claim that the difference in identity, focus of

attention and sources of legitimization also is important in understanding part of the difference in making sense of the prices. Albatros enacts that the prices are a way to further tourism, and therefore the prices are justified through the responsibility of Air Greenland. On the other hand, the accusation from Air Greenland that the other airlines ‘think that they can earn some money in the future’ can actually be true even from the perspective of the Tourism logic. If these airlines like Albatros (and Greenland Travel) believe in the growth potential of tourism in Greenland, then maybe they can increase their earnings in the future. However, from the Tourism perspective this growth does necessarily happen at the expense of Air Greenland due to the believe in the potential increasing tourism. Air Greenland on the other hand sees little potential in tourism and Albatros and the low price is dependent on ‘that they shall give us something at another time’. In the perception of the Airline logic this ‘something’ will probably not come, because they have little faith in tourism growth potential.

6.5 Discussion

In this section we will discuss the finding of our analysis. In the first section we relate our findings to the institutional and behavioural literature on pricing, and illustrate that the fairness of prices is discussed broader and more dynamic than proposed in extant research. In the next section we discuss how our findings relate to the competing logics perspective.

6.5.1 The multiplicity of reference point for fair prices

In this paper we have illustrated the multiple references points for fair prices was enacted, and shown that deciding on what a fair price should be cannot be taken for given. That perceived fairness is important in pricing is not a new insight since fairness in relation to prices has been discussed in both the behavioural (Draka and Haka, 2008; Luft and Shields, 2009; Luft and Libby, 1997; Kahneman et al., 1986; Kachelmeier and Towry, 2002; Fehr and Schmidt, 1999) as well as in the institutional literature (Ahmed and Scapens, 2000; 2003; Loft, 1986). In the behavioral accounting literature, a fair or equitable price is often seen as the price that results in a sharing of profit either in an equal split ((Draka and Haka, 2008; Luft and Shields, 2009; Luft and Libby, 1997; Kachelmeier and Towry, 2002; Fehr and Schmidt, 1999) or in proportion to contribution (Luft and Shields, 2009; 39). In the institutional literature a fair price is calculated with costs as a reference point (Ahmed and Scapens, 2000; 2003; Loft, 1986).

Our paper goes beyond extant research and illustrates that outside the structured space of an experiment, it is difficult to separate the different types of arguments from each other, since both the market price or reservation price as well as the price that shares profit often functions as the reference point for e.g. a fair price, and the difference reference points are invoked by both of the logics. Thus, the case study provides empirical illustration of the general point made by Kahneman et al. (1986) that: ‘Disagreements about fairness are most likely to arise when alternative reference points can be invoked, each leading to a different assessment of the participants' outcomes.’ (Kahneman et al., 1986; p. 730). Just as Kahneman et al. (1986) we can conclude that agreement on general principles of fairness therefore does not preclude disputes in Air Greenland exactly because many reference points can be and were mobilized in the discussions of a fair price. Figure 2 summarizes our findings in terms of the specific reference point we have detected during our case study.

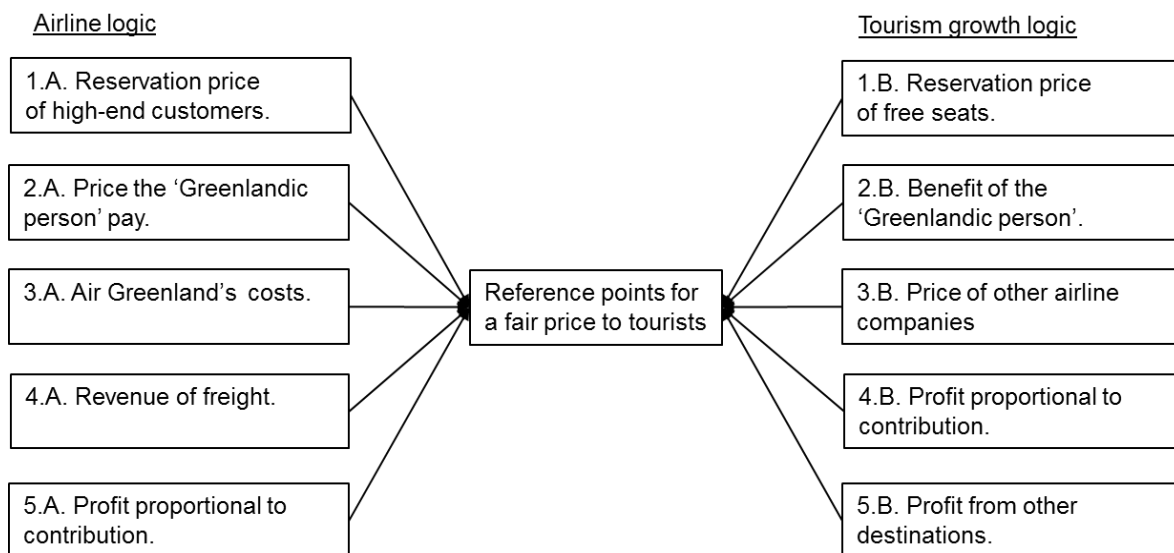


Figure 2 - Two competing logics' reference points for a fair price

We illustrate that both of the competing logics invoke reference points related to reservation or alternative prices (1.A., 4.A. and 1.B., 3.B.). These reference points are all related to the idea that the prices are perceived as unfair because the reservation price is higher (lower) than the price requested (provided) by the travel agencies (NRM). The intriguing part is that apparently the same reference points are invoked but they are enacted differently, which can be explained by the circumstance that the enactment is embedded in the competing logics. The difference in e.g. the calculation of reservation price of a free seat (1.B and 1.A) is dependent on the identity

and focus of attention of the two logics. The Airline Logic's calculation of the reservation price focus on the potential loss of not having available seat ready for last minute high-paying business customers, whereas the Tourism Logic focus on the possibilities of price discrimination for package tourists with a high growth potential. Both of the competing logics also use equity arguments related to the sharing of profits (3.A, 5.A and 4.B, 5.B.) in their argumentation for a fair price, and again the reference point for what a fair profit should be is embedded in the competing logics and the industry they are in. Albatros compare the profit they earn in Greenland with what they can earn in other destinations around the world, whereas Air Greenland sees volume as the reference point for at fair sharing of profit (Albatros have the same profit with 20% of the volume). In the discussions of the setting of prices between Air Greenland and Greenland travel, contribution, in terms of amount of work, were used as reference points for discussions of what a fair price should be. These discussions were also embedded in the competing logics since the belief in tourism influenced the perception of the other part's contribution.

Beyond these reference points that are often mentioned in extant pricing literature our analysis also illustrate that an additional reference point not mentioned in the pricing literature was mobilized in the discussions concerning what a fair price should be. The introduction of the 'Greenlandic person' and the benefits of that person (2.A and 2.B.) as a reference point for a fair price are hard to categorize in one of the traditional groups highlighted in the literature. We interpret this reference point as an introduction of 'need' as a criterion for a fair price, a criterion that is well-known in the broader literature on fairness (Deutsch, 1975; Rawls, 2009). In relation to need Rawls (2009; 86) states: "...the principle holds that in order to treat all persons equally, to provide genuine equality of opportunity, society must give more attention to those with fewer native assets and to those born into less favourable social position". We have not seen discussion related to need in extant pricing research, but in the case both of the competing logics enacted the need of the Greenlandic person as a reference point for fair prices.

The general impression in Greenland and to some extent also in Denmark is that the Greenlandic people historically have been treated somewhat badly by the Danes, and there are a lot of social problems among the Greenlandic people in Greenland, which earn less and have less education than Danes also the Danes living in Greenland. Therefore, we interpret the use of the Greenlandic person's benefit (2.B) and the idea that a lower price for Danish package tourists

would be a ‘deceit’ (2. A.) (see section 5.1) as an enactment of ‘need’ (Deutsch, 1975; Rawls, 2009) as a reference point for a fair price. We infer that the difference in the enactment of the Greenlandic person as a reference point for a fair price is caused by the difference in reasoning of the two institutional logics. The Airline logic enacts the Greenlandic to reason against price discrimination for package tourist, whereas the Tourism logic reasons for price discrimination for (Greenlandic) package tourists.

6.5.2 Institutional logics

A further contribution of our analysis is that we indicate that the participant’s choice of reference points is embedded in the two competing institutional logics we argue exists in our case study. The Airline logic has an airline identity whereas the Tourism logic has an identity as a travel agency. We argue that the identity and subsequently focus of attention constitute a cognitive structure, which make the two logics competing. The Airline logic’s frames of reference and focus is on regular customers, whereas the Tourism logic frame of reference is package tourist. The cognitive structures are linked to external legitimacy. The Airline logic justifies their focus of attention on regular customers and lowering prices to further the development of the infrastructure in Greenland. The Tourism logic mobilizes the appropriateness of having tourism as the driver of economic development, which Greenland is in dire need of. The competing logics also contain a regulative element in terms of sources of authority, which are embedded in the institutional logic.

The use of institutional analysis illustrates practice variation in the organizational field. In this way our analysis resembles other field studies based on institutional logics (Ezzamel et al., 2012; Townley, 2002; Reay and Hinnings, 2009). But whereas extant research often sees conflict arising from a new set of practices conflicting with an older set of practices (e.g. Amans et al., 2015; Carlsson-Wall et al., 2016; Ezzamel et al. 2012; Townley, 2002; Mattimoe and Seal, 2011), our analysis illustrates that the conflict in Air Greenland is not related to an ‘old’ less economic logic and a new ‘yield logic’. Both of the competing logics accept the yield and hence general economic logic. Yield management is not opposed by an ‘Old logic’ as in Mattimoe and Seal (2011), but is enacted and given meaning within the two logics that are hybridized (Kurunmäki, 2004) ideal types containing both business logics and wider institutionalized elements.

By looking at how a business practice such as yield management is accepted but enacted differently our study complements the existing literature on competing logic (e.g. Amans et al., 2015; Carlsson-Wall et al., 2016; Ezzamel et al. 2012; Townley, 2002; Mattimoe and Seal, 2011). Our study shows that since the application of decision making tools such that yield management - investment appraisals and forecasts are other examples - demand that information, often on hypothetical alternatives (if we do not do A what will then happen), need to be collected. We have indicated that the collection and calculation of this information are highly embedded in institutional logics.

6.6 Conclusion

Fairness in pricing is a multifaceted problem. Fairness both build on the ability to calculate cost and profits, the use of reference prices and on securing the legitimacy of operations. At the centre of discussions was the simple yield management calculation. The calculation however did not dictate the strategies and actions. The interpretation and institutionalisation were not uniform as different logics compete in the field. The relevance of pricing strategies is therefore interpreted through cognitive, legitimation and regulative structures, which draw on competing logics that have different views on fair prices and social obligations. So while the basic calculation may be simple, the calculation becomes more complicated when the multiple entities operating together interpreted the calculation through their own distinct logic, employing different references to argue for fairness.

7 Paper III - A longitudinal case study of information systems and their implications on organizational practices

Abstract

This paper investigates the effects of information technology on interorganizational relationships and management accounting rules and routines. The paper reports a longitudinal case study that was conducted to examine how an airline shifts between different types of information systems in its distributional infrastructure to comply with technological development, industry regulations, and external market pressures. The empirical section of this paper is based on a qualitative study that analyzes a twelve-year period in which an airline's distribution system underwent several modifications to accommodate organizational and strategic expectations. This case study demonstrates that information technology can not only support daily production but also actively affect both intra- and interorganizational relationships. This study argues that information technology plays a strong and dominant role in the interorganizational sphere. The analysis shows how technology shapes boundaries and orchestrates complex relationships in the interorganizational field. This paper emphasizes the fact that to understand how relations and boundaries change, the role of information technology and network accounting needs to be analyzed over time.

7.1 Introduction

This paper argues that information technology has a significant impact on organizational practices. Extant research has shown that the use of information technology improves performance (Gunasekaran et al., 2006; Hyvönen, 2007), creates competitive advantages (Ruivo et al., 2014), and results in organizational control (Granlund, 2011). Several studies that have focused on the use of information technology in organizations have noted a complex relationship between information technology and management accounting (Granlund, 2011) and argued that information technology is involved in many, if not most, processes in modern organizations (Dechow et al., 2007). Other researchers have focused on the interorganizational field. For example, Cuganesan and Lee (2006) reported how information technology takes relations across organizational boundaries, can reshape the enactment of controls, and mediate more complex network settings and interorganizational collaboration. Several literature streams have emphasized how information technology affects both interorganizational relationships and management accounting rules and routines.

The first literature stream investigates the relationship between management accounting and information technology. These research studies illustrated various effects of information systems, including that they have only a small impact that does not result in revolutionary change (Granlund & Malmi, 2002; Hyvönen, 2003; Quattrone & Hopper, 2005; Quattrone & Hopper, 2006) or that they have a large impact on organizational practices (Granlund & Mouritsen, 2003; Nicolaou, 2008). In this field, few studies have analyzed how information technology results in change from a more longitudinal perspective or understood its long-term effects. Therefore, the actual long-term effect of information technology remains unclear when establishing its role and impact on organizational practices such as management accounting.

A second literature stream focuses on the relation between information technology and interorganizational relationships. Frances and Garnsey (1996), in establishing the role of information technology in the interorganizational field, focused on the relationship between control mechanisms and information technology and showed how their interconnection strengthens interorganizational linkages. Cuganesan and Lee (2006), in analyzing control mechanisms, argued that interorganizational collaboration is increasingly mediated and influenced by information technology; furthermore, Dechow et al. (2007) showed how the control mechanism in the interorganizational field is, in many ways, reliant on information technology. However, this literature did not fully capture the dominant role of information technology in the interorganizational field and the fact that it can control complex interorganizational relationships and move boundaries far beyond the organizational sphere. To understand these settings, it is necessary to address the wider literature in network accounting and the interorganizational field.

In a third literature stream, Caglio and Ditillo (2008) extensively reviewed literature on accounting in interfirm networks. Their review noted that most studies focused on the upstream and the singular relationship between buyer and supplier (Seal et al., 1999; Mouritsen et al., 2001; Dekker, 2003; Cooper & Slagmuller, 2004; Caglio & Ditillo, 2012). However, few studies have focused on downstream relationships. For example, Kulp (2002) mainly used quantitative methods for "...analyzing the different stages of the supply chain and the relationships between manufacturers and retailers" (Caglio & Ditillo, 2008, p. 884). Downstream relations are important for understanding changes in the larger interorganizational field, because in the

modern world, they comprise a large part of the ever-developing and complex relationships created in the interorganizational field. Research on the effect of both upstream and downstream relations is much less common, and it has not focused on the complexity in the interorganizational field by analyzing relations as being both horizontal and vertical.

To understand the ongoing changes in the interorganizational field, more attention should be placed on the complexity of the role of information technology in orchestrating relations. Therefore, this study is motivated by three factors: the longitudinal perspective of information system implementation, the organizational effect of multiple information system implementation, and how information technology orchestrates complexity in the interorganizational field. Toward this end, this study answers the following research question to further understanding and advancement in the field of technology, accounting, and networks:

How does information technology affect management accounting rules and routines and the structuring of interorganizational relationships over time?

To establish the implications of information technology in the interorganizational field, this research study particularly draws upon Lind and Thrane's (2010) study, because their framework provides a systematic way to analyze and categorize multiple and complex relationships. Furthermore, this research study uses institutional theory to analyze how information technology affects management accounting practices and network relations. To fully understand these changes, Burns and Scapens' (2000) study is useful for understanding the changes in management accounting rules and routines (Busco et al., 2006). The use of this framework enables an analysis of how change occurs as a consequence of technology and how this affects organizational practices and interorganizational settings.

This case study analyzes multiple implementations that are useful when understanding the long-term effects of information technology. A few studies on the interorganizational field (Coad & Cullen, 2006; Thrane, 2007) and on information technology in the interorganizational field (Scapens & Jazayeri, 2003) have applied a longitudinal perspective. In addition, several researchers have emphasized the need for a longitudinal approach to understand the role of information technology in this field (Granlund & Malmi, 2002; Kulp, 2002; Dekker, 2004; Hyvönen, 2007; Caglio & Ditillo, 2008; Vosselman & Van der Meer-Kooistra, 2009).

Currently, there is a lack of literature that applies a longitudinal perspective in network accounting and information technology; existing longitudinal studies only span a few years, and they examine only a single information system and its implementation.

The case study analysis focuses on information technology in the interorganizational field, and it establishes three findings. First, the central and dominant role that information technology plays in the interorganizational field and its ability to take relationships far beyond organizational boundaries show how information technology does not simply play a passive role. Second, the change in management accounting practices owing to shifts in information technology extends existing literature through its emphasis on the active role of technology in the management accounting field. Third, the longitudinal perspective establishes how the change in information systems results in unintended consequences and how this has a profound positive and negative impact on management accounting practices. The empirical study can clarify these findings, because the analysis is based on multiple system implementations and a longitudinal perspective. This approach can illustrate in more detail how these management technologies can control the interorganizational field and affect organizational practices such as management accounting.

The remainder of this paper is structured as follows. First, literature on information technology and management accounting is examined. Second, literature on accounting in interfirm networks is discussed. Third, institutional theory is presented, and the role it plays in accounting research is explained. Finally, the longitudinal case study is analyzed through three individual information systems that are used to manage and control organizational and interorganizational settings.

7.2 Literature review: Accounting, networks, and information technology

7.2.1 Management accounting and information technology

Research on accounting and information technology in the interorganizational field presents a broad analysis of the implementation and impact of information systems. Granlund (2010) extensively reviewed the interface between management accounting and information technology and tried to draw some general conclusions. The researcher argued that "...it can be suggested that accounting researchers should incorporate information technology much more thoroughly in studies of substantive accounting developments, as information technology today plays

practically always an important role” (Granlund, 2010, p. 14), thereby indicating that information technology does have a considerable effect on accounting and control practices. Numerous other studies have also pointed out that information technology has an impact on organizational performance and management accounting practices.

Several studies have analyzed enterprise resource planning systems (ERPSs), a type of information system, through three main perspectives: management control and actor-network theory (Dechow & Mouritsen, 2005; Quattrone & Hopper, 2005, 2006), management accounting and new institutional sociology (Granlund & Malmi, 2002; Hyvönen, 2003; Scapens & Jazayeri, 2003), and modeling (Baiman & Rajan, 2002; Nicolaou, 2008). However, these studies were contradictory; they found that ERPS has various impacts on an organization, ranging from modest to significant.

Studies reporting that ERPS has a moderate impact (e.g., Granlund & Malmi, 2002; Scapens & Jazayeri, 2003; Dechow & Mouritsen, 2005) reveal how information systems facilitate some kind of change in managerial control, rather than as a result of actual implementation. These studies state that, rather than the impact that information systems have on management accounting, identifying the opportunities that are created post-implementation is more important. Studies reporting that ERPS has some kind of impact on management control (e.g., Quattrone & Hopper, 2005; Quattrone & Hopper, 2006) note that information systems create different forms of distance and relations between organizations. Studies reporting that ERPS has a significant impact (e.g., Granlund & Mouritsen, 2003; Nicolaou, 2008) indicate that management control is dependent on information technology, and that “...information technology cannot present its own case” (Dechow et al., 2007, p. 625). This illustrates that there are strong links between these two systems, and it calls into question whether information technology is a driver of development or an attachment.

Many studies that have analyzed information systems and management accounting have focused on *one* specific information system and *one* single implementation. Analyzing several systems and implementations over a longer duration gives a better foundation for a more comprehensive analysis of the effect of information technology on organizational practices and network settings. Moving the analysis beyond a single implementation such as ERPS and deeper into multiple implementations of different information systems leads to a more detailed analysis of

the different impacts that technology has on organizational practices. The next section investigates the field of information technology and accounting in the interorganizational field, also referred to as network accounting, to understand the effect of information technology in this field.

7.2.2 Network accounting and information technology

In the interorganizational field, few studies have focused on *how* information technology mobilizes relationships and effect boundaries (Frances & Garnsey, 1996; Cuganesan & Lee, 2006; Dechow et al., 2007). The effect of information technology on the orchestration of complex interorganizational settings over time has not yet been fully explored. Considering this continuous development in organizational relationships and the evolution within information technology, this paper analyzes how technology has an impact on organizational practices and relationships and emphasizes the need for more research. To illustrate the implications of technology in the interorganizational field, this study focuses on relationships and establishes boundaries as things that are created as a part of fast-changing relationships.

Few studies have focused on information technology in the interorganizational environment and the way in which it affects management accounting. Frances and Garnsey (1996) showed that accounting techniques, when supported by information technology, strengthen interorganizational linkages and reduce costs across the supply chain system. They also showed that information technology creates a “closely coupled interaction” (p.606) among retailers, suppliers, and customers. Cuganesan and Lee (2006) examined information technology and its effects and argued “...that inter-organizational collaboration is increasingly mediated and influenced by information technology, fostering control within a single network” (p. 165). Dechow et al. (2007) showed that, in many ways, management control is dependent on information technology and that, more importantly, “...information technology is unable to stand on its own, resulting in a strong link between the two” (p. 635).

A small body of research argued that accounting exists prior to the given context, thereby defining the boundaries and relationships, which is why it is such a critical influence when defining the context (Frances & Garnsey, 1996; Mouritsen et al., 2001; Mouritsen & Thrane, 2006). These findings raise the question of the role and impact of technology in network accounting (Granlund, 2010). Studies on information technology implementation show how

information systems work in everyday situations and how there are links among control, accounting, and information technology. Only a few studies in the management accounting field have focused on how information technology actively participates in setting the interorganizational field. Even less attention has been devoted to the significance of information technology in the orchestration of multiple-type relationships, and how this affects boundaries.

7.2.3 Relationships and boundaries

To analyze in more detail the way in which complex relationships are established and boundaries change, this paper uses the outline of Caglio and Detillo's (2008) as well as Lind and Thrane's (2010) mapping of advanced networks in the interorganizational field. Lind and Thrane (2010) concluded that many studies have investigated interfirm networks as a relationship between two independent organizations or as a chain of organizations. They established that research into network accounting could benefit from investigating the dynamics of complex systems, including several actors and multiple relationships. Following their recommendations and in conjunction with the literature analyzing interorganizational relationships, this paper suggests that more focus should be placed on the complexity of technology and relationships. Information technology allows for more complex relationships because the supplier, customers, owners, partners, and competitors are connected simultaneously, and all play an active part in the interorganizational sphere.

Numerous studies in the interorganizational field and management accounting have analyzed the construction of boundaries. Coad and Cullen (2006), Mouritsen (1999), and Mouritsen et al. (2009) analyzed the role of accounting by taking multiple relationships into consideration. Håkansson and Lind (2004) analyzed the dimensions of the horizontal relationship between different organizations and showed that three basic coordination forms and accounting methods can be used in various ways to enhance the development of organizational relationships and to establish organizational boundaries. These studies illustrate how management accounting is used to mobilize interorganizational boundaries, thereby giving valuable insights into the functions of different interorganizational relationships and how they are managed within existing boundaries. This paper goes beyond existing boundaries in analyzing how organizational relationships are becoming more interorganizational, thereby creating what are defined in this paper as "network boundaries."

In the interorganizational field, different studies have also examined the construction of boundaries to establish control elements. Mouritsen and Thrane (2006) established that management control technologies in the interorganizational field are involved in creating boundaries. Thrane and Hald (2006) focused on network boundaries and interorganizational transactions and stated that "...this fluid conceptualization of the supply field has the consequence that we do not distinguish sharply between intra- and inter-organizational controls." (p. 295). Their study raises questions about control as a primary challenge and about how organizational relations and structures respond. This, in turn, emphasizes the question of boundary setting and how this is part of the development of interorganizational relations. Thrane (2007) discussed the role and practice of accounting as dynamic and complex business networks within these systems and relationships and concluded that "...change in the inter-organizational field is not linear or an evolutionary process." (p. 269). Van der Meer-Kooistra and Scapens (2008) understood the advancement in relationships and analyzed the "governance package" behind ever-developing lateral relationships that go beyond the boundaries of the organization and management control systems. They established that these new relationships span the traditional boundaries of the organization and create the need for a new form of control.

These studies on relationships and boundaries show that the intercorrelation between information technology and accounting creates the potential for much more complex settings because relationships can go beyond organizational relationships and expand existing boundaries. However, it remains unclear how multiple relationships are controlled, how they are able to move boundaries beyond the organization, and how to manage the complexity that these relationships create. Further conceptualization is needed to fully understand control in these complex relationships and multiple networks. Even though several studies have analyzed information technology, it remains uncertain how technology, over time, orchestrates interorganizational relationships and affects organizational practices. This paper establishes the inherent connection between accounting, relationships, and boundaries and how this is extensively controlled and facilitated through information technology. The next section examines the theoretical perspective and how it is applied to understand change and development in the interorganizational field.

7.3 Theory

To establish a more detailed understanding of technology, accounting, and networks and to further conceptualize the impact of technology, this study uses the concept of institutional theory and, in particular, draws upon Burns and Scapens' (2000) study. This perspective emerges from the theoretical framework of Giddens's structuration theory (1984) that emphasizes the impact of structures and how this affects systems that encounter actors in the (re)productions of social structures. Burns and Scapens (2000) provided a theoretical lens that complements existing literature for understanding interorganizational relations (Seal et al., 2004) and the role of information technology in the interorganizational field. This theoretical lens analyzes and demonstrates the importance of organizational rules and routines and enacting institutions in the processes of management accounting change.

This theoretical perspective is useful for analyzing management accounting change over a longer duration. The longitudinal perspective illustrates the stability found in rule-based behavior and organizational routines and practices, and it also recognizes how and when these rules and routines change. This theoretical perspective is helpful in that most existing studies have focused on the immediate impact and snapshots of occurring changes. The changes in the interorganizational field and the area of attention are seen as a duality and as being in a constant state of change. In this study, the focus is on *institutional analysis* as opposed to an *analysis of strategic conduct*. An institutional analysis looks at how structures are (re)produced, thereby affecting the way in which actors draw on structural properties in the constitution of social relations. This perspective views information technology as being part of social relations by defining structures as not being "embedded" in technologies but as being "enacted" by actors (Orlikowski, 2000).

Institutional theory has been widely used to understand change in institutional environments and the different kinds of impacts that occur. Institutional and structural theory has been applied to several areas, such as technology and information systems (e.g., Orlikowski & Robey, 1991; Orlikowski, 1992, 2000; DeSanctis & Poole, 1994; Englund & Gerdin, 2011), actors and structures (e.g., Burns & Scapens, 2000; Dillard et al., 2004; Coad & Cullen, 2006), accounting (Macintosh & Scapens, 1990, 1991; Englund & Gerdin, 2009), and interorganizational studies (Seal et al., 2004; Free, 2008). These studies use institutional theory and emphasize the effect on organizational practices such as accounting.

To illustrate the focus of this paper, the model below shows the elements that are part of the analysis. The arrows indicate the impacts of information technology on relations and practices as revealed by the analysis.

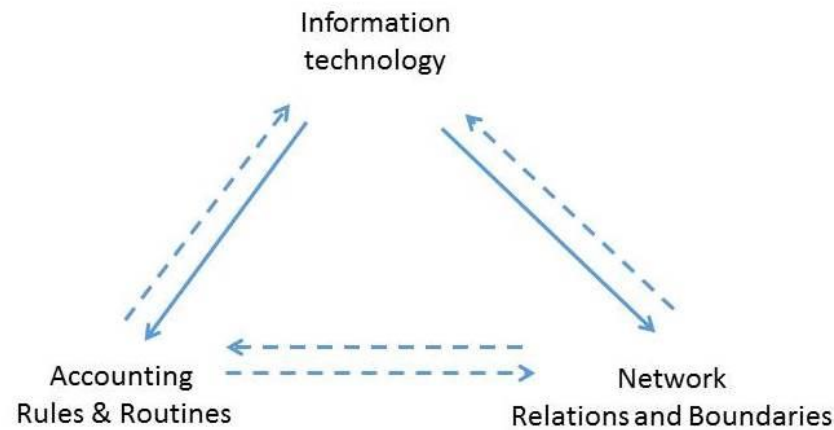


Figure 3 – Analysis of information technology, accounting, and networks and how they impact each other. The arrows and lines indicate the impact of information technology on accounting and networks.

This model illustrates the organizational context and areas of interest, with a focus on information technology and its impact on management accounting rules and routines as well as network relations and boundaries. By focusing on these interactions, this analysis examines management accounting systems and practices as organizational rules and routines, and it understands change as a *process* rather than as an *outcome*. This view is grounded in the notion of “duality of structure” and institutions that shape behavior. These institutions are the outcome of actors’ actions, which can be challenged by other elements such as information technology.

Studies using institutional theory have established that the relationship between management accounting and information technology is complex and uncharted. Granlund (2011) considered both theoretical and empirical areas to be underdeveloped and stated that new studies are required to establish how information technologies affect management accounting as well as what effect management accounting potentially have on information technology (Dechow et al., 2007; Rom & Rhode 2007; Granlund 2011). A large part of the literature within the institutional field argues for a unidirectional relation between management accounting and information technology, and some studies claim that examples of bidirectional relations do exist (Rom & Rohde, 2007). This study analyzes the unidirectional relation between information technology and accounting rules and routines as well as network relations and boundaries.

This case study uses the institutional construct given in Burns and Scapens' (2000) and Lind and Thrane's (2010) framework to analyze the role of information technology. The analysis establishes how information technology takes a central position in controlling what Lind and Thrane (2010) called "situations"¹⁶. These situations are identified by observing the complex constellation that an airline distribution system incorporates to facilitate relationships and define boundaries. This framework can be used to systematically categorize and discuss the case findings and provide a suitable perspective on the ways in which information technology affects organizational practices over time. By conceptualizing information technology and network accounting, this study sees hardware/software integration as a technical aspect of integration belonging to the information technology domain, wherein information system integration refers to a business aspect that belongs to the management accounting domain (Rom & Rohde, 2007).

7.4 Method and framework

7.4.1 Data collection

To analyze the role of information technology in the interorganizational field, this paper uses a case study approach with multiple methods, such as participant observations, retrospective semistructured interviews, and document analysis, both inside and outside the case company. The empirical sections of this paper comprise 18 interviews with 15 employees and external partners conducted between December 2011 and December 2014. Most of the field work for this study was conducted over a 24-month period in which changes in the organization were observed. A series of interviews was conducted in the commercial departments of the case company to establish how employees interpreted information technology as a change that occurred in organizational systems. The focus was on how the employees saw changes to the rules and routines, while the organization kept pace with the state of information technology in the distribution system development. The 24-month fieldwork corresponded with the exit from one internal system (Navitaire) and the implementation, re-adaptation, and use of a new external global distribution system (GDS) (Amadeus¹⁷).

¹⁶ Lind and Thrane (2010) identified five types of "situations" that organizations need to manage when viewing a relationship within a network of relationships. This situation illustrates how an organization needs to understand relations such as customers, suppliers, competitors, and managerial issues in relation to the role of accounting. The authors state that "...conceptualizations of different types of situations tend to use different theories, ranging from economic theories at Situation 1 to institutional, actor network, industrial networks, and complexity theories at Situation 5."

¹⁷ Altéa is Amadeus's airline passenger services system. Officially called the Amadeus Altéa Suite, it consists of a three-module solution that manages reservations, inventory, and departures for all involved in getting passengers onboard.

The researcher was part of the commercial team during the fieldwork phase, thereby providing additional insights. Observations were made in the sales, marketing, network revenue management, IT, and distribution departments. In addition, several talks were conducted with executives and directors on how they saw the shift from one distribution system to the other. It was clear that no one saw these system changes as being easy, nor did they see any of these systems as being simple; therefore, significant frustration was detected in each of these crossovers from one system to another. During the data collection period, the researcher managed his daily work in the commercial department; this consisted of overseeing daily marketing operations, attending meetings, and receiving and reviewing formal documentation while also conducting interviews. This position gave the researcher unrestricted access to all departments and its employees, meaning that valuable data gathering occurred during commercial work, where the distribution system also played an important role. My colleagues had a clear understanding about my research and did not feel the need to hide anything, which is why the interaction was fruitful in terms of understanding the challenges with the systems in the organization.

7.4.2 Data analysis

The analysis represents an examination of the data through the institutional perspective and applied framework. In the data analysis, the data itself was initially analyzed to understand the interrelationship. The interrelationship was established between information systems (information technology), management accounting practices (accounting rules and routines), and interorganizational relationships (network relations and boundaries). Then, the transcripts were read systematically and carefully using the institutional constructs and in keeping with Burns and Scapens (2000) to illuminate changes in rules and routines.

To fully understand the transformation in relations and boundaries, this paper uses a longitudinal perspective. This approach allows the researcher to study information technology and accounting and networks, while focusing on multiple information system changes; this gave the researcher the opportunity to analyze how various factors interact in a given context and how this creates a trajectory of change. Several researchers (e.g., Granlund & Malmi, 2002; Kulp, 2002; Dekker, 2004; Hyvönen, 2007) have acknowledged and encouraged future studies in these fields to take on longitudinal in-depth methodologies and to reveal the connections among

information technology, management accounting practices, and organizational settings in the process of change.

Numerous empirical data were used for triangulation in the case study, which used three information systems. Through interviews with the key respondents, it was possible to triangulate the key shifts that occurred and to discern the meaning from the independent and mutual views of the adaptations through the eyes of key respondents, which were directly affected by this evolving transformation in their information systems. The aim here was to understand the developments in information systems, rather than making predictions. The next section presents the empirical study that examines the three information systems and the multiple implementations within Greenland's national airline.

7.5 Greenland

In recent decades, information technology has had a profound effect on businesses in Greenland. This has resulted in the economy shifting from one based on hunting and small-scale production in colonialist settings to becoming part of an emerging economy that is slowly moving toward globalization. Greenland is an autonomous region that is part of the Kingdom of Denmark; it is the largest island in the world, covering 836,109 sq. mi., and it has a population of 55,984 (Naatsorsueqqissaartarfik, 2015). Greenland's environment, geographic composition, climate, culture, and nature play a significant role in the prerequisites for the infrastructure for handling operations because passenger numbers are small and passengers are scattered over a large geographical area, making them difficult and expensive to reach.

7.5.1 Case company: Air Greenland

Air Greenland, the case company, has a rather large size and extensive organizational structure, giving it an important position in society. It is the national airline, and it has three shareholders: the Danish State (25%), the Greenlandic Government (37.5%), and Scandinavian Airlines System (SAS)¹⁸ (37.5%). In 2013, the executive officers operated a staff of 574 employees, equal to ~1.8% of the working population, who were scattered among different divisions across Greenland (Government of Greenland, 2011). Today, Air Greenland's fleet consists of 35 aircraft and helicopters, ranging from the large Airbus 330-200 to the smaller AS 350 helicopter.

¹⁸ Scandinavian Airlines System is the national airline for Denmark, Norway, and Sweden. Until 2002, it was closely competing with Air Greenland on the transatlantic route, and it was one of Air Greenland's shareholders.

Air Greenland has a line of subsidiaries that are operated as individual privately held companies, wherein Air Greenland either has complete or minority ownership. These subsidiaries are owned as a part of the Qarsoq strategy¹⁹, and they are operated to support the organization's supply chain (i.e., hotels, airline, ferries, travel agency, and tour operators). Air Greenland has, through its organizational development, used different types of information systems to manage its distribution and vertical and horizontal relationships²⁰. These systems are discussed in detail in the next chapter, and the functions they perform and how they have an operational impact are examined.

7.6 Case analysis

Study period

This case study examines several information systems and their implementation in one focal organization. The paper thus follows a small base of longitudinal case studies that analyze information technology in the interorganizational field (Kulp, 2002; Granlund & Malmi, 2002; Dekker, 2004; Hyvönen, 2007). The analysis covers a 12-year period (2002–2014) that is considered suitably long for the purposes and contribution of this study. The analysis illustrates the development in ticketing and distribution, the role of technologies, and how distribution has changed owing to various internal and external pressures. Therefore, this study period should provide a rich source of data to reveal the challenges in the change process. In particular, it shows the implications for these individual information systems and how they manage and control the relationships and take the relations deep into the interorganizational sphere. The analysis focuses on three specific historical events. The first was the “competitor-controlled system” in which SAS had the control that determined the relationships throughout the system in 2002. The second was the “closed system” in which Navitaire narrowed the boundaries and relationships and gave Air Greenland complete system control in 2007. The third was the “open

¹⁹ In 2007, Air Greenland implemented its first wide-scale strategy plan among the board and managers to motivate the organization to tighten up business-wise and organization-wise. In 2007, work started on a long-term strategic plan, together with a matching investment plan. A comprehensive analysis was conducted to identify a series of fundamental challenges in the company.

²⁰ Caglio and Ditillo (2008) reviewed different authors' work to distinguish between vertical and horizontal relationships. The terms vertical and horizontal are used to classify relationships in the interorganizational field. Horizontal relationships are those with industry outsiders (i.e., producers of complementary goods or services; known as “complementors”) and industry insiders (i.e., producers of similar goods or services; known as “competitors”). Vertical relationships are those between buyers and suppliers that are managed in upstream and downstream relationships. The authors note how this classification is useful for analyzing relations by arguing that “...accounting may play a role influenced also by factors other than the rational economic and technical, such as social, institutional or political motivations” (Caglio and Ditillo, 2008).

system” in which the Amadeus system changed the boundaries through the GDS and established new relationships, leading to a loss of control in 2013.

Systems analyzed

A large part of the literature in the field of accounting and information technology has focused on the dyadic relationship between two relationships on a string in a single network (Lind & Thrane, 2010). The literature has therefore devoted less attention to the more complex conceptualization of relationships and how they are altered in multiple networks. To extend the existing literature, this study focuses on the technology that facilitates airline distribution. Three separate information systems, also called airline distribution systems, are identified in this case study: SAS, Navitaire, and Amadeus. These three information systems have enabled the case company, at different points in time, to instantly align all the relevant information of airline distribution (i.e., price, rules, quality, quantity) which is available in the market to customers and partners, albeit on separate terms and thus creating different relationships and boundaries depending on what system was in play or which type of transaction was made.

In this analysis, these distribution systems are considered central when managing the vertical and horizontal relationships. This is because these distribution systems provide an infrastructure that vertically takes the “airline seat” from the airline (i.e., Air Greenland) to the vendors (i.e., travel agents, global sales points, and Internet vendors), and it horizontally takes them to competing airlines (i.e., through interlining and code-sharing); ultimately, the seat becomes available to passengers. These systems therefore play a vital role in the management and control of the interorganizational relationship. These systems and technology have become more powerful over the years, as they have become a bigger part of the organizational infrastructure and have become ever more complex, handling multiple relations and changing boundaries. This development has had a large impact on management accounting rules and routines, as documented in this case study.

The best known GDSs are Amadeus, Galileo, Sabre, and Worldspan; this case study focuses on the Amadeus system²¹. Amadeus is an open GDS, whereas Navitaire is a closed point-to-point

²¹ Overall, the travel industry is the largest branch of industry, with over 101 million employees and gross sales of over U.S. \$2 trillion worldwide, and it accounts for 5.5% of the world’s GDP. Airlines’ main strategic concerns with respect to distribution

distribution system. Navitaire is targeted at low-cost carriers, and it has played an important role in the distributional history of the case company; therefore, it is also included in the case analysis. The SAS system is a hybrid between self-made information systems and parts of the early stages of the Amadeus system.

7.6.1 Being controlled under SAS

SAS had, since the establishment of Air Greenland in 1960, been the technical backbone and controlling force behind Air Greenland's distribution system. There were various such systems, and with time and technological developments, they had changed from simple to complex. During this period, SAS and Air Greenland also became competitors, which increased the tensions in their relationship. Over a 40-year period, SAS had overseen this part of Air Greenland's production as the system owner, system provider, and system administrator; provided daily support functions; and had full technical control over all system functions and transactions made on Air Greenland's ticket and PNR numbers²². The relationship between SAS and Air Greenland was considered one singular dyadic relationship of collaboration in which SAS had substantial control. Air Greenland's management stated that the system setup through SAS was seen as both a good and a bad thing:

"...interlining, pricing and all complex assignments of rescheduling was handled by SAS. Meaning that we were in a very complex environment, but it was like being in a kindergarten – we had the adults to take care of us, which of course could be nice. But there was also a challenge because it was then the adults that would decide what we could do and what we could get access to and with whom we could play – SAS was our Gatekeepers"

This issue also emerged in an interview with Air Greenland's IT management, as for several years previously, they had been managing Air Greenland's IT systems under SAS and been working with Air Greenland's distribution systems that were hosted under SAS. The IT management commented that "...we did not really have any power under SAS, we got what

include cost reduction, a move toward e-ticketing (and e-interlining), and how airlines in alliances should select their distribution strategy (Lordache & Voiculet, 2010).

²² In the airline and travel industries, a passenger name record (PNR) is a record in the database of a computer reservation system (CRS) that contains the itinerary for a passenger or a group of passengers travelling together. The concept of PNR was first introduced by airlines that needed to exchange reservation information in case passengers required flights from multiple airlines to reach their destination ("interlining").

they would give us – they were calling the shots. But they were also running most of the technical function in distribution, as we were hosted in their system.” SAS was clearly dominant in the everyday production by controlling the distribution through their systems; simultaneously, it created legitimacy because it ensured the necessary system functionality that allowed Air Greenland to connect with its customers and distribute airline seats.

Accounting in a hosted environment

In 2004, Air Greenland was operating its own accounting system and receiving processed inventory and booking data from SAS systems that were hosted by CSC airline solutions²³. The data from SAS was to be used in Air Greenland’s internal accounting system, which in principle would create better management accounting practices. The idea was to foster control in Air Greenland’s sales and distribution processes, enabling them to measure profitability and efficiency on individual routes and business units.

A controller working in the commercial department said that the relationship did not emphasize a high degree of control. The specific systems between Air Greenland and SAS were not set up for monitoring or control, as the operational function was controlled by SAS. Air Greenland focused on operational excellence as opposed to looking at cost structures and efficiency. At this point, Air Greenland’s culture was not based on management accounting principles. Rather, it worked with cost structures and efficiency initiatives, as the controller commented:

“...at this point we received a block grant from the Home Rule Government and the idea was just to fill the holes and if we needed some more money we just applied for more – with the setup we had in the SAS systems we did not focus on control and it was not that easy to measure on operations. The goal was more to make sure we did not have a deficit and basically get through the day.”

The controller continued:

²³ In 2003, large outsourcing agreements were made between CSC and SAS Data, which created CSC Airline Solutions. Their role was to deliver IT solutions to the airline industry, with Scandinavian IT Group as their biggest customer administrating and supporting a version of the GDS Amadeus Altea.

“...being in this system setup under SAS was just what we did. We should just make it to the end of the day and then everyone was happy. It was hard to calculate the profitability! In this previous management system, the focus was not on creating control or profit, but more to ensure successful operations. It was hard to figure out what we earned our money on.”

The focus at this point was on the efficiency and excellence of flight operations, as legitimacy was obtained through SAS, given that the management accounting practices were controlled in systems and processes that were still a part of the old SAS setup. Air Greenland was subject to the norms and standards of the SAS system which, in large part, were facilitated through an information system. Air Greenland only had to provide reliable infrastructure, and therefore, efficiency and optimization were secondary. This was one of the reasons why Air Greenland had a more difficult time emphasizing management accounting practices and focusing on profitability. Furthermore, the key information technology processes were controlled by SAS, which also created fewer possibilities for Air Greenland to improve their management accounting practices. It was clear that SAS controlled the information technology infrastructure and used this to dominate Air Greenland; furthermore, the old culture of SAS had affected Air Greenland's way of doing things.

Competing within the same information system

Air Greenland's management was aware of SAS' position and the fact that they had complete access to their systems. A manager commented that there must have been times when employees from the commercial division in SAS had been spying on Air Greenland's inventory and reservation system to get valuable information, because the two airlines were competing for the same passengers on the transatlantic route between Greenland and Denmark²⁴:

“...when we were in the SAS system I'm certain that they were spying on our system, monitoring what tickets we had for sales, giving them the competitive edge as they furthermore were telling us when to fly the domestic routes and now also the transatlantic route, so it was not in competition with their operations. The

²⁴ Until this point, the operations of the transatlantic route had always belonged to SAS as Air Greenland had supported this route with domestic flight operations within Greenland. This was a significant change in the relationship between Air Greenland and their private shareholders (including SAS). The details about this change are not the focus of this paper.

reason that SAS had ownership in Air Greenland was just so they could control the domestic route to support their transatlantic route, which back then was quite profitable for them.”

Air Greenland’s management was now concerned about their distributional setup, with SAS supplying the system, as this gave SAS a strategic advantage in controlling their system. A significant section of the senior management also saw the issue of being in competition with SAS, who in fact controlled their system. SAS was becoming more dominant as they could monitor Air Greenland’s prices and consequently arrange their ticket prices and services to be cheaper than those of Air Greenland. As one manager commented:

“...we saw several incidences where SAS booked cheap classes on our routes through our systems and blocked seats that we then could not sell. They also had the advantages of monitoring our system, which funnily enough enabled them to always match our offers and prices at the last minute.”

Their owner and new rival on the transatlantic route (SAS) was in complete control of all of their transactions and system functions. SAS enjoyed this position because of Air Greenland’s need for complex distributional infrastructure. SAS controlled the most vital components of Air Greenland’s income and revenue stream under their system, meaning that Air Greenland had to adhere to the rules and norms of SAS’ technology. The control of the distribution system and transactions was in the hands of SAS, although there was a close relationship between the IT departments of the two airlines. Air Greenland was frustrated at being locked into the structures and rules of SAS.

7.6.1.1 Summary: Hosted in the competitor-controlled systems

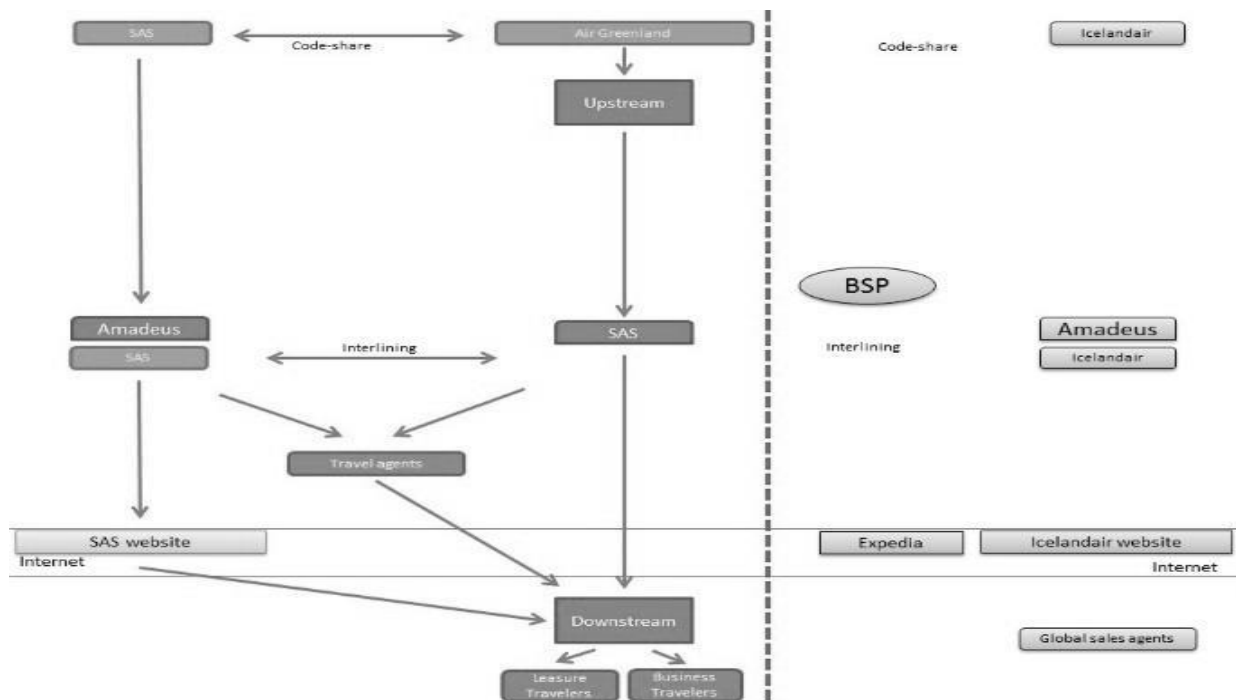


Figure 4 – The competitor-controlled system illustrates how the management accounting rules and routines were affected by SAS, the system owner, and the fact that the system only allowed interorganizational relationships with those approved by SAS. This created what Lind and Thrane (2007) described as “one singular relationship” between SAS and Air Greenland.

Implication for management accounting

It was evident that SAS was dominant through their control of Air Greenland’s information system and that they used this position to gain a strategic advantage over Air Greenland. Because Air Greenland operated under SAS’ system, it had to institutionalize its rules and routines in keeping with SAS’ culture. This was then (re)produced through the behavior of the individual actors, which affected the management accounting practices in Air Greenland. At this time, the actors did not have the capacity or knowledge to create change. Rather, change came as a result of external technological developments affecting Air Greenland, which was also fighting to become independent by seizing control over its transactions and distribution. The management accounting practices in Air Greenland were strongly grounded in existing institutions because the rules and routines were based on SAS’ external institutions, thereby creating “a lack of management accounting identity” within the organization.

The management accounting practices under SAS were constrained because the management accounting rules and routines adhered to the procedures of SAS’ system. Air Greenland’s accounting system was never set up to do more than simple bookkeeping, and it was supported

by SAS, who delivered all data. Control and budgeting indicators were weak and were not aligned to monitor operations. Air Greenland's practices were more focused on operational excellence and ensuring the smooth running of flights, and the objective was only to make numbers align so that there was no deficit. The lack of management accounting systems resulted from many years of controlled distributional operations under SAS.

Influence of information technology

SAS' information system, as shown in table 1, was rooted in Air Greenland's processes because SAS' structures were highly institutionalized in Air Greenland's rules and routines. Given the "one relationship" setup wherein Air Greenland was adherent to what SAS could facilitate, SAS clearly had a dominant role. SAS operated and controlled the information system and dictated how Air Greenland handled inventory, created flight schedules, and organized their actual pricing structure. This determined the boundaries of how Air Greenland legitimated their relationship. In the daily operation of systems, SAS dictated Air Greenland's ability to control their vertical and horizontal relationships, because these relationships were controlled in compliance with SAS' norms and technical specifications.

To ensure the ability to compete, it was important for Air Greenland to gain more influence over its distributional environment. This illustrates the fact that the existing information technology setup between Air Greenland and SAS did control the latter's ability to establish the necessary relationships to ensure better production and foster more internal control. The "pressure for change" came from external sources, as analyzed below, where the revolutionary changes in online distribution and digital ticketing combined with the power struggle between Air Greenland and SAS were conflicting. This conflict was centered around the existing information system setup that created the need for change.

7.6.2 Having control in Navitaire

Over many years, Air Greenland had existed in a setup under SAS that was challenging for them because SAS had built a strong and dominant position through this system. Their relationship with SAS was in no way beneficial to them now that they had become competitors. A further issue was that industry regulations and technological developments forced Air Greenland to make reservations, bookings, and ticketing digital for all its stakeholders. This meant that they had to look for other options beyond being hosted by SAS.

At this point, Air Greenland had limited options owing to their size and scale of production. For example, several incidents had shown that Air Greenland was simply too small for GDSs. Air Greenland was not large enough to capture the interest of any of the major GDS suppliers (e.g., Amadeus, Travelport, and Sabre):

“...when we were at the point where we had to change into a new distribution system, the European GDS supplier would not talk to us, as we did not have the right size. At this point, the CSC platform was not an option and the U.S. Sabre just was not interested in talking to us. A subdivision in the Amadeus Corporation had a product call Amadeus Frontier, but they would not make the effort of coming all the way to Greenland to present their system, due to our size and that the product was simply too expensive for Air Greenland – we were not interesting to them.”

The information technology controlled by GDS suppliers clearly had a quite significant effect on the airline industry because it legitimated who could use the systems and on what terms. New industry regulations meant that Air Greenland was forced into new control settings and a new system setup. With these various changes, the existing system structure under SAS was weakened as they were forced to enter into another information system setup. At the time that change was needed, Air Greenland was introduced to Navitaire and their “New Skies” reservation system. Unlike open GDSs such as SAS and Sabre, this was a closed reservation system. Navitaire handled low-cost carriers who flew point-to-point and who only distributed through the Internet from their own webpage. Air Greenland’s management learned that entering into the new distribution system was a completely different setup compared to being hosted under the SAS system:

“...going into Navitaire compared to SAS were a more customer-supplier relationship, so it was a little easier to negotiate, though they were set up to handle big low-cost carriers. This meant that what Air Greenland wanted and needed out of a distribution system as an old-legacy airline was not what the rest of Navitaire’s big customers wanted, and was therefore not that good a match.”

This comment from management indicated that going into this distribution system was not a perfect setup, but had more to do with a lack of viable options. When talking about distribution system setups, one of the employees also said that “...we ended up in Navitaire because we really did not have any other choice.” The employee’s comments seem to suggest a lack of options and the feeling that the one that was eventually chosen was not necessarily a good one. Nevertheless, the management and board decided at the beginning of 2007 to invest in this Internet-based system. This new system would help them meet the challenge of making the whole distribution process digital and ticketless.

The goal was to meet the challenge of making booking and check-in comply with the new regulation implemented by the International Air Transport Association (IATA). However, this created an even bigger challenge and barrier to the relationship with subsidiaries, travel agents, and partners who were part of the original supply chain setup under the SAS system and Air Greenland’s vertical supply field. Meeting the new regulation would mean technological advancements that would change interorganizational relationships, thereby alienating the vertical supply field, as described in the next section.

From paper to information technology (ticketless)

Air Greenland’s goal was to meet the challenge of making booking and check-in comply with IATA’s new regulation. However, this created an even bigger challenge and barrier in the relationships with subsidiaries, travel agents, and partners who were part of the original supply chain setup under the SAS system and Air Greenland’s vertical supply field. Announcing the end of conventional tickets in the industry meant the elimination of paper tickets. This initiative was estimated to lower airlines’ costs by around \$3 billion worldwide. According to the IATA, once initiated, this revolutionary change would reduce the cost of issuing a ticket from \$10 to \$1²⁵. The elimination of paper tickets affected 350 airlines that used 80 Billing and Settlement Plans (BSPs)²⁶ covering 162 countries worldwide (Grossman, 2008). These BSPs were established by IATA to manage the cash sales of airline tickets between travel agents and

²⁵ The International Air Transport Association (IATA) is the trade association for the world’s airlines; it represents around 240 airlines and accounts for 84% of total air traffic. The IATA supports many areas of aviation activity and helps formulate industry policy on critical aviation issues.

²⁶ BSPs are organized on a local basis, usually one per country. However, some BSPs cover more than one country (for example, the Nordics). The IATA states that at the close of 2009, there were 86 BSPs covering more than 160 countries worldwide; at the close of 2011, there were 88 BSPs covering 176 countries and territories and serving around 400 airlines, with gross sales processed amounting to USD 249 billion (Wikipedia.org).

airlines. Throughout Air Greenland's history, BSPs had been administrated and handled by SAS.

Air Greenland was a part of the industry and was subject to IATA's new institutional rules. Moving from paper tickets to electronic tickets was a significant transformation that was difficult to initiate owing to their current situation of being under the SAS system. Air Greenland's routines were deeply rooted in the SAS system, and therefore, they had not felt the need for change thus far. Their setup under the SAS system meant that they were isolated and unable to initiate the transformation. These transactions and work procedures were unknown to Air Greenland as they only handled passenger documents that were then delivered to SAS. The distribution manager explained Air Greenland's ticketing setup in 2004 as follows:

"...when we had paper tickets the passenger got a paper ticket with 4-6 carbon sheets, where each carbon sheet was handed over to what airline that was handling the trip. So there was always a paper trail of the passenger and the travel. So back in the time of paper tickets the cost of interlining agreement would be the paper that the agreement was written on. When we went into the ticketless digital systems an interlining agreement would cost up to half a million dollars as every interlining agreement entail that the information systems of each airline could communicate and process data from others airlines within the interline agreement."

The new system setup had to be able to approve transactions and tickets from all other airline systems. Airlines also had to be able to make changes and to tell other airline systems that the passenger now had been "lifted," so that whoever had transported the passenger (operating airline) could send an invoice to the airline that had issued the tickets (ticketing airline) and get their financial share from the passenger that had been lifted through the BSPs. The distribution manager pointed out that:

"...if it was just the matter of the system of two airlines that should speak together then it would not be such a challenge, but when it's was 350 airlines, things became much more complicated and devastating for Air Greenland."

In this new setup with digital tickets, the cost of interlining and the system complexity meant that every airline was reevaluating its interline agreements. In these new regulatory settings, interlining was not just a matter of an agreement and the cost of a “piece of paper” as in the old settings but of analyzing the cost/benefit of each relationship with other airlines and determining the profitability accordingly cost. Throughout 2006, all airlines started terminating those interline agreements that were not beneficial to them. At this point, Air Greenland had around 50 interlining agreements through the SAS system, and all of them were terminated. This was explained by the manager of the commercial department as follows:

“...many airlines had around 200 interlining agreements and I think that we had around 50 agreements with different airlines while being incorporated in the SAS system. There were none of these agreements that generated a profit of half a million dollars, so we were effectively excluded because we were too small a player in the global distributional market.”

This meant that Air Greenland, at this point, did not have any interline agreements with external airlines. As a result, Air Greenland could not sell anything through interlining or make connecting airline tickets with other airlines to destinations other than those they covered. Technological developments and new institutional rules had radically challenged all existing systems because rules and routines had to be changed; this, in turn, clearly changed the boundaries for the distributional setup as relationships had become limited owing to the technological change. All management accounting systems had to be altered and recalibrated to support new organizational practices as old rules and routines were made obsolete by the technological change.

Implementing Navitaire, securing internal control, and meeting new industry standards

In October 2007, the closed Navitaire system was implemented and put into operation. This system was built around a “book & pay module,” one of the strengths and benefits of which was that there was no difference in the time between ordering and payment. This meant that payment was received at the time the tickets were booked. Under the SAS system, this was handled through a BSP that delayed the delivery of the payment; in contrast, the new Navitaire system afforded more control over the cash flow. Navitaire was less complex compared to the SAS system, a point noted by a commercial controller:

“...Navitaire was inexpensive and not nearly as complex as the SAS’ Amadeus system or any other GDSs. I think that we in operations saved around \$2.5 million yearly and substantially improved our cash flows as we had all payments as soon as the ticket was sold.”

Money could clearly be saved by changing from SAS to Navitaire, which also improved internal daily operations. Accounting practices also improved greatly as the airline, for the first time, could control its own distributional infrastructure. The commercial controller remembered the system change, and noted:

“...it was quite nice going from SAS to Navitaire. For the first time it was us that controlled the complete commercial operations. If we had to change a price in the system, we could do it in five minutes. When we were in the SAS system it could take up to three weeks. Moreover, we could make changes to our flight schedule without contacting SAS. What also made it easier in the booking flow was that under the Navitaire system we only had to operate with a PNR number²⁷ and therefore could handle all transactions internally – under Navitaire we worked under few integrated internal systems.”

The new distribution system had given Air Greenland substantial internal control. The new setup gave them full control over their system despite limiting them on the distribution side. This resulted in better cash flow. It also enabled them to create more sophisticated management accounting practices because they now controlled the information system that handled all the transactions, and the processes were simpler. Air Greenland now had access to all the data, so they could better calculate the profitability and cost of different products. The new distribution system simplified Air Greenland’s operations because they could now control their transactions and therefore monitor them. Air Greenland’s chief accountant explained how he was quite satisfied with the new system given that they could oversee and control the data flow and all transactions:

²⁷ The closed distribution system only operated on PNR numbers excluding ticket numbers that were used in the GDS systems, enabling an airline to operate all transactions in one system without making any intermediation between partners.

“...well, there were, from my point of view not that many challenges with the new system. We had a documented process that worked fairly well. This meant that all types of transactions in Navitaire were subject to finance-mapping, and that every time someone works in Navitaire, whether in-house or external, it results in some kind of financial transaction that we monitor and process. This has made it much easier for us to settle, report, and make budgets, setup KPIs and actually follow up on those if needed.”

Control and monitoring had become easier, and the accountants and controllers could now generate new management accounting rules and routines. This was a significant improvement for several stakeholders in Air Greenland in terms of operations. On the one hand, the new Navitaire system challenged the interorganizational relationship and eliminated the vertical and horizontal relationships, and on the other hand, it improved the management accounting practices. The new systems had helped change and improve the management accounting rules and routines within the airline, creating better settings for control and governance.

Terminating vertical and horizontal relationships

The external partners and travel agents that were selling tickets to and from Greenland were furious. They had always been able to work with their reservation systems in the GDS. With Air Greenland's new information system, the travel agents were excluded as the Navitaire system was closed²⁸. Their only option for creating a relationship at this point was to book online through the airline's webpage, like a regular customer using a credit card. The CEO of one of the big travel agents in Greenland stated:

“...when Air Greenland got into Navitaire, it was a bad thing for us. Our system was not made to handle this kind of setup as we got cut off from selling Air Greenland tickets.”

The CEO continued thus:

²⁸ Navitaire is a “closed” system that is mainly intended for smaller airlines that do not have the need for “open” systems such as Amadeus, Sabre, and Travelport.

“...we eventually figured it out and paid a lot of money and used a substantial amount of time to configure our IT-system to apply Air Greenland’s close system standards and system specification. Moreover, we employed two extra people just to handle this new setup dealing with the Air Greenland distribution system.”

When interviewing the CEO, it became clear that the transition from the SAS to the Navitaire system was a significant change for his organization and for the whole supply chain, not least the value chain, which they were a part of. Air Greenland and its supply chain had thus far been able to operate on industry standards and in a system setup where airlines, travel agents, and other parts of the industry could perform transactions with Air Greenland according to these industry standards.

The new Navitaire system provided a completely different distributional infrastructure. It challenged both the vertical and horizontal relationships with external stakeholders; therefore, as relationships changed, the boundaries moved and narrowed. Air Greenland’s distribution manager explained how many of their partners were simply excluded from selling tickets for Air Greenland owing to the new Navitaire system and the changes in the distributional infrastructure. As such, most of them chose to terminate their business relationship with Air Greenland:

” ...when Air Greenland went into Navitaire, most travel agents turned their back on us and started to look at destinations like Canada, Svalbard and Iceland, which they could sell in the GDS instead. We went from having 12 travel agents that sold our tickets to having three, one of which we owned. We basically killed the leisure market in Greenland.”

The distribution manager stated that Air Greenland, following the implementation of its new system, radically changed its vertical relationships with its downstream sales partners. In doing so, it eliminated the option of working with the industry standards (i.e., GDS) that all other airlines and travel agencies used. With this change, the only entry to the new system would be through the Internet and the airline’s webpage, which did not meet industry standards. After the implementation, Navitaire had several consequences because it had some limitations. Some of these consequences were unintended, with one being the ability to generate new management

accounting rules and routines that, according to key stakeholders, improved control because accountants could monitor and control all transactions. Another consequence was that Air Greenland lost most of their supplier relations.

7.6.2.1 Summary: Taking control using the Navitaire system

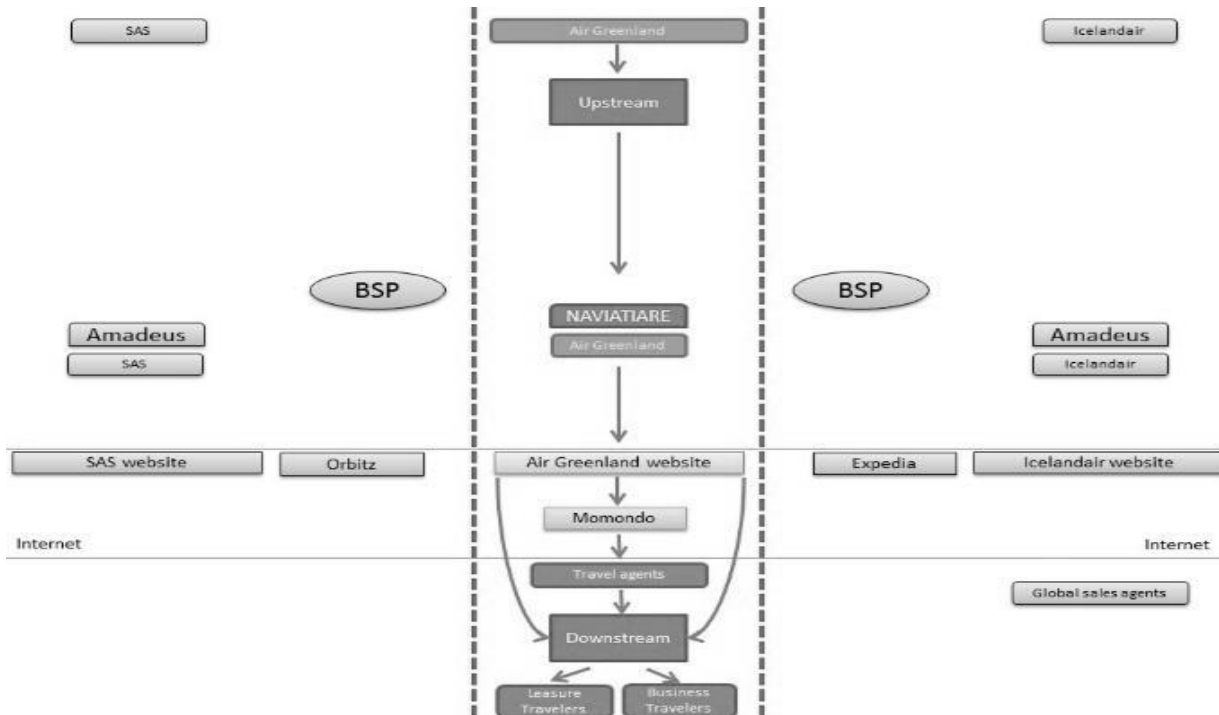


Figure 5 – The company-controlled system completely removed all interorganizational relationships and domination by SAS, with all systems and transactions being handled internally by Air Greenland. This created an unintended consequence of stronger management accounting practices. In this setting, Air Greenland now handled what Lind and Thrane (2007) would categorize as “serial relationships,” wherein Air Greenland had control of all transactions.

Implication for management accounting

The necessary exit from the SAS system meant that Air Greenland was forced to change. Technological advancements (e.g., the Internet and ticketless reservation) had resulted in a revolutionary change that meant that Air Greenland could not continue with its system settings. This had a large impact on the airline industry and on Air Greenland as well. Air Greenland had to make extensive changes to its management accounting rules and routines, with more automation and computerization of management accounting practices. The fact that their partner SAS had become a competitor created a further need for change. This significantly changed the role of accountants and controllers in Air Greenland.

Owing to technological developments, new industry standards, and the changing nature of relations with SAS, Air Greenland was forced to move into a different information system setup. This had several unintended consequences. The new system's settings eliminated vertical and horizontal relationships, thus making the process of management accounting and control easier. The new settings meant that the organization and its employees were now in full control of all transactions. Management accounting rules and routines changed and practices improved as the accountants could monitor and allocate costs, compare revenues with budgets, develop budgetary control and establish financial performance measures.

In this new setup, all ticket sales and transactions were handled in the Navitaire system, which isolated Air Greenland from global distribution. Booking, payments, and ticketing were completed in one transaction in this internal closed system, thereby enabling Air Greenland to control all cash flows and transactions. This new information system made Air Greenland's option for global distribution and interlining weak; however, it created better conditions for its accounting practices because all operations were now controlled internally by Air Greenland. As such, the management accounting rules and routines changed. Air Greenland could incorporate both upstream and downstream relations in their management accounting practices owing to the capabilities offered by the new processes in the Navitaire system.

Influence of information technology

Revolutionary information technology developments resulted in innovation in the airline industry and the development of a new airline ticketing concept. The resulting digitization of ticketing greatly influenced Air Greenland's supply chain. Boundaries changed as interlining operations with partner airlines were terminated in the transformation from paper tickets to digital tickets. New standards and system compatibility meant that Air Greenland went from having 50 interline agreements to having none, thereby ending its horizontal relationships and crippling its vertical relations. The result was a simple serial relationship between Air Greenland's supplier and customers.

The downside of this closed system was that it eliminated relationships and changed the boundaries in the interorganizational field. This led to many disadvantages and a loss in sales because the new setup eliminated vertical and horizontal relationships. The advantage of this new distribution system was that Air Greenland could now control all transactions, meaning that

there was no billing and settlement with other airlines, BSPs, and travel agents. The new information system setup had made Air Greenland independent, where it operated all systems and procedures internally. The greater use of information technology in ticketing and distribution also affected the relationship between accounting and distribution as the system was now central to the departments in the commercial division through the centralization of data processing.

7.6.3 Losing control in Amadeus

The challenges with the Navitaire system and the lack of interorganizational relationships resulted in Air Greenland's board and management looking to replace the existing system. In 2010, the management evaluated the current Navitaire system to assess whether they should continue with it. In 2010 and early 2011, Air Greenland's IT department was still trying to apply the global distribution functions to the existing Navitaire system. In mid-2011, Air Greenland was facing competition from Icelandair and Air Iceland, two airlines from Iceland. The conflict in terms of the distribution system was that these two airlines were operating in a global distribution system that gave them a strong competitive advantage. This threat had made both the management and the board reevaluate their distribution strategy, because it was difficult to legitimate staying in a closed system, despite the internal improvements, when competitors were operating in an open system that gave them strong vertical and horizontal relationships. Moreover, oil and mining industries had accelerated their exploration in Greenland, and the key to securing this market segment was through an open system and global distribution²⁹. This meant that to survive and stay competitive, Air Greenland had to follow developments in information technology and return to an open system irrespective of the consequences.

In 2012, market conditions had now enabled Air Greenland to sign a large set of agreements with Amadeus IT Group S.A. for using their Altea platform. This platform could handle Air Greenland's distributional infrastructure. In terms of resources, a large part of 2012 was used to negotiate the terms of the new platform, which would finally go live in April 2013. Air Greenland aimed to use the Amadeus system to work according to industry standards in an open system. This was intended to achieve more visible and global distribution as opposed to the

²⁹ In a competitive market, Air Greenland had to operate with a GDS. For example, a Chinese businessman would use a ticket supplier and not book two separate tickets to Greenland. Air Iceland's competing route did not have these limitations and was expected to capture a large share of this new market).

erstwhile closed system that had been in operation since October 2007. Air Greenland's management felt that the system change was essential for creating growth, meeting new demands (i.e., the oil and mineral industry), and fighting the competition (i.e., Air Iceland and Icelandair).

Implementing the Amadeus Altea platform

The newly implemented Amadeus platform changed organizational boundaries and opened up completely new interorganizational relationships. This change did challenge existing structures because of the change in rules and routines and, in turn, organizational practices. Many processes were changed as they were now to be part of the Amadeus system, which was controlled by an external vendor. The existing processes under the Navitaire system that had strengthened the management accounting practices were now changing to meet the Amadeus standards. The significance of having a competitive advantage seemed greater than having a controlled environment with strong management accounting practices, as was the case under Navitaire.

In this open system, Air Greenland could engage in interlining and multiple relationships with external partners, and therefore, the distributional boundaries changed. This enabled Air Greenland to independently engage in both vertical and horizontal relationships, instantly creating multiple networks. The Amadeus system gave access to complex networks through the Internet and advanced information technology. Amadeus is one of the biggest civilian computer systems, servicing over 90,000 travel agencies in 195 countries, 500 airlines and 34,000 airline sales offices, over 86,000 hotels, 42 car rental companies covering 36,000 rent-a-car locations, and many thousands of tour operators.

Amadeus' open environment gave Air Greenland the option to once again explore and expand their vertical and horizontal relationships. These new settings expanded their supply chain, thereby reinforcing their value chain and changing the distributional boundaries of the organization. The travel agents and partners that were excluded under Navitaire were now able to access Air Greenland's system on industry standards and terms. As the distribution manager noted:

“...the travel agents and partners felt quite restricted when we went back into Navitaire and many left. Now you have them all back. For travel agents that sell many airlines and are used to working in Amadeus, the closed system of Navitaire was just too big a hassle.”

Amadeus certainly made things easier for external stakeholders, because they all returned to this unified and open global distribution system. The Amadeus system enabled interactions with multiple external stakeholders, thereby creating new and complex interorganizational relationships and moving boundaries far beyond the organization. An unintended consequence of this improvement was that the new environment made it harder to create accounting and financial reports. The complexity of the information system had grown substantially, as explained by an employee from network revenue management:

“...It was complex to go into Amadeus, where we were now back to both ticket numbers and reservation numbers (PNR), which are two unique system numbers on two independent servers, meaning that you if you change something in one place, you have to change it in several other places too.”

All features of this GDS were controlled by the Amadeus Corporation, because the Amadeus system was now responsible for supporting Air Greenland's distributional infrastructure. Therefore, Air Greenland had to apply the rules and norms of the Amadeus standards. The new processes for handling inventory, reservation, and distribution were also becoming more complex as the new system setup demanded that different departments in Air Greenland had to follow Amadeus' strict protocols. Indeed, a new interorganizational department had to be created to accommodate the new interorganizational boundaries that were established through Amadeus.

Adapting the Amadeus system to the organization

The largest and most fundamental change in the organizational structure of the commercial department within Air Greenland was that with the implementation of the Amadeus system, they had to establish a new department called “revenue accounting.” This new department had to handle billing and settlements among different airlines, partners, and travel agents; this was a requirement under the Amadeus system because of the information technology it used. This new

department had to be connected to a subdivision of Amadeus called BSP. BSPs are systems that electronically handle billing and that facilitate the flow of data and funds among airlines, travel agents, and other partners. The head of the revenue accounting department had earlier used the SAS and Navitaire systems at Air Greenland and was therefore able to acknowledge how things had gone from being simple to rather complex in the new Amadeus setup and how accounting changed dramatically, thereby affecting management accounting practices.

The integration into Amadeus was challenging, and the operational errors that occurred had a great effect on the revenue accounting department. The newly installed internal control systems (e.g., Mona Lisa) in this department were dependent on data from several other systems to align with Amadeus. A technical issue and significant challenge was how the different systems communicated and what data was received.

“...the Amadeus system is able to do a million things and we have only bought the rights to a limited set of these features. Still, after a year, we have not learned to use these features. We did not properly prepare ourselves as to what the system can do, what it demands of information, how the configuration should be – so as long as we have not settled that in terms of Amadeus, we can’t get things to properly function here in this department.”

Extensive changes were required in the management accounting rules and routines as the accounting practices within Air Greenland had to change once again to facilitate this new information system setup. One indication was that the organization now had to oversee billing and settlement, something that had previously been handled by SAS and that had been a simple internal process in Navitaire. The revenue accounting department had to follow the rules of a new distributional setup that was controlled and operated through external vendors (i.e., Amadeus and BSP) and was based on industry standards supported by information technology.

7.6.3.1 Summary: Being controlled in the Amadeus system

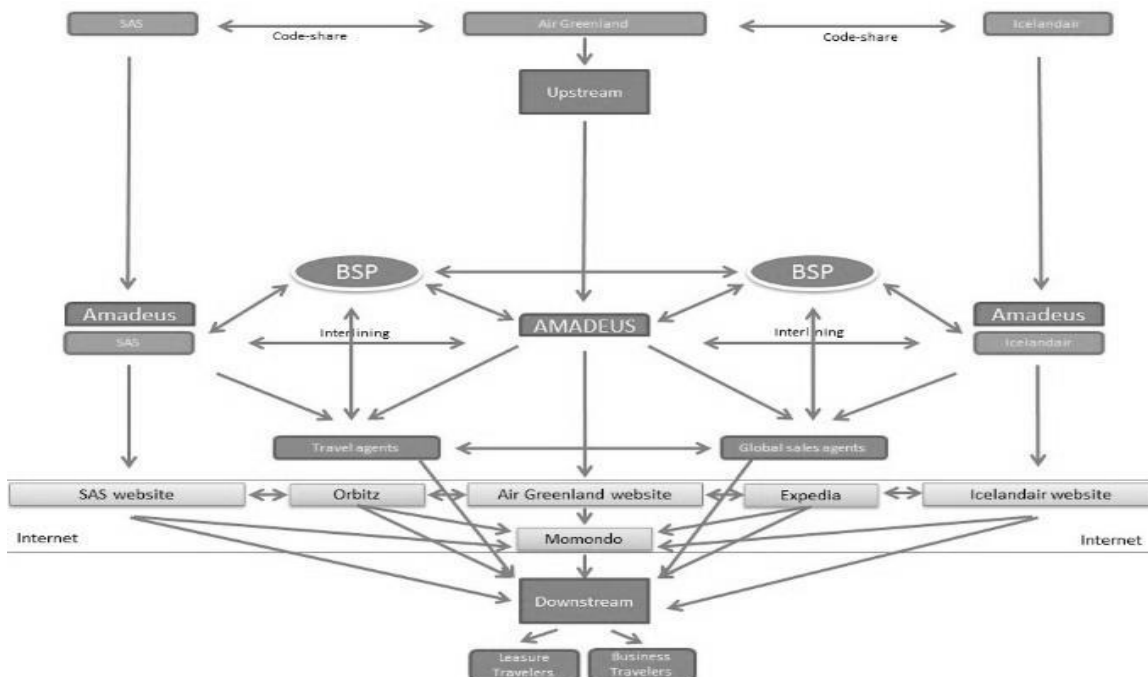


Figure 6 – The supplier-controlled system opened up various interorganizational relationships that had large impacts on management accounting settings and organizational practices. Meeting market demands weakened the ability to control, thus creating what Lind and Thrane (2007) identified as complex relationships, including third parties.

Implication for management accounting

The more comprehensive the integration, the more did the Amadeus system take an intermediary position. This meant that accounting processes were altered to comply with a global GDS setup that incorporated external invoicing and settlement processes into internal management accounting practices. Individual transactions had to be processed first through the Amadeus distribution system and then through the BSP subdivision; this was an industry standard that Air Greenland had to apply to its management accounting procedures to ensure billing and settlement.

To apply Amadeus' standards, Air Greenland had to incorporate a multidimensional reporting system called Mona Lisa. This was a standard and a requirement to operate within the GDS environment, in which both internal and external data were processed simultaneously to be ready for delivery to Amadeus' BSP. The head of the revenue accounting department clearly stated the challenges with this new setup:

“...I work in Mona Lisa and that is a completely different system from Amadeus. It’s an invoicing and settlement system. It has been quite a task starting this system up, and as long as we do not get the correct data, then it will always be a big challenge – put garbage in, and you get garbage out!”

The strong internal and institutionalized practices that Air Greenland used the closed Navitaire system were now being challenged and overruled by the new open Amadeus system, which changed the distributional boundaries of the organization and created new management accounting rules and routines. This restructuring and adaptation in the accounting setup under the GDS meant that the management accounting practices also had to incorporate flexibility and scalability to work with the external system. This was a requirement to enable rapid responses to the new vertical and horizontal relationships in this new dynamic business environment.

Information technology’s influence on the change process

The legitimacy of competitive advantage and the significance of technology created changes that have emphasized the need for larger interorganizational relationships and further use of complex information technology solutions. The change in information systems had unintended consequences in that Air Greenland lost substantial control following changes to several management accounting practices. Competition and new market demands generated the need for further advancement in distribution; this forced Air Greenland to rethink its distributional strategy and information technology setup. This type of system created a relationship between different parties that had an indirect effect on each other (Lind & Thrane, 2007). This meant that the distributional setup clearly showed that Air Greenland had the ability to engage in complex and advanced interorganizational relationships, with the unintended consequence of losing control in this open system.

Moving from a closed system that enforced management accounting practices to an open system presented several challenges. The IT and revenue accounting departments had to deal with incompatible databases and applications, poor-quality data, and the restricted scalability of internal systems toward the outsourced Amadeus distribution system. The maintenance of these different relationships in complex systems resulted in many conflicts in creating frictionless processes that could satisfy all parties.

This case study illustrates that to ensure cooperation and a complex relationship in the interorganizational field, information technology plays a central and vital role in orchestrating different relationships and boundaries. Moreover, it has a considerable effect on management accounting rules and routines. The system change showed how the rules were affected and how they caused both unintended and deliberate changes.

7.7 Discussion

The institutional analysis focusses on three specific periods and illustrates how information technology plays an active role in terms of organizational development. The analysis examines these three periods to examine the role of information technology in the interorganizational field. The case study uses Lind and Thrane's (2010) framework along with elements of institutional theory to establish the interaction within these three periods. These are summarized in the model below.

Distribution system setup	Situation considered	Key managerial issues	Type and role of accounting	Impact of IT	Technology in practice	Interpretive schemes: Signification	Facilities: Domination	Norms: Legitimation
Being controlled under SAS "Competitor-controlled system"	- One relationship	- System dominance - Lack of distributional control - Lock into distribution system	- Underutilized accounting system dictated by the distribution system in simple processing and accumulation of data in the dyadic relationship, facilitating a zero-sum-game	- IT developments made existing ticketing processes obsolete and forced the airline into higher IT use and reevaluation of supply chain setup owing to size and production.	- Hosting: The airline's internal systems were dominated and subject to the SAS system that handled all technical aspects of ticketing and distribution. Air Greenland only handled front office, ticketing, and bookkeeping functions.	- The scheme focused on operations excellence and people performance rather than on having an accounting focus. Operational efficiency was the first priority. The focus was on excellent service through reliable operations supported by SAS: "...SAS knew best and handled things right."	- Owners' authority: Operations were superseded by SAS as the major system provider and the owner dictated how systems were to be operated, how tickets were issued, and what routes were flown by Air Greenland. SAS also became a competitor to Air Greenland.	- SAS information system - Reliability and operational excellence - Owners' authority
Having control in Navitaire "Closed system"	- Serial relationship in a chain	- Distanced from supply chain partners - Loss of interorganizational collaboration - More complex but better accounting practices	- Internal accounting setup that was instantly synthesized with all systems now came in-house, creating a lock position with the supply chain setup. Management accounting had greater emphasis.	- The independent information system cut-off all supply chain connections, eliminating the airline's option of taking up any supply chain partnerships and thereby substantially altering the organizational boundaries.	- Plug 'n' Play: Internal system had complete control over all distribution functions and ensured system independence, thus trading off the ability to interline and realize global distribution.	- The scheme was independent. Uneconomic activities were to be eliminated. Focus was on system compliance, as the airline had to manage industry regulations and operate the system on their own.	- Industry regulators: The airline was forced to undergo substantial changes as processes had become ticketless and involved higher Internet use. Moreover, they separated from their competitor SAS.	- Independence - IT regulations (industry standards) - Higher control - Transparency - Efficient operations - Cost-cutting

Losing control in Amadeus "Open system"	- Complex systems/Networks, including third parties	- Increased system complexity - Lack of intraorganizational collaboration - Loss of management control	- Overlapping accountability, multiple accounting entries through intermediaries and associates, controlling supply chain affiliations - Accounting practices in open system led to loss of control	- Using intermediaries to facilitate distribution. - Loss of control in the IT setup made system use highly complex, giving power to the information system supplier	- Inter-mediation: Meeting strategy gave the ability to distribute globally, creating different power relations between the organization and information technology.	- The scheme was moving toward global competitiveness, meeting market demands efficiently by outsourcing, competitive pricing, and profitability.	- System supplier: The airline had started to adhere to the new system, which was controlled through the extensive and complex relationship with its system supplier.	- Meeting market demands - Fight of competition - Global distribution - Managing relationships
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Table 5 – Case analysis enactment in Air Greenland (Lind and Thrane's (2010) framework)

The case study reveals the need for change and how it is facilitated by information technology. The analysis illustrates the extensive power and position that information technology has in the interorganizational field, and how this position allows it to facilitate relationships and move boundaries far beyond the organizational sphere. The empirical study illustrates how these relationships are established or terminated as a consequence of information technology and, more specifically, how they change from one relationship into serial relationships and end as a complex network, depending on the use of technology (Lind & Thrane, 2007). To establish and analyze these relationships, Lind and Thrane's (2007) framework and the use of the institutional perspective has been useful in identifying the relations between information technology and management accounting, and they reveal the dominant role of information technology in the organizational field. The process of going from one information system to another illustrates how technology can rapidly alter existing boundaries. This demonstrates how information technology plays an active role in the change process by orchestrating complex relationships through different information systems, and how this affects organizational practices such as management accounting.

The empirical study established changes in management accounting practices as a consequence of the shift from one information system to another. Being in a competitor-controlled environment especially emphasized the dominance of the system owner SAS and their impact on management accounting practices. A large part of the transactions in terms of the distribution of passenger seats was controlled in the SAS system, reducing the ability to use management accounting, with Air Greenland having more focus on operational excellence. Going into a closed system that was controlled by Air Greenland created an environment where stronger management accounting practices could be applied. Management could now control all

transactions and improve their practices to place more emphasis on control and efficiency. Going into an open system created many challenges. In the closed system, the organization had established strong management accounting practices; in the open system, these had to be altered to support the new information system and its processes. The open system created an environment in which several management accounting practices became more complex and harder to control and now had to incorporate the new processes of the open external system.

It is crucial to take a longitudinal perspective on the interaction of multiple information systems and the development of management accounting practices. This clarifies the relationship between information technology and management accounting and how different information systems can create different settings for management accounting practices, thereby creating change. This case study states the significant role of information technology in the interorganizational field.

Management accounting and information technology

This study established how information technology has a significant impact on internal practices such as management accounting rules and routines. The case study further emphasizes that these changes need to be analyzed over a longer duration to fully understand their implications. However, there has been little discussion on a more longitudinal perspective of analyzing multiple implementations and the role of information technology in more complex situations and relationships.

Studies analyzing the impact of information technology in the management accounting field have extensively focused on single system implementations and the direct impact of information technology. These studies have analyzed different practices from various perspectives such as management control and actor-network theory (Dechow & Mouritsen, 2005; Quattrone & Hopper, 2005, 2006), management accounting and new institutional sociology (Granlund & Malmi, 2002; Hyvönen, 2003; Scapens & Jazayeri, 2003), and management accounting and modeling (Baiman & Rajan, 2002; Nicolaou, 2008). These different perspectives have given notable insights into the direct impact of an information system in the organizational field and in establishing the fact that this impact varies.

This study extends the existing literature by going beyond the direct impact of a single system implementation to illustrating how multiple system implementations affect organizational practices from a more longitudinal perspective and how this changes interorganizational relationships. This case study illustrates how information technology is not merely a simple tool fulfilling the needs of the actors themselves. The case study establishes the dominant effect that technology has and how this can create both constraints and support for the actors. Furthermore, it examines how an information system plays a central and dominant part in the orchestration of multiple and complex relationships by moving interorganizational boundaries and being both a catalyst and an inhibitor for change. The paper thus lends support to research arguing for the significant effects of information technology on management accounting.

Network accounting and information technology

This paper supports literature that argues for the strong impact of information technology in the interorganizational field (Frances & Garney, 1996; Cuganesan & Lee, 2006; Dechow et al., 2007). It argues for more research on *how* change occurs and analyzing it over time with a focus on multiple implementations of information systems. This paper concurs with the findings of Frances and Garney (1996) and Cuganesan and Lee (2006) who stated that information technology plays a dominant role in the interorganizational field. This empirical study illustrates how multiple relationships are established to facilitate the vertical relationships of suppliers, buyers, and sellers as well as how horizontal relationships such as partners, competitors, and strategic alliances play a part. These relationships create the settings for new networks that change existing boundaries.

Analyzing vertical and horizontal relationships has provided the opportunity to observe and demonstrate the ever-evolving combinations of complex relationships and how this strongly affects management accounting rules and routines. It further allows an analysis of how interorganizational control is configured through information technology and how it can expand and reduce the interorganizational field. Many studies of the interorganizational field have analyzed the interdependencies between internal and external boundaries (Dekker, 2004; Håkansson & Lind, 2006; Mouritsen & Thrane, 2006; Thrane & Hald, 2006; Thrane, 2007; Meer-Kooistra & Scapens, 2008); this paper extends them by showing how vertical and horizontal relationships change as a result of the information technology setting. This paper

extends existing research by analyzing several information systems from a longitudinal perspective.

Literature in the management accounting and interorganizational fields has consistently focused on the relations between buyer and supplier; literature on network accounting has extensively analyzed upstream relationships in supply chains but captured only snapshots of the true changes happening therein (Caglio & Ditillo, 2008). Based on the need for further knowledge, this study emphasizes that to fully capture complex interorganizational changes, it is crucial to examine these changes over a longer duration and in more detail. This paper adds to existing literature by using an institutional perspective with a focus on multiple system implementations and the arrangement of different network settings.

7.8 Conclusion

This study focuses on information technology and its impact on the interorganizational field. In particular, this paper theorizes how information technology can orchestrate complex relationships and change boundaries. This paper shows the appropriateness of a more empirical approach for analyzing complex relationships in the interorganizational field (Lind & Thrane, 2010) and emphasizes the need for more longitudinal case studies (Caglio & Ditillo, 2008). The case study illustrates the role of information technology in the interorganizational field by analyzing micro practices and management accounting rules and routines.

Furthermore, the empirical study shows how information technology plays a central role in the interorganizational sphere by orchestrating relationships and determining distributional boundaries. An analysis of multiple system implementations illustrates the different power relations that information technology holds in the interorganizational field and how information technology does not simply play a passive role in facilitating production. Based on the case study, it can be concluded that a closed and simpler system creates a better environment for improving management accounting practices, whereas an open and more complex system challenges existing management accounting practices. The case study illustrates how both evolutionary and revolutionary processes initiate the need for change in information systems. This process was based on market demands, technological development, and industry regulations, all of which aim to better use technology.

An analysis of technological developments illustrates how Air Greenland has struggled to find its place in the interorganizational field. The empirical study demonstrated different challenges resulting from information technology, especially how the use of particular information systems determined the ability to create different interorganizational relationships. Examining multiple system implementations gives a more detailed conceptualization of the control element and how information technology is not merely used in a dyadic relationship, but goes beyond and establishes multiple networks and relationships. By extending current studies on information technology in the interorganizational field, this study clearly shows how technology has a strong influence in the interorganizational sphere and is not merely a passive component.

This paper contributes to existing literature with two main findings. First, the study indicates that management accounting practices are strongly affected by information technology. This is established by analyzing multiple information system implementations and how they decide the management accounting settings in different ways. Second, this study shows that information technology has an increasingly strong and central position in the interorganizational field and that it orchestrates relationships that go far beyond the organizational sphere. These findings will hopefully inspire future research focusing on the relationships among technology, systems, and organizational practices so as to provide a further understanding of the theoretical insights on the significance and dominance of information technology.

7.8.1 Limitations

These findings are interpreted in light of the limitations of this study. First, the data were collected from one focal organization and its subsidiaries. Although this allowed the case study to focus in more detail on the organizational variables (e.g., actors, system, and networks), this limits the generalizability of the findings. Second, this case study focused on the role of different airline distribution systems and the complexity of these “types” of systems. This may not be applicable to other systems, as organizations may implement different types of information systems and this could result in different effects (Hyvönen, 2003). Third, given that this longitudinal case study investigated the role and effect of information technology in the interorganizational field, some changes may also result from general development rather than being directly associated with the impact of information technology. However, the changes discussed in this paper do seem to be related to the shift in information systems and technological developments, such as SAS, Navitaire, and Amadeus.

This study focuses on the impact of information technology on accounting and relations; as such, it is harder to identify whether accounting and relations have an impact on information technology or on themselves. During the last period of the case study, data was only available for a 12-month period after the implementation of the new GDS. Although this timeline adopted a longer perspective, this is consistent with other longitudinal studies on network accounting (Scapens & Jazayeri, 2003; Cooper & Slagmuller, 2004; Coad & Cullen, 2006; Thrane, 2007). Previous research has suggested that there is a lag before organizations have fully implemented their new systems (Granlund & Malmi, 2002; Dechow et al., 2007).

Future research could examine the changes in management accounting and interorganizational relationships and the role of other types of information technology, and how these impact actors and networks. More focus could be placed on the analysis of the bidirectional relations among information technology, management accounting, and relationships, with a focus on the role and impact that management accounting could potentially have on information technology.

8. Thesis discussion

The three research papers support this thesis that contributes to research on management accounting change in an SOE in the context of emerging countries. These papers establish that modernization, institutional logics, and professionalization not only make the organization more open to change but also trigger and initiate several change elements that act as a medium for organizational development. This study argues that in an emerging country, there is a need for a more processual and lateral perspective on exogenous forces and endogenous processes to understand change. There should be more focus on analyzing micro practices and on understanding the duality between the institutional environment and human agency.

8.1 Empirical discussion on management accounting change in an emerging country

This thesis finds it useful to analyze both management accounting and corporate governance when examining organizational change. Both these perspectives work with organizational change and allow for the examination of the distinct types of changes observed in Air Greenland. Although this thesis addresses two directionally opposite forces (i.e., social and commercial) that are established under the ownership of governmental owners and private shareholders, these forces set the path for development. Social and commercial forces appear to have a relationship in an institutional context because they create a space in which the actor can

maneuver and create change. This phenomenon is identified in the three papers in this thesis, as discussed in this section. The discussion addresses the development that occurs in an SOE by examining change through human agency and organizational practices.

The three papers analyze how exogenous forces (i.e., modernization, institutional logics, and professionalization) induce change in the organization. The thesis analyzes how endogenous forces in the organization affect the change element (i.e., actors, enactment of institutions, and tools) that facilitates the organizational change as well as the role this plays in overall organizational development. These exogenous forces were established by examining the impact on the organization; the change elements were identified by analyzing the organizational environment that they were a part of. These change elements are examined in the individual research papers.

The exogenous forces and change elements identified in the individual case studies play a part in creating organizational change. This change, which is discussed in the individual papers, is analyzed in relation to its impact on management accounting practices. These settings are described briefly to illustrate their relevance and role in this organizational development. The institutionalized environment includes the different forces (e.g., exogenous forces) and elements (e.g., endogenous elements), as shown in the model below.

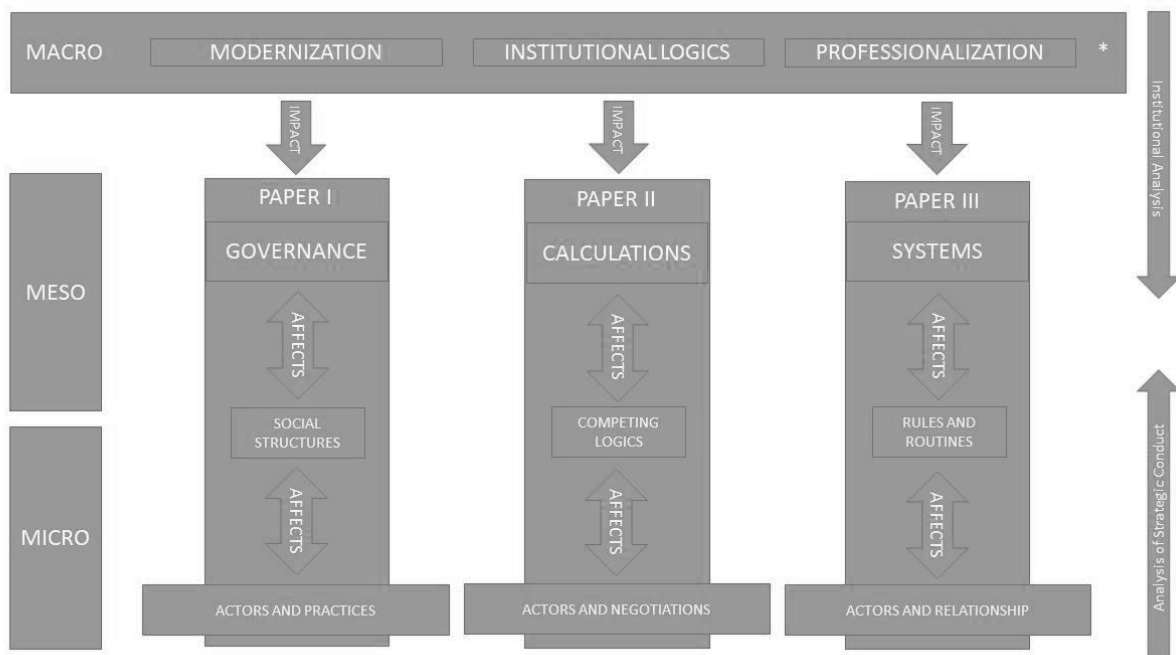


Figure 7 – Research area of this thesis illustrating the environment of interest.

The model focuses on how modernization and professionalization affect the organization and how human agency can act in this institutionalized environment and use tools as a part of management accounting settings, which over time are affected and therefore change. The individual papers in this thesis all identify how exogenous forces take part in creating change in the SOE. These papers extend existing literature by illustrating how management accounting is affected by modernization, institutional logics, and professionalization, as seen from the change in practices, negotiations, and relationships.

The three large forces that are part of the overall institutional environment have been described and conceptualized by different researchers. Cohen and Shenton (1996, p. 12) described modernization as “...historically wrapped up in the notion of progress, a linear unfolding of the universal potential for human improvement that need not be recurrent, finite or reversible.” Thornton et al. (2012, p. 2) described institutional logics as follows: “...institutional logics represent frames of reference that condition actors’ choices for sense making, the vocabulary they use to motivate action and their sense of the self and identity. The principles, practices, and symbols of each institutional order differentially shape how reasoning takes place and how rationality is perceived and experienced.” Siegrist (2015, p. 96) explained professionalization as follows: “...professionalization is a social project, which articulates itself in discourses on

science, performance, honor, public welfare, and society and in the ideology of professionalism. It is intended to secure for professionals a high or midrange status in the system of social and cultural inequality.”

In the field of accounting, Cooper and Robson (2006, p. 415) located sites of professionalization and posited that “we suggest that these are important sites where accounting practices are themselves standardized and regulated, where accounting rules and standards are translated into practice, where professional identities are mediated, formed and transformed, and where important conceptions of personal, professional and corporate governance and management are transmitted.” By understanding these larger forces and how they are conceptualized, this thesis focuses on the actors and structures. Paper I analyzes social structures, paper II examines the competing logics, and paper III analyzes the rules and routines. The individual papers illustrate (I) how accounting practices are modernized, (II) how calculations and negotiations are affected by institutional logics, and (III) how systems are professionalized and how this affects management accounting practices.

The findings of this thesis illustrate how the conventional development of SOEs (i.e., privatization, introducing market forces, and change in governance structures), which has been established in many studies in developing countries, is lacking in an emerging country environment like that of Greenland. This thesis emphasizes the role of human agency and how a hybridized institutional perspective can establish change in an emerging country.

8.1.1 Forces, elements, and organizational development

The empirical findings state that these three significant forces were the cause of much of the organizational change. The three research papers clearly showed the effect on practices, negotiations, and relationships and how change is initiated from larger external forces, thus illustrating the consequence of the endogenous process that affects the organizational development of this specific SOE.

The individual research papers illustrate different types of change and reveal how they can occur in a way that is different from that stated in existing literature (i.e., outside-in). The case studies show the ability of agency, presence of institutions, and how actors can fight back and induce change in the environment (i.e., inside-out). The case studies in the first and second papers

further emphasize the strong influence of human agency that was facilitated by contradictions and conflicts (e.g., among commercial, social, and political forces). This created the space for the actor to maneuver and induce change, which was evident as the actors fought back, thereby creating evolutionary change that affected the organizational development.

8.2 Theoretical discussion of management accounting change

When analyzing management accounting change, it has to be seen as part of a larger institutional environment. Shields (1997) stated that “changes in environments cause changes in organizations which, in turn, cause changes in management accounting practice,” illustrating how changes that arise from the external environment affect the organization and therefore also affect organizational practices such as management accounting. Burns and Scapens (2000) examined management accounting change by analyzing rules and routines and looking at how practices and structures change, which can be seen as a part of organizational development. At the very outset of their article, they stated that “whether management accounting has not changed, has changed, or should change, have all been discussed” (Burns & Scapens, 2000, p. 3). They emphasized that the outcome of management accounting change has been widely researched and discussed, and therefore, more focus should be placed on *how* management accounting *changes* and the process behind this. As established above, change is to be addressed according to various dimensions and should not be considered uniform. In the following sections, the findings of this thesis are discussed in relation to the governance, critical, and institutional perspectives on development and management accounting change.

8.2.1 Governance literature

When analyzing the Greenlandic environment in which these SOEs operate, it can be seen that the development of these SOEs has not occurred through privatization. In fact, the unique environment in which these SOEs operate does not foster privatization, because the market has neither the economies of scale nor the critical mass needed to provide conditions that foster competition. Existing literature on governance sees the development of SOEs through the act of privatization as something that is initiated by externalities such as market forces (Ho et al., 2012; Kang & Kim, 2012; Lien & Li, 2013). This is why most literature on corporate governance reports positive developments arising from privatization (Boubakri et al., 2004a, 2004b). Greenland’s unique and extreme environment has fostered a different type of development that is driven by a sociopolitical agenda, which is why this empirical study

illustrates how a combination of both private and public shareholders creates a setup that has thus far been able to support the development of a Greenlandic SOE (Wong, 2004; Gupta, 2005; Omran, 2009).

Studies on corporate governance have reported a positive relation between organizational change and privatization with regard to the means of development for SOEs. The literature illustrates how SOEs are affected by their external environment and notes that they typically move toward privatization as a means of improving performance compared to private players in the same industry. Both the governance and institutional literature state that privatization might be a faster way to realize organizational change; in contrast, this thesis illustrates how management accounting practices change as a result of professionalization and modernization as well as tools and actors. According to this perspective, change also comes about through actors developing more commercial and profit-oriented mindsets, despite contradictory institutional impetuses. Most literature on governance does not understand development when it is not caused by governance changes like privatization, whereas this thesis establishes a form of development that is more actor-driven and not solely dependent on governance changes and privatization.

8.2.2 Critical literature

When analyzing critical literature, this thesis states that the actors in SOEs operating in Greenland can act and inflict change. Compared to many critical studies, this emphasizes change as something that also comes from within. Many critical studies have viewed organizational change as something that is mainly caused by and is a consequence of the external environment (Hopper et al., 2008). This thesis supports those studies in the critical field that analyze organizational change in developing countries and find it to result from social, cultural, and political structures (Hoque & Hopper, 1997; Uddin & Hopper, 2003; Wickramasinghe et al., 2004; Uddin & Tsamenyi, 2005; Tsamenyi et al., 2010). The findings of this thesis acknowledge the impact of these larger forces and extend previous findings by illustrating the active role of actors. It demonstrates how the unintended consequences of social and commercial forces create a space for an actor to act and create change.

The critical field in developing countries illustrates the importance of understanding how multiple, strong factors affect development. The individual studies document exogenous factors

and their influence on organizational practices and illustrate that bureaucratic control, market forces, and cultural contexts form a much wider spectrum (Wickramasinghe & Hopper, 2005; Efferin & Hopper, 2007). This literature stream looks at development from a more critical perspective; it shows that actors are less capable of acting toward their environment, and it argues that in many cases, development results from external forces. This thesis acknowledges these multiple factors and understands that the development of Greenlandic SOEs has occurred in an environment in which these factors are neither constant nor dominant. The critical perspective neglects the endogenous perspective of change and places less emphasis on the capabilities of the individual actors.

8.2.3 Institutional literature

The findings of this thesis and its empirical studies are the same as those of institutional studies in developing countries in that organizations react to the external environment. However, as this thesis emphasizes, it is also the internal processes and endogenous roles that create change. In light of the Greenlandic environment, this study states that change needs to be analyzed from a more holistic perspective. Change should be understood as the result of something that is enforced on the organization as well as the consequence of actors that create and develop institutional structures.

Institutional studies focus extensively on change as either a process of decoupling (Hoque & Hopper, 1994; Nor-Axiah & Scapens, 2007; Xu & Uddin, 2008) or in terms of isomorphism (Alam & Lawrence, 1994; Firth, 1996; Lin & Yu, 2002; Hassan, 2005). They state that either nothing happens or that the organization adapts to the external environment. This thesis recognizes and adds to institutional literature by analyzing individual actors and their role in the organization. This can support the institutional perspective, where the focus is more on the external environment. The aim is to strengthen the existing institutional perspective, because it somehow neglects a more detailed analysis of organizations and the way in which human agency plays an important role in change and development.

This institutional perspective does not sufficiently recognize the capabilities of human agency and how it needs to be seen in the analysis of strategic conduct, how it creates differences within the institutional environment, and the relative power of different institutional actors that are part of organizational change. This thesis adds to the literature by understanding change as a duality,

where both are initiated by the external environment and by internal processes. This thesis argues that change in a Greenlandic context and in SOEs must be analyzed both through an institutional analysis focusing on the structures and through an analysis of strategic conduct that examines how actors draw on these structures (Giddens, 1984).

By contributing to the literature on management accounting change, this thesis emphasizes the ability of actors that are part of a hybridized institutional environment, and how these settings enable actors to maneuver. This thesis shows that actors can play a more active role and affect the current macrolevel social, economic, and political order that inhibit meaningful change in the organization. This illustrates the importance of understanding the micro practices and the role of individual actors and the fact that organizational change has to be understood as a duality.

8.3 Existing literature

This thesis and its empirical studies found existing literature on developing countries useful when understanding change in SOEs in Greenland. To obtain a clearer understanding of organizational change in Greenland's unique environment, this has to be analyzed from a more holistic perspective. This can help in capturing change on numerous levels, which can lead to a more distinct picture of development. Numerous studies in developing countries discuss organizational change as something caused by exogenous forces and contextual factors. They illustrate how these elements have a strong impact on the organization, but they ignore the actors and the role they can play. Much of this literature states that work practices are indeed socially organized and culturally formed, which erodes the power of the organization.

The empirical studies analyzing organizational change in unique environments (e.g., developing countries, emerging economies, emerging countries, and late developed countries) need to take a broader perspective. More research is needed on the complex relations between different types of organizational change and what impact this has on organizational development when considering a unique and extreme environment. This means that to fully understand development, change in this context must be understood as both coming from the outside-in (Gupta, 2005; Hopper et al., 2008) and from the inside-out (Mouritsen & Thrane, 2006; Thrane & Hald, 2006). The literature examined in this thesis all show how change can be understood

more thoroughly through the dual roles of structures and human agency. Change thus comes as an effect of exogenous forces as well as of endogenous processes.

9. Thesis conclusion

This thesis illustrates how contradictions result from the relationship between social and commercial forces. Furthermore, the empirical studies show how the relationship between these forces results in unintended consequences. One of these consequences is the creation of a space that enables the actor to maneuver and act. This ability is considered both positive and negative, depending on the given situation. To analyze and establish *how* change occurs in Air Greenland, this thesis uses three institutional perspectives.

This approach enables the thesis to establish how forces like modernization, institutional logics, and professionalization trigger change elements, for example, the actors and tools that play an important part in the development process in this specific SOE. By using institutional analysis and an analysis of strategic conduct, this thesis examines social structures (Giddens, 1984), competing institutional logics (Thornton & Ocasio, 2008), and institutional rules and routines (Burns & Scapens, 2000). These perspectives reveal contradictions and conflicts and the way in which this institutional environment is a part of setting organizational development. Furthermore, it reveals that, importantly, actors, institutions, and tools are indeed elements of change and that they play a central role in the development of SOEs.

Air Greenland has developed in a manner different from that usually reported in most existing literature. Greenland's unique environment has precluded SOEs from evolving in a conventional manner, that is, through extensive changes in market settings. This process includes introduction to foreign capital, strong competition, influence of large international funds and agencies, and pushing SOEs toward a more commercial and liberal state. Nor has the environment fostered any act of privatization in SOEs. The analysis shows a unique type of development that illustrates how actors, institutions, and tools have a significant influence on the ongoing contradictions and conflicts that give the actor the space to act. These conditions illustrate the ability of actors in a highly institutionalized environment and show that they themselves are affected by the environment that is being (re)produced.

This thesis supports most literature on management accounting and corporate governance in developing countries while also presenting a new perspective on change. The findings of this thesis do not simply support or discard the findings of literature on developing countries. Rather, it contributes to knowledge on management accounting change by analyzing how actors are essential in development and how they play a crucial role in the overall modernization and professionalization of the specific SOE. This thesis emphasizes the significance of understanding the uniqueness of the type of development seen in Greenlandic SOEs, as this is closely linked to the country's environment. This perspective can help understand how this has an effect on the development of society, and vice-versa. The next section discusses some societal aspects of this thesis and presents some important contributions.

9.1 Organizations (SOEs)

SOEs are important and play a fundamental part in production in Greenlandic society. They are seen by many as rigid and as a restraint on development given their monopolistic and dominant position in society. Air Greenland has, through its operations, size, and market dominance, great relevance in Greenland's economy, and overall growth is emphasized by the protocols established by the Greenlandic Government (Naalakkersuisut, 2011). The purpose and existence of Greenlandic SOEs are seen by many as historical³⁰ and are therefore strongly debated, which makes their development unchartered. Greenland has not fully industrialized thus far, and the government remains unsure about which industries would help revive the troubled national economy.

By understanding the importance of practical implications, this thesis analyzes the role of the actors in state-owned enterprise and their capability to induce change. In particular, it examines how Greenlandic SOEs can, to some extent, separate themselves from their governmental owners, being protected by the "arms-length" principles that are in place to ensure appropriate distance between the operations of an SOE and the intrusion of governmental control. The "arms-length" concept has resulted in some distance that prevents government intrusion and in the unintended consequence of further distance between SOEs and their owners. This distance and their strong monopolized settings have increased the ability of SOEs to withstand

³⁰ Many important stakeholders and government officials do, to this day, see these SOEs and their existence as historical. Many are in favor of a more liberal approach to development, which is why these SOEs engender so much debate in society. This is also discussed in Winther (2003).

governmental intervention; in recent times, this has become a challenge because these SOEs are now operating in a more self-directed fashion, resulting in less control for their owners.

While writing the last part of this thesis, the researcher was employed to manage the governmental ownership of different SOEs on behalf of the Prime Minister of Greenland. This position gave the researcher considerable insight into the role of a governmental owner of different SOEs. The researcher was able to gain much knowledge of SOEs and the way in which they are managed by the government. There were some indications that these SOEs, as private limited companies, had become too independent and powerful as a result of the monopolistic settings that gave them a dominant position in society. In recent times, the development of these SOEs has created more autonomy in the boards and management. This autonomy is strengthened by modernization and professionalization as well as the introduction of the “arm’s-length” concept and corporate governance principles. These improved governance principles emphasize that SOEs will become more separated from the political environment and will be operated on more commercial terms.

Despite the good intentions of modernization and professionalization, one unintended consequence has been the enforced autonomy that has created greater distance between SOEs and their governmental owners. This distance and the SOEs’ dominant position as monopolies mean that their position has been strengthened. The challenge in light of the small population and demographics is that it is not possible to create an economy of scale, and it will not always be possible to create competition. Thus, it is necessary to align these SOEs with developments in society and Greenland’s special market forms, modernize and professionalize their practices, and direct them toward a more commercial and profit-oriented focus through further measures. The current development found in Air Greenland is in governance, and while the organizational perspective is seen as a positive, greater transparency is needed.

The complete liberalization of industry and privatization initiatives would not be a panacea for Greenlandic SOEs and their development. When arguing for development, several factors point toward a type of development that needs to be seen as more socio-political, rather than one arising from liberalization and privatization. To ensure Greenlandic SOEs’ sustainable development, it is vital that this development is understood as being institutional. The actors must be focused on. Larger forces have undoubtedly created change, but the employees and

managers of these SOEs have been central in terms of understanding how change has occurred in Greenlandic SOEs.

9.2 Managers (Actors)

The empirical component illustrates how this form of hybrid ownership (i.e., social and commercial) has become established as a viable organizational form, with the unintended consequence of space and maneuverability for the actor. This analysis examines the contradictions and the conflict between commercial and social forces in more detail by examining the organizational implications of institutional pluralism. This study goes beyond mere instances of social, economic, and political factors and how this affects the structures and development of the organization. This thesis establishes how the plurality of social and commercial forces orchestrates the environment, how this environment is seen as a sustainable way of becoming more legitimate, and how it can more efficiently obtain the economic support required to succeed in an emerging country context.

This thesis finds that this pluralism, which enables the actor to balance between the social and commercial aspects, has to be seen as both a positive and a negative when analyzing development. Importantly, the empirical studies in this thesis establish that human capital is the key in terms of change. In the absence of a strong market and regulative and privatization forces, the actor becomes central when discussing organizational development in an emerging country like Greenland. The empirical findings illustrate how managers can act in what has been established as an institutionalized environment shaped by societal and political forces despite being led by modernization and professionalization enforced by the settings of a commercial organization. This special environment also has a negative outcome. The contradictions that are created by the pluralism in the social and commercial forces give managers broader decision rights and therefore the room to make decisions that is contrary to the wishes of the owners and economic rationality.

This thesis' findings point toward a wider institutional understanding of the development of SOEs in Greenland and the fact that organizational change is more connected with actors. The findings indicate that more resources should be invested in human capital, as a large part of the development of Greenlandic SOEs lies in the hands of managers. Education and professionalization could strengthen the organizational construct and thereby have a positive

effect on the development of these SOEs. The empirical study illustrates that the development of SOEs is reliant on the actors, which, in other developing countries, carry greater emphasis owing to the impact of larger forces such as liberalization, leading to privatization (Boubakri et al., 2004a, 2004b). In Greenland, development is established in a more hybrid form of sociopolitical development that is supported by strong human agency that needs to be controlled in a more transparent environment.

9.3 Limitations

This thesis is based on a longitudinal study and historical data, wherein an extensive part of the study is explained through narratives. As an institutional study that takes an interpretive stance, a quite subjectivist approach has been created for both the interviewer and the interviewees. The researcher understood this limitation and therefore triangulated the gathered data as well as possible to verify and support the large amount of data, thereby ensuring the best possible validity and quality of data and analyses.

This case study is based on one focal organization in a unique environment, which can be seen as both a limitation and a benefit. The empirical evidence and findings relate to one organization representing these particular SOEs. The key parts of the data were gathered in the company headquarters and the offices of its subsidiaries. The specific research setup used in this thesis could be seen as a limitation in that it is based on a case study strategy that examines just one focal organization that operates in a unique environment, meaning that there is a lack of generalizability. However, this specific setup and environment can be seen as being better for identifying deeper causes in an institutional environment (Flyvbjerg, 2006).

Being able to engage in this unique environment raised several questions. The environment, with small distance between macro and micro and wider accessibility, created a strong empirical base. This means that there was interest in several subjects; however, the study had to focus on the current topic. The environment was compared to that of other small-scale societies (Hopper et al., 2008), which made it possible to conduct an analysis that could take the macro-, meso-, and microenvironment into consideration. One limitation was that the researcher was not allowed access to either the board meetings or the board minutes, which could be a subject of future research and focus. With a strong empirical base and many potential avenues to investigate, this thesis was forced to limit the area of research to focus attention and ensure

validity. Other interesting themes that could be analyzed include the role of SOEs in Greenland's unique environment and how they are part of a sociopolitical development that is crucial for Greenland's development.

Being a full-time employee of Air Greenland can be seen as both a limitation and an asset in terms of obtaining more detailed data. During the working day, my interest was in identifying data arising out of daily practices and processes that were relevant for the three papers. Taking these subjects up with the interviewees and my colleagues could have its challenges; it was sometimes hard to discuss these delicate subjects as they touched upon topics that related to performance and efficiency in their own working lives. The researcher tried as far as possible to create the trust and confidence necessary for them to talk freely so as to obtain the maximum possible information from the interviews. However, in some cases, the subjects were withdrawn, making it difficult to get the full details of the issue at hand.

This research study focused on literature on developing countries in general and the empirical data of an emerging country specifically. The findings are related to this unique and extreme environment, and they may not be suitable for a particular country or another organizational setup. This is owing to the contextual conditions of Greenland and because each country has its own culture and history and suitable conditions for development, meaning that "the way things are done" may vary between countries. This obviously raises questions about the research's generalizability and whether it would be suitable for environments other than Greenland as an emerging country. This said, the findings are not inconsistent with most literature on management accounting in developing countries.

9.4 Future research

This thesis establishes a unique set of conditions that play an important role in the change and development of an SOE. These conditions opened up several research opportunities with regard to this specific subject and the highly institutionalized environment. In terms of future research on management accounting change, there is clearly an opportunity to investigate several issues in more detail and from different perspectives. In particular, it would be interesting to examine this mix of endogenous change and exogenous forces, whether this development and these phenomena are comparable to those in other SOEs, and whether this is specific to an emerging country setting.

To establish change and to understand development, this thesis uses an institutional approach that could be further extended by using another theoretical perspective. The institutional perspective has provided useful insights into human agency and social structures and in understanding the creation of micro practices. From a management accounting perspective, these micro practices and the actors could be analyzed using another theoretical viewpoint (i.e., actor-network theory, economic theories, and contingency theories). This would establish other views of management accounting change and reasons for organizational development.

The findings of this study illustrate how change in governance improves practices in one SOE and leads to better results. The research in this thesis illustrates how modernization and professionalization play a role in improving practices, and how change in an institutionalized environment can drive the SOE forward. To obtain more knowledge on change in SOEs in Greenland, comparative studies of several SOEs in Greenland could be performed. This approach would create a better view of this specific type of change, that is, how it could result from new governance structures or be created by individual actors in specific SOEs.

The individual case studies have shown how one specific SOE develops despite the lack of privatization, larger regulative changes, or significant changes in market forces. More research into this specific type of development is needed to better understand how change is caused in this institutionalized environment and to understand how change is a duality and emphasizes human agency. This could result in a better understanding of how organizational change occurs, and it could be analyzed further through more longitudinal and cross-sectional studies. This thesis establishes change as being something that is also endogenous, and it notes that actors have a larger stake in the change process. It could therefore be useful for future researchers to use the method of action research in the environment of this developing economy to analyze how SOEs could improve in terms of governance and accounting.

10. References

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