



# **Management Accounting and Control :** the Diversity and Opportunities in Research and Research Methods

Edited by

Inger Johanne Pettersen

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This TØH-notat contains a selection of the papers presented at the workshop 6th – 8th November 2012 at Clarion hotel & Congress, Trondheim. The workshop had the following theme

*Management accounting and control – the diversity and opportunities in research and research methods*

The workshop was hosted and financed by HiST TØH, and is the third held by Trondheim Business School – TØH. The first one was in the mountains of Trollheimen (Storlidalen) in 2008 and the second in Trondheim 2011.

Professor Inger Johanne Pettersen, TØH, has edited this selection of workshop papers. Due to some formatting challenges, tables and figures may have been changed and/or deleted during the editing.

Papers are work in progress and should not be cited without the permission from the authors.

Trondheim, February 2013

Inger Johanne Pettersen  
Organizer

## Program

<b>Thursday 6<sup>th</sup> November</b>	<b>At Campus TØH</b>
12.00	We meet in the main hall at Trondheim Business School for lunch in Kantina
12.00-13.00	Lunch i Kantina TØH
13.00-14.45	Inger Johanne Pettersen & Kari Nyland, TØH: Key note: Management control changes – diversity and hybrids in public sector.
14.45 - 15.15 15.15 - 15.30 15.30 - 16.00 16.00-16.30	Elsa Solstad Break & Coffee Kari Nyland & Charlotte Andreassen Lili Kihn (paper 1)
19.00	Dinner at Graffi- city centre
<b>Wednesday 7<sup>th</sup> November</b>	<b>Clarion Hotel &amp; Congress Trondheim</b>
09.00-09.30 09.30-10.00 10.00-10.15 10.15-10.45	Anne Robbestad Break & Coffee Anna Linda Musacchio Adorisio Inger Johanne Pettersen
10.45-11.45	Professor Hanne Nørreklit, Norges Handelshøyskole & Århus Universitet Key note speech: The rise of the balanced scorecard- relevance regained?
11.45-13.00	Lunch
13.00-13.30 13.30-14.00 14.00-14.30	Peter Skærbæk Lili Kihn Levi Gårseth Nesbakk
14.30-15.00	Coffee
15.00-15.30 15.30-16.00 16.00-16.30	Liv Bente Hannevik Friestad Per Ståle Knardal Denis Becker/Terje Berg
19.00 NB	Dinner at <b>Clarion Hotel &amp; Congress Trondheim</b>

<b>Thursday 8<sup>th</sup> November</b>	<b>Clarion Hotel &amp; Congress Trondheim</b>
<b>09.30-10.00</b> 10.00-10.15 10.15 -10.45	Frode Kjærland Break & Coffee Gudrun Baldvinsdottir
10.45- 11.30	1. Amanuensis II Micael Cäker, Handelshøyskolen i Gøteborg & TØH: Key note speech: Reward systems in a Nordic context
11.30-12.30	Lunch

## **The vertical and horizontal control dilemmas – a national study among managers**

Inger Johanne Pettersen,  
Trondheim Business School  
7004 Trondheim  
Norway

&  
Elsa Solstad  
Harstad University College & Trondheim Business School  
9480 Harstad  
Norway

### **Abstract**

New control problems arise when services are to be coordinated between autonomous units. Mainly, these control problems are found within the horizontal, flat relationship between producing units, as the traditional control practices follow the functional, vertical lines. New organization structures have emerged where lateral relations are important. The hospital sector in Norway has been continuously reorganized since 2002, and the reforms have created organizations that are functionally/vertically controlled by managers, whereas the production lines are coordinated on a process- or a lateral basis

In this paper we focus on both the functional vertical coordination and horizontal coordination within and between the local hospital enterprises and the regional administrative levels. A national survey among hospital managers shows that the functional and vertical lines of management control are perceived to be operating according to the traditional views on management control. This survey indicates that the horizontal coordination tasks are not very well implemented. Accordingly, a more interactive use of management control system for managerial purposes is hidden in our data. 2

# **The vertical and horizontal control dilemmas – a national study among managers**

## **Introduction**

Cooperation between public sector organizations has become increasingly more important as different forms of inter-organizational relationships have emerged from the reform initiatives in this sector during the last decade. Especially in the welfare sectors we observe that health care services are produced in collaboration between two or more public and/or private units. Consequently, new control problems arise when services are to be coordinated between autonomous units. Mainly, these control problems are found within the horizontal, flat relationship between producing units, as the traditional control practices follow the functional, vertical lines. Consequently, new organization structures have emerged where lateral relations are important (van der Meer-Kooistra and Scapens, 2008).

The hospital sector in Norway has been continuously reorganized since 2002, and the reforms have created organizations that are functionally/vertically controlled by managers, whereas the production lines are coordinated on a process- or a lateral basis (Pettersen et. al., 2012). Further, reforms now call for the hospitals also to specialize and then cooperate in order to supply efficient and high quality services to the population. The new organizational form is basically built on a Regional Health Authority which includes several independent local hospital enterprises. Each level is managed by a general manager who reports to the board at regional or local level. These units are legal entities regulated in the Hospital Enterprise Act (2001). This model is in many ways similar to the business enterprise model, consisting of several independent business units called daughters which are governed by the parent organization.

The four Regional Health Authorities in Norway coordinate the hospital enterprises in the regions. This way of organizing the health sector requires a complicated mix of coordination. We find vertical coordination between the State (the owner), the Regional Health Authorities and the local hospital enterprises. And further, there are horizontal coordination tasks between the local hospital enterprises within their region, and also internal horizontal coordination challenges within hospital units. In this paper we focus on both the functional vertical coordination and horizontal coordination within and between the local hospitals and the regional administrative levels. One basic idea when the State reorganized the hospitals into enterprise units in 2001 ((ot.prp. nr. 66 (2000-2001)) was to undertake better coordination of hospital services to the inhabitants both at regional and local levels. This task was supposed by the Government at that time to be secured

through the payment system and by the steering documents which regulated the contracts between the State as purchaser and the hospital enterprises as providers. The reform initiatives were in detail described in the documents which were passed into a Law on hospitals (2000-2001). In this document (Law) is explicitly stated that (§6)

*It is under the responsibility of the managers in the Regional Health Authorities to coordinate the activity in the local hospital enterprises with the aim to secure an efficient use of resources to produce high quality services to the population.*

Both vertical and horizontal coordination are needed for the Regional Health Authorities to succeed in reaching the goal of efficient use of resources and high quality services distributed evenly to its population. A relevant research question is then how managers at different levels manage the horizontal and vertical coordination challenges in the new organizational form consisting of autonomous hospital enterprises. A national survey among hospital managers shows that the functional and vertical lines of management control are perceived to be operated according to the traditional views on management control. On the other hand, this national survey indicates that the horizontal coordination tasks are not very well implemented. So far, the aims of the Norwegian Hospital Enterprise Act (20001) to motivate for efficient use of resources in the hospital regions as a whole and integrated system have not been realized.

This paper is organized as follows: First we present the theoretical framework, and thereafter the research methods and the empirical data are discussed. The paper ends with a discussion of findings and concluding remarks.

## **Theoretical framework**

The theoretical framework includes a presentation of research on vertical and horizontal management control and use of diagnostic and interactive systems. We end the presentation by framing these concepts into a package of management control. Traditionally management control practices have been designed for line organizations to allocate accountability between managers at different levels. This traditional view is challenged by the introduction of the horizontal dimensions, which focus on the support of decisions and control between units in lateral relations. Here the main task is to manage activities in a non-hierarchical and lateral sense, introducing aspects of process orientation, which is highly relevant for hospitals as professional service organizations.

### **Vertical and horizontal management control**

According to McNulty and Ferlie (2004), the New Public Management (NPM) wave has developed strong vertical principles of organizing within public service organizations. In this respect it accords with functional organizing principle and ethos of control and coordination (Denison, 1997). The development of the clinical directorate structure is indicative of the push within the NPM towards strengthened vertical and functionally based patterns of public sector organizing. According to a functionalist approach, the management control process in public sector organisations is expected to follow instrumental phases which describe strategic planning, budget preparation, operating and measuring, and the last phase is reporting and evaluation (the ideal control circle) (Anthony and Young, 2003). In principle, vertical management control systems are designed to support decisions and control according to hierarchical authority lines. They are especially tailored to match with the line organization where the authority to manage and control is placed with the different administrative levels in the organization.

However, since the late 1990s there are some signs of post-NPM model emerging within health management – as within other public service organizations – based on lateral or horizontal rather than vertical modes of organizing (Grafton et al. 2011). There is talk of a “governance” model of organizing (Newman, 2001) which supersedes the NPM, based on lateral rather than vertical relations. These models all challenge the core principle of NPM template, stressing lateral and process-based forms of organizing rather than vertical or functional principles. They are potentially a post-NPM approach of organizing, as they incorporate within existing NPM-style organizations the functional and vertical lines (McNulty and Ferlie, 2004). Literature in the field points at the observation that horizontally oriented MACS (Management Accounting and Control System) are used for coordinative purposes in inter-organizational settings (Håkansson and Lind 2004; Dekker, 2004; Cäker and Siverbo, 2011). It is noted that the horizontal MACS do not substitute the existing vertical functionally oriented MACS, but complement it (Kastberg and Siverbo, 2011). However, what they see is that the use of horizontal and vertical MACS are kept separate and used in different situations. Other studies show that traditionally designed (vertical) MACS obstruct the realization of process orientation, since such MACS (horizontal coordination) reinforce a vertical perspective on the organization, which makes inter-departmental cooperation and inter-organizational collaboration more difficult.

Laterally based principles of organizing are now being promoted as a potential successor to highly integrated forms. But the success or failure in inter-organizational contexts depends on the coordination between the partner institutions (Smith et al., 1995; Dekker, 2004; Caglio and

Ditillo, 2008). However, there is also a strong and continuing stress on performance measurement (Power, 1997) and a performance management culture. Such performance measurement and management take place around distinct units which report up in line. A performance manager is most comfortable with vertical mode of organization as it is much easier for the performance manager to hold a defined and subordinate entity (such as a directorate) accountable, than a more loose and lateral network of coordination. Earlier research has thoroughly discussed how hospitals in general and especially physicians are affected by changes in management accounting systems in their work (Jacobs, 2005; Lapsley, 2007; Llewellyn, 2001).

### **Diagnostic and interactive use of management control systems**

A diagnostic use of management control systems has traditionally followed the functionalistic approach of management control (Ferreira and Otley, 2009; Berry et al., 2009). Simons (2000:209) defines diagnostic management control system as: *“The formal information systems that managers use to monitor organizational outcomes and correct deviations from present’s standards of performance.”* A diagnostic system of management control is designed and used to ensure the predictable goal achievement (Simons, 2000), and this system is based on a basic feedback control model where clear strategic objectives are identified and translated into measurable key performance indicators. The performance is measured and compared with the objectives. As pointed out by Simon (1995), managers may control and monitor the critical performance variables by the diagnostic control system.

A lateral management control system is more similar to the interactive control system defined by Simons (2000:216) as *“...the formal information system that managers use to personally involve themselves in the decision activities of subordinates.”* Interactive management control systems appear in interaction between managers and their subordinates (van der Meer-Kooistra and Scapens, 2008). According to Batec and Carassus (2006) and Kominins and Dudau (2012: 144) the interactive management control systems are characterized by: *“a strong level of involvement from all organization members, and a focus on dialogue and knowledge exchange for the examination of the assumption underlying both current strategies and new strategies.”* These processes are characteristics of lateral relations built on involvement, dialogues and communication. The vertical control approach does not include the lateral processes across functional lines of authority.

## **Management control as a package**

The discussion above leads to the concept of a control package (Malmi and Brown, 2008). Systems of control coexist and interact with each other within an organization. Organizations use many interlinked control practices in a control package, and the combination of controls in the package determines their efficiency (Cäker and Siverbo, 2011). But, because control can be implemented in different occasions, they may be poorly coordinated (Malmi and Brown, 2008, Cäker and Siverbo, 2011).

Besides the diagnostic and interactive role of MACS, these systems are also used for coordinating organizational activities (Anthony and Govindarayan, 2007). Basically, the coordination role of the MACS is about the “Mastery of events” (Tomkins, 2001). According to Kastberg and Siverbo (2011) the horizontal MACS are at a more general level used for coordination, for interactive control and for attention direction. Simon (1995) and Kominis and Dudau (2012) conclude that the measure of success of an organization’s management control package is its ability to manage the tension between predictable goal achievement (monitored by diagnostic systems) and creative innovation (fostered by interactive systems).

## **Empirical data and findings**

In this part of the paper the national survey study is presented and complemented with interviews of some key informants. The main findings are spelled out and analysed according to the vertical and horizontal dimensions within and between hospital enterprises.

### **National survey data, interviews and documents**

We base our study on data from a national survey study among all the hospital enterprises in Norway (2008). The hospital sector in Norway is organized into four Regional Health Authorities (Pettersen et.al., 2012). The Health Authorities is responsible for the hospital enterprises in their regions. The State with the Ministry of Health is the owner of the Regional Health Authorities, and control the Regional Health Authorities through a Corporate meeting and through the Steering letter and its guidelines. These guidelines have more than 130 indicators. The Norwegian hospitals are paid on a frame budget basis of approximately 60% and then the per case system amounts in principle to 40%. This per case system is calculated on the basis of a Diagnosis Related group system (DRGs). And the metrics behind these standard prices are changed every year.

A total of 450 questionnaires were sent to general managers, directors of finance and middle level managers in all the hospital enterprises in Norway. The survey has a high respond rate, as 95% of the directors of finance responded and approximately 85% of the middle level managers (operational managers) responded. On average, the response rate was 75%. The questionnaire was distributed electronically to the whole population. The survey was administered by the Office of the Auditor General of Norway (The Auditor General of Norway, 2009), and the researchers participated in the research group which followed the survey in order to analyze it. The aim of the survey was to analyze the attitudes of the managers as to their practices in horizontal and vertical management accounting and control decisions and coordination. More precisely, we study their use of control systems within in the managers' units and hospital enterprises, and their use of systems between the hospital enterprises. The analysis of the survey data was done by the statistical package SPSS, and frequencies were employed to present the data.

**Table 1:** About here

In order to make a deeper analysis of the statistical findings, a follow up interview was done in 2009 by the General Auditor ...in four hospital enterprises with the general managers, the directors of finance and operational managers at the clinical levels. Further, document studies were done of the annual budgets and the annual reports from the hospital enterprises.

**Vertical lines of control within the hospital enterprise**

Of the 385 respondents who are managers at middle levels (operational managers) in the hospital enterprises, 94% agree with the statement that they are familiar with the strategic goals for their units, and that they agree (78%) with these goals. Further, more than half of the respondents think that their colleagues in their units also are familiar with these strategic signals. These statements indicate that there is communication on a vertical basis between the managerial levels in the hospitals. The survey also gives reason to think that the management control practices on a vertical basis is integrated with the top level strategies (76% of the respondents agree with this point), and 94% of these respondents think that the performance measures as to the budget goals for their units are clearly expressed. The managers on the middle levels (clinics and sections) also think that they are supported by their managers further up when they have to make operational adjustments to tighten budget frames (nearly 80%).

According to the middle managers in this national survey, the vertical parts of the hospitals' control packages are implemented according to the functional lines, following a top-down logic and based on traditionally diagnostic uses of management accounting information.

Several of the interviewed respondents in the follow up study after the survey study felt that there should be more predictability in the annual budgetary processes, which could have made the internal coordination smoother/easier. Especially all the changes made by the Ministry of Health in the per case prospective funding system were pointed at as large problems in vertical control within the hospital enterprises. These changes are most often announced at short time before the budgetary year, and sometimes these changes are made during the year. These changes may have large consequences for the income side of the budgets, and the top managers state that all the changes make it problematic to forecast the income side- and consequently the net budget. Another point is that this budget model creates challenges in the internal resource division between the clinics.

Further, respondents in the interviews underline that as the Ministry has developed a practice where hospitals with budget deficits can count on having these deficits covered. This has introduced some kind of opportunistic adjustments among the hospitals (in general). Of course, as they say, this implies that the managers have little legitimate authority to perform tight budget control. Another point which is mentioned in the interviews is that the budget frames are published too late as these are presented from the Ministry in January/February in the budgetary year. This is too late in order to adjust activity to budget frames. Consequently, process orientation is hampered.

### **Vertical lines of control between principal and hospital enterprises**

Then the next question is whether this vertical coordination/control is considered to exist also in relation to the line between the Regional Health Authority and the hospital enterprise; this is to say the relationship between the principal (the region) as purchaser and the hospitals as agents/suppliers of services. Questions were sent to the general managers and the directors of finance, who are the managers most in direct contact with representatives of the principal (the Regional Health Authority).

Of the 22 directors of finance at the hospital enterprise level, 91% was of the opinion that the Regional Health Authority did not support their decision making with calculation and accounting information which could be relevant for the management accounting and control of the hospitals. They also expressed that they considered that the regional level did not have the competence and capacity to serve each hospital enterprise with relevant economic and managerial information (90%). Consequently, about 62% of the respondents wanted to be supplied with economic analyses and calculations to support managerial control and decision making, and even more of the respondents (90%) indicate that they ask for more economic information.

The directors of finance who responded to the survey, expressed opinions which indicate that the local hospital enterprises as daughter units with the Regional Health Authority as the parent unit, were not supplied with relevant information as to the managing of their local hospitals as a part of a coordinated and regional enterprise. Little relevant information existed as to the overall running of the hospital enterprises and thus, information did not exist in order to manage the hospital care services in an overall efficient way to the population. Although the directors of finance agreed to the statement that clear performance measures exist on the regional level (95%), they lack relevant information to take actions to run the hospital enterprise according to the common performance goals and measures.

The general managers (21 respondents) express the somewhat similar views, indicating that they have relevant management accounting and control information for internal and vertical coordination. However, such information is lacking in the relationship with the regional level above them. Based on the survey data, we may conclude that the Regional Health Authorities appear as fragmented organizations where the daughters (the local hospital enterprises) act as independent bodies. Accordingly, the synergies in reorganizing the hospital sector from hospitals being administered traditionally as a part of the county administration towards establishing hospital enterprises as legal bodies to operate under the umbrella of the regional enterprise have not been realized.

The respondents interviewed point at the fact that the allocation between the hospital on national and local levels is considered not to be adjusted to the needs of the population. This creates a kind of ambiguity, also due to the fact that the steering letters (the annual contract between the Ministry and the Regional Health Authorities include too many objectives, and that some of these objectives also might be conflicting. Respondents pointed explicitly to the fact that the hospital enterprises' activity is strictly regulated according to laws and rules, which have to be followed although this might be contradictory to the Ministry's steering letters.

Further, these steering letters from the Ministry most often do not indicate prioritation between the different goals. Some goals are very ambiguous and on macro levels, whereas other goals are detailed and operationalized to unit levels. These steering letters are also not coordinated with the hospital enterprises' budgetary processes, as the steering letter for 2009 came in June 2009. Many of the respondents' accordingly state that the steering letters have little effect on the management control in the hospital enterprise. Several of the informants at top manager level express that the same situation holds for the relationship between the Regional Health Authority and the local

hospital enterprises. These managers see very few elements of prioritation in the contracts between the regional and local levels, which imply ambiguous steering signals. One general manager in a hospital enterprise says that the Regional Health Authority expected an increase in acute care of 2, 5%. However, if the hospital should plan for this increase, there would not be enough funding for the increase in planned activity which was set to 1, 5% during the year. His arguments were not met with adjustments at the regional level.

These respondents also suggest that the performance measures included in the steering letters (the contracts) between the regional level and the local hospitals should have been based more on dialogues in a lateral way between the units. And consequently, the planning procedures are performed in a hierarchical top-down manner.

In the interviews, top managers are of the opinion that there are regularly dialog meetings on budget matters between the Regional Health Authority and the hospital enterprises. However, these meetings are more frequent in relation to those hospital enterprises which are running with budget deficits. In this case, such meetings have a controlling function top-down. Still, the survey study indicates lack of lateral dialogues. On the other hand, the general statements from the general managers (top level) are that the interactive dialogues between the regional and the hospital enterprise level are important for diagnosing common management control issues. As one general manager said:

*“They come from outside and have some critical questions which you yourself has not been thinking of and which you have to reply to – and thus, you really have to analyze your local situation”*

Based on the managers’ statements, we observe that vertical coordination occurs on an interactive basis between the principal (the regional level) and the top management. However, the situation is different further down in the enterprises.

### **Horizontal lines of control within hospital enterprises**

The production of health care services to patients in hospital enterprises is fundamentally based on process organization, which has to be horizontally coordinated. This is the case from the patient arrives into the hospital enterprise in one unit, receives services from the laboratories and radiology units, is managed through the operational theatre, is transferred to the intensive care unit and then at last, is admitted to a ward unit and returns home. Based on this description, it can

easily be understood that horizontal and lateral coordination is the key to efficient process organization.

On this background, it is not surprising that about 77% of the managers at the middle levels indicate that the activity in their units is affected by the level of activity in other hospital units. In sum, these statements indicate a high degree of reciprocity and process orientation in the chain of service production. This observation might also explain why about 52% of the managers at the middle levels state that they do not have the full authority to run their units according to the budget limits.

The respondents state that many managers do not have the possibility to keep their budget frames due to the consequences of external decisions and activities which directly affect their internal levels of expenditures. These external elements are outside the authority of the unit managers. One main explanation here is mentioned to be the lack of coordination between the responsible clinical units, as budgets are based on vertical authority lines and patients pass horizontally through the hospital enterprise.

One respondent said:

*“The operational theatre in the hospital is not under the authority of the surgical clinic. The theatre is financed based on frame budgets, independent of activity. However, the surgical clinic is on the whole financed based on a 40% per case payment (Diagnoses Related patient Groups-DRGs). This surgical clinic purchases capacity from the operational theatre without paying any internal prices. Consequently, the surgical clinic may increase activity in order to increase the income side of the budget, whereas the operational theatre has to reduce activity and people on duty in order to decrease costs.”*

This citation illuminates in a “nut shell” the problems inhibited in the vertical budget systems and the horizontal patient processes. And further, many of these problems are tied with the way the units are paid and the way the payment systems are calculated and motivate towards professional action.

Several of the respondents state that it is necessary for the clinical managers in the production lines to have legitimacy in their performance of coordination across vertically managed units. This legitimacy is mostly based on being a professional doctor who understands the patient throughput and can communicate across managerial borders. Further, this kind of coordination is also heavily dependent on interactive control based on involvement and discursive logics. The interviewed respondents point at the fact that traditionally, good clinical managers have been

experienced and active clinicians themselves. Thus, clinical managers have combined the roles of both being clinicians and managers, and by this hybrid role they have personally cooperated between units and undertaken horizontal management practices. After the late reform initiatives, the respondents agree that this combination of roles have become more difficult to undertake, due to a development towards professionalization of managers of clinics, far away from the daily clinical work.

Respondents also state that management control in hospital enterprises now must be based on managers at clinical level who understand the logic of management within budget frames and also devote time for communicating with their colleagues and employees in the clinic. The tendency is therefore that an increasing number of managers at middle levels in hospital enterprises devote most of their time to managerial tasks.

Further, the respondents in the interviews indicate that most hospital enterprises transfer the per case payment internally to the clinics, while most of the costs in patient treatment in fact are generated in service clinics or clinics outside the clinic from where the patient leaves out. This kind of payment system is an obstacle for horizontal cooperation, as the income side (payments) follows the horizontal lines. Several of the respondents characterize the annual budget process as instrumental and mechanic, as allocations then are not adjusted for activity or technological changes. Further, performance evaluation has been and is mostly focused on negative deviations from plans/budgets. There are few other indicators to evaluate, and these budget decisions are without exceptions following the vertical lines. One respondent illuminates this:

*“If a clinic runs with surplus at the end of the year, it has to use this money. Otherwise these resources are being spent to cover the total deficits. The money disappears in a way. ... There is no motivation for efficient resource consumption...”*

The planning and coordination of the summer holidays are important in hospitals in order to have efficient running of activity during downsizing in the summer months. Such coordination is however not necessarily easy:

*“After the surgical operation the patients were transferred to the wardrooms. Despite this simple fact, the holidays for employees in the operational unit began one week later than in the wards, which belong to another administrative unit. This lack of cooperation implied that the operational theatre had reduced capacity several weeks after the people in the wards came back from summer holidays...”*

Our findings indicate that horizontal coordination within the hospital enterprises are fragmented and nearly non-existing. The services around the patients are managed based on professional guidelines. However, this management is separated from the management control systems.

### **Horizontal lines of control between principal and hospital enterprises**

The picture of absent horizontal coordination at higher levels in the hospital enterprises is painted by the responses from the general managers and the directors of finance. A large majority of the directors of finance (82%) think that the Regional Health Authority (as parent level) does not produce information for benchmarking between the hospital enterprises within the regional organization. Further, more than 90% of these respondents think that the regional level is not able to communicate to facilitate learning and innovation between the local hospital enterprises. Accordingly, little organizational learning as to perform more efficient service production is taking place, and we find little interactive use of management control.

The general managers (21) are of a somewhat different opinion, as half of them (about 52%) think that they get relevant information for benchmarking and data to undertake organizational learning between the parent level and the daughters. The explanation for these differences might be found in the functional differences between these managers, as the general managers tend to communicate directly with the hierarchies further up in the enterprise. The general managers might have more informal information and interactive communication.

The lack of horizontal coordination between the hospital enterprises, may create fragmented organizing of the regional health enterprises' production units, is also found in the opinion among managers on the allocation of budgets. Here the general managers and the directors of finance are of the same opinion. A majority of these managers think that the model for allocating the frame budgets between the local hospital enterprises is not transparent/objective (62% of the general managers and 52% of the directors of finance). Further, these top managers in the hospital enterprises agree that the allocation of frame budgets does not even out differences between the level of services to people in different parts of the regions (80% of the general managers and 75% of the directors of finance). Last, 71% of the general managers think that the processes in making the annual budgets are characterized by struggles between the local hospital enterprises in order to get more money. In other words, there is a high level of conflicts in the funding of the hospital enterprises.

The survey among the managers at middle levels in the hospital enterprises also supports this observation, as 70% of those who responded (321) stated that the budgetary processes do not secure an even allocation of funding between the hospital enterprise units. In this case, the role of the Regional Health Authority is more like trying to balance between different stakeholders (hospitals) than being top management body to decide on budget allocation based on transparent models.

The general managers and the directors of finance, who were interviewed after the survey study, expressed the opinion that the reason for budget deficits was to be traced to all the external factors affecting the budget frames. . Examples here are the payment system for patients who travel from one region to another. Here they point at the huge sum of money to be paid without having any possibilities to control the level of spending. Further, the transportation of patients has increased and implying a higher level of spending without the managers' /possibility to control the level. These top managers indicate that they do not have the necessary authority to coordinate between hospital enterprise units in order to make functional divisions between units. These problems with the horizontal coordination are strengthened due to the fact that the Regional Health Authorities introduce new tasks into the hospitals without funding these new tasks.

In the interviews the respondents agree that a lot of resources are put into reporting upwards to the regional levels. Still, the survey study indicates that this reporting is not relevant for horizontal coordinating purposes. Several of the respondents say that this upward reporting reduces the controllers' capacity to make internal analyses in the clinical departments. Further, the vertical reporting is considered to be unnecessarily detailed.

As to the relationship between the Ministry of Health and the Regional Health Authorities, the managers at the regional level underline that management accounting and control at the regional level to a large degree is dependent on the Ministry's (the principal's) ability to present contracts which specify operationalized and clear objectives and indicators.

## **Discussion**

The focus in this paper is how managers at different levels manage the horizontal and vertical coordination in the reformed and autonomous hospital enterprises. We find somewhat contradicting observations. At the one hand, the activities within a hospital are interrelated, and further, the activity in one hospital affects the level and composition of activities in other hospitals. These characteristics of hospital service production are and patient treatment were

according to the hospital enterprise reform to be handled by specialization and coordination horizontally to supply high quality services in efficient service production lines.

However, we find few signs of coordination and control between the Regional Health Authority as parent and the hospital enterprises as daughters. There are two main findings here: The hospital enterprises are developed as bureaucratic and hierarchical organizations. Yet, two separate control systems exist; one functional management control system and one horizontal coordination system governing the patient treatment processes.

### ***Bureaucratic and hierarchical organizations***

We have found that vertical MACS have been implemented according to the NPM doctrines (McNulty and Ferlie, 2004), and we find strong vertical control practices according to functional principles as the relation between the regional level and the hospital enterprises are regulated by hierarchical authority lines. The managers at all levels refer to much reporting and control, indicating a bureaucratic organizing of the hospital sector. The hospital enterprises are organized as “free standing bodies”, even though the hospital enterprise reform relied on horizontal coordination between the Regional Health Authority and the hospital enterprises. Further, the funding system of the hospitals in Norway is also a driving force against horizontal coordination, as this system promotes competition between the hospital enterprises. These elements described here hamper lateral relations which are necessary to promote learning and innovation in hospitals as process-oriented organizations.

### ***Two separate systems***

New control problems arise when services are to be coordinated between autonomous and specialized units. These horizontal management control practices should not substitute the existing vertical control practice, but be complementing (Kastberg and Siverbo, 2011). Our findings indicate that horizontal management control is so to say absent within and between these organizations. The essential role of the Regional Health Authority as a coordinator between the local hospital enterprises within their regions is not implemented. We also find that the Regional Health Authorities do not fulfill their roles as standard setting bodies

The top managers in the hospital enterprises express that the Regional Health Authorities do not take the role as coordinators or motivate to lateral relations and communication between the local hospitals enterprises. The horizontal MACS are not operating according to the ideas of the reform initiatives. These findings indicate that the vertical and horizontal management control practice does not complement each other. The same picture holds for the lack of internal coordination within the hospital enterprises. This absence of process orientation hampers the

possible efficiency gains which motivated the hospital enterprise reform. The existence of the vertical MACS and functionalist diagnostic uses of MACS are separated from the horizontal coordination processes of patient treatment. We find few signs of interactive use of the management control system, whereas we observe an oversized diagnostic use of control information, a kind of overload management. This may indicate that the vertical information is not translated to the horizontal practice. Further, the professional networks within the hospital enterprises and between the hospital enterprises operate outside the vertical functional lines. Consequently, the professional work close to the patients functions according to medical norms and practices although the horizontal line of MACS does not operate according to the reform aims.

## **Conclusion**

The aim of this study was to study how managers at different levels manage the horizontal and vertical coordination challenges in the new organizational form consisting of autonomous hospital enterprises. This way of organizing the hospitals enterprises in Norway requires a complicated mix of coordination,. According to the Law on hospitals (2000-2001) both vertical and horizontal coordination are needed for the Regional Health Authority to succeed in reaching the goal of efficient use of resources and high quality services distributed to the population.

Based on our empirical findings, we may conclude that the vertical line of management control system has been implemented according to the NPM doctrines. We find strong vertical practices within the hospitals enterprises and between the hospital enterprises and the Regional Health Authority. When it comes to horizontal coordination between the hospital enterprises in a region, and within a hospital enterprise, we found that this is not operating according to the aims of the Norwegian reform initiatives. We also found diagnostic use of management control system, while the interactive system of practice is hidden in our study.

In future studies in-depth interviews with managers on different level in hospital enterprises should be done in order to complement our findings based on our national and somewhat macro oriented study.

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DEVELOPMENTS IN MANAGEMENT ACCOUNTING RESEARCH:

A Study of Finnish Doctoral Dissertations from the 1940s to 2010

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By Lili-Anne Kihn & Salme Näsi

School of Management

FI-33014 University of Tampere

# DEVELOPMENTS IN MANAGEMENT ACCOUNTING RESEARCH: A Study of Finnish Doctoral Dissertations from the 1940s to 2010

## **Abstract**

This study contributes to the limited body of knowledge on how Nordic research in management accounting has developed over time. This paper presents a systematic longitudinal research strategic analysis of all the doctoral dissertations published in this field in one country – Finland. The key results detail developments on how the Finnish scholars have developed new research themes and traditions, theoretical approaches and methodologies. The findings shed light on new, traditional and borrowed developments thereby demonstrating that there are many ways to conduct dissertations in this field. As the research has become more diversified over time, there has also been a growing amount of research that adopts alternative approaches in addition to the mainstream approach. Overall, these findings show how knowledge develops and new ideas get accepted.

*Key words:* Knowledge production, Management accounting research, Research methodologies, Research traditions, Theoretical approaches, Historical analysis.

## **1 Introduction**

All disciplines, including management accounting, develop over time in both their intent and extent (see Johnson and Kaplan, 1987; Zawawi and Hoque, 2010). In management accounting, the developments have not necessarily been fast and radical (see Bromwich and Bhimani, 1989), but undeniable. The developments do not occur in isolation but are often influenced by other disciplines (see Pihlanto, 1986; Shields, 1997; Hesford, Lee, Van der Stede and Young, 2007), literature, experiences and innovations from the rest of the world (Näsi and Rohde, 2007, 1113). Note also that in Nordic countries, the link between academia and practice has been strong and accounting education has always been given as part of a general business degree (Jönsson and Mouritsen, 2005, 8-9). Consequently, “Nordic and Scandinavian accounting researchers have been unafraid to develop new relations to the object of accounting” (Jönsson and Mouritsen, 2005, 9).

Increasing knowledge about the roots and the developments of the discipline is important to scholars, educators and students of management accounting. It aids in understanding and explaining what has taken place, its directions and consequences, which in turn can influence

current thinking and decision-making. It also shows how knowledge develops and new ideas get accepted.

Following a limited number of prior Nordic (e.g., Hägg, Magnusson and Samuelson, 1988; Näsi, 1994, Näsi and Rohde, 2007; Jönsson and Mouritsen, 2005) and Finnish studies (Näsi and Näsi, 1985; Näsi, 1994; Näsi, Laine, Mäkinen and Näsi, 1993; Ihantola, 2010; Kihn, 2005; Kihn and Näsi, 2010), this study addresses management accounting developments in Finland. Our focus is on doctoral dissertations. This is a highly interesting and important context as the number of dissertations has significantly grown in Finland in this field. Ever since the first management accounting dissertation was completed in the 1940s (see Kaitila, 1945), more than sixty dissertations have been accomplished at ten business schools or university units in Finland. This development can probably be related to the greater perceived importance of management accounting in modern societies; an increase in public and private research funding; changes in doctoral education such as the emergence of supervisor committees with several supervisors (also from other countries); prominent existence of Finnish researchers in the management accounting research community, and greater interaction with several researchers.

The purpose of this study is twofold: (1) to analyze the research strategies – including research themes, research traditions, theoretical approaches, and methodologies – of all the dissertations published in this field in Finland and (2) to synthesize how the management accounting dissertations have developed throughout the ages (i.e., from the 1940s to 2010). Further analysis of these questions increases knowledge about *what* in management accounting dissertations has been studied and *how*. In so doing, our findings extend previous literature in three ways, first, by analyzing a wider range of research strategic elements and, second, a longer period of time. While the results concern only doctoral dissertations (and hence further the understanding of doctoral education in this field) they may also reflect the focal areas of research in Finland and therefore also further the understanding of management accounting research in Finland in general. Although our results describe one Nordic country only, they can provide a frame of reference and possibilities for further research in other countries in the North. Third, our findings increase knowledge about how knowledge develops, how new ideas or knowledge streams become accepted, and what Finnish management accounting research is like today – does it differ from the main stream research dominated U.S. and Australian research?

The remainder of this paper comprises four sections. The following section introduces research strategic classifications of management accounting research themes, research traditions, theoretical approaches and methodological approaches. Thereafter, our data and research methods are described. We next analyze and synthesize the doctoral dissertations completed in Finland by research theme, research tradition, theoretical approach, and methodology. The final sections present a synthesis of the key results and conclusions.

## **2 Classifying management accounting research**

### *2.1 Classifying management accounting research themes*

In this study, we use a classification of management accounting research themes based on management accounting doctrine (Bhimani, Horngren, Datar & Foster, 2009; Atkinson, Kaplan, Matsumur & Young, 2007) and research (Hesford, Lee, Van der Stede & Young, 2007; Shields, 1997). We distinguish between cost accounting and control systems in classifying management accounting research themes and topics. Cost accounting systems refer to traditional and activity-based cost allocation, cost variances, the use of cost information for decision-making, and strategic costing. Strategic costing includes attribute costing, life-cycle costing, quality costing, target costing and value-chain costing (see Cadez & Guilding, 2008).

Control includes capital budgeting and investments, operating budgeting, performance measurement and evaluation, and organizational control. Following Hesford et al. (2007), budgeting research consists of studies on budget target setting, budget participation, and budget-related dysfunctional behaviors. Capital budgeting and investments research investigates investment decisions and their follow-up. Performance measurement and evaluation involves the study of financial and nonfinancial performance measurement and incentive systems and their consequences for organizational behavior and performance. Finally, organizational control studies are conducted on management and organizational control systems. (See also Hesford et al., 2007).

In addition to cost and control, we also include the following research themes in our classification system: decision-making, profitability and pricing, accounting information

systems (AIS), management accounting history and change, strategies and strategic management accounting.<sup>1</sup>

## 2.2 *Classifying traditions and theoretical approaches of management accounting research*

What are research traditions and theories of management accounting are difficult questions. Different classifications exist (see e.g., Shields, 1997). In this study, we investigate the use of research traditions using Hopper and Powell's (1993) classification of accounting research, and theoretical approaches based on the works of Ryan et al. (2000) and Hoque (2006). These classification provide generally accepted examples about potential research traditions and theoretical approaches.

Hopper and Powell's (1993) classification on research traditions is rooted in Burrell and Morgan's (1979) classification of organizational research. According to Burrell and Morgan (1979), the two important and independent dimensions of organizational research are the nature of social science and of society. The social science dimension consists of the following distinct but related elements: assumptions about ontology, epistemology, human nature and methodology. The assumptions can range from subjective to objective or be merged into a single subjective-objective continuum.

Hopper and Powell (1995) adopted Burrell and Morgan's (1979) subjective--objective continuum, and added a new dimension representing the range of approaches scholars take towards society. At the ends of that dimension, researchers are concerned either with regulation and the creation of order in society or with the potential for radical change. By combining the two continua, Hopper and Powell (1995) developed their taxonomy of accounting research. Following Burrell and Morgan (1979), four categories of (organizational) research are identified: functionalism, interpretive, radical humanism and radical structuralism. According to Hopper and Powell (1995), they can be linked to the following three traditions of accounting research: *mainstream research*, *interpretive research* and *critical research*.

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<sup>1</sup> This classification system of research themes can be seen in the first column of Table 4.

Appendix 1 presents examples of the theories used in the research in the above-mentioned three traditions. According to Ryan et al. (2000, 68-93), *management accounting mainstream* approaches can, firstly, be further classified into economics based normative research and positive economic theories of management accounting. Secondly, to the extent that behavioral, organizational and strategic research extend the discipline base of management accounting research, but do not represent a shift in methodology, they can also be classified as mainstream approaches. Thirdly, according to Hoque (2006, iii-iv), some other examples of positivistic perspectives include: rational choice theory, human relations theory, transaction cost economics, and strategic choice on management control systems.

*Interpretive research* is about understanding and making sense of the social world, and includes work investigating the social nature of accounting practices (Ryan et al., 2000, 42), Hopper and Powell, 1995). As Appendix 1 shows, interpretive research uses, among others, a wide range of behavioral, organizational, social, and political theories, among them legitimacy theory, institutional theory, stakeholder theory and interpreting management accounting systems change (Hoque, 2006, v).

*Critical accounting researchers* investigate conflicts and inequalities in society and potential radical change. Both the interpretive and critical management accounting research directions originated in the work of social theorists. Critical management accounting research is rooted in the studies by Habermas, Braveman, Marx and Foucault. The works of Giddens and Latour have critical and interpretive elements (Ryan et al., 2000, 42-43, 87-90). According to Hoque (2006, vi), some examples of critical theories are: theories of labor process and power and the Gandhian-Vedic paradigm on sustainable development. (See Appendix 1)

### *2.3 Classifying research methodologies*

Research methodology generally includes the rules, commitments and methods which the researcher has accepted and applied and which govern his or her work. While various classifications exist (theoretical and empirical, quantitative and qualitative), here we introduce a more detailed classification developed in Finland. In Finnish business economics and accounting research and education, the research methodologies have often been classified based on Näsi (1980) and Neilimo and Näsi (1980) (see also, e.g., Kasanen, Lukka & Siitonen, 1991 and 1993; Lukka, Majala, Paasio & Pihlanto, 1984). The original classification

distinguishes four approaches: conceptual, nomothetic, decision-oriented, and action-oriented approach. Kasanen et al. (1991, 1993) later added a fifth approach, the constructive approach. The basic underlying difference between these approaches is the division between the Aristotelian and Galileian philosophy of science. The first refers to an ‘understanding’ way and the latter to a ‘causal’ explanation way to do research. Figure 1 summarizes the main characteristics of each approach.

Figure 1 here

The conceptual (or concept analytical) approach appears first in Figure 1. According to Näsi (1980) and Neilimo and Näsi (1980), it follows Aristotelian tradition and is notably used in philosophy. It uses reasoning and argumentation. While all methodological approaches may use conceptual analysis to some extent, the conceptual approach aims to develop new concepts and conceptual systems – consisting of mental and linguistic systems – through conceptual analysis and synthesis.

The nomothetic research methodology comes second in Figure 1. It follows the Galileian tradition and its ideals are hence close to those of the natural sciences. The nomothetic approach is positivist-empirical and emphasizes the need for large samples of data. Causality, explanation and verification are emphasized, likewise testing hypotheses and finding evidence. The key characteristics include discovering invariances, generalizations, patterns, recurrences, and obediences to “laws” (Neilimo and Näsi, 1980; Näsi, 1980) or at least tendencies. In many disciplines, a nomothetic approach is deemed traditional.

The decision-oriented (or decision-analytical) approach comes third (see Figure 1). It is likewise rooted in positivism, but has more specific goals than the nomothetic approach. It usually seeks normative rules to help a firm’s management run their company, most commonly by building different decision-making models. In this approach decision-making is analyzed in its entirety therefore emphasizing logic and maintaining close relations with management science and operations research. (Näsi, Laine, Mäkinen & Näsi, 1993)

In Figure 1, the action-oriented (or action-analytical) approach comes fourth, being relatively new in business research. According to Neilimo and Näsi (1980), it follows the Aristotelian tradition, pursuing a better understanding of a single or few cases. It includes, for example,

action research, clinical method, comparative analysis, historical research, and practical syllogism (Näsi, 1981, 8-9). The human core of a firm is emphasized in an attempt to produce not just understanding but also conceptual systems, frameworks and languages. Based on Lillis and Mundy's (2005) classification, we classify action-oriented studies to include single and multiple case studies and cross-sectional field studies to the extent they include action-oriented elements.<sup>2</sup> Empirical intervention and the role of theory vary in the action-oriented research. The theoretical contribution may be theory discovery, illustration, refinement or testing (see Jönsson and Lukka, 2006).

Finally, following the ideas of Kasanen et al. (1991, 1993), we have added the constructive approach in the fifth column of Figure 1. The constructive approach represents qualitative case studies and it can be seen as a subcategory of the action-oriented approach. Due to its strong interventionist nature compared to all other types of case- and field studies (see also Lukka 1999) we have a good reason to see the constructive research as an approach of its own. Debates on the practical relevance of business and accounting research and the gaps between research and practice (see e.g. Hopwood, 2007) has in part lifted the term "interventionist research" into the focus. Jönsson and Lukka (2006) use interventionist research as an umbrella term to cover alternative forms of research, such as action research, action science, clinical research, constructive research approach, design science and 'rational modelling'.

According to Kasanen et al. (1991, 1993), constructive management accounting research is intended to solve practically significant managerial problems by constructing innovative models, diagrams, plans, organizations, etc. An essential part of the constructive approach is to connect a practically relevant problem and its solution to accumulated theoretical knowledge. The novelty and the actual functioning of the solution must also be demonstrated.

According to Kasanen et al. (1991, 1993), the constructive approach has much in common with the decision-oriented and action-oriented approaches. Both in the constructive and decision-oriented approaches, theoretical analysis, thinking, etc. play an important role leading to the creation of a new entity. However, as Kasanen et al. point out, the decision-

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<sup>2</sup> Cross-sectional field studies can also address more complex questions than surveys. Note, however, that while action-oriented elements may appear in some cross-sectional field studies, others may apply a positivist epistemology.

oriented approach typically uses deduction while the constructive approach is characterized by heuristic innovations. The decision-oriented approach emphasizes theoretical modeling, but the constructive approach attempts to explicitly demonstrate the practical usability of the solution constructed. The constructive approach resembles the action-oriented approach in the empirical phase, in which the case method is usually applied. Both approaches presuppose a thorough understanding of organizational processes with the researcher as a “change agent”. However, action-oriented research attempts no explicit managerial constructs. (Kasanen et al. 1991, 1993)

### **3 Data and the research methods**

In this longitudinal historical investigation we attempt a comprehensive account of the development of the Finnish doctoral dissertation research in management accounting from the very first management accounting dissertation in 1945 until 2010.

Selection of the dissertations and analysis involved four steps. First, the Finnish universities with doctoral education in the field of accounting and finance were identified. The search focused on departments offering doctoral education in business economics and accounting. Other departments such as those offering doctoral education in public sector administration and accounting, and industrial economics were excluded. Consequently, departments in ten universities were identified. They are (in alphabetical order): Helsinki School of Economics (HSE, today part of Aalto University); Lappeenranta University of Technology (LUT); the Swedish School of Economics (Hanken); Turku School of Economics (TSE, today part of the University of Turku); the Universities of Jyväskylä, Oulu, Tampere and Vaasa; and Åbo Akademi University (ÅA). The Helsinki School of Economics was founded in 1911, the Swedish universities Åbo Akademi and Hanken in 1927, Turku School of Economics in 1950 and the others in the 1960s or after it.

Second, the names of the authors and the bibliographic details of their dissertations were collected from library databases, university and departmental level web-pages and the studies by Näsi and Näsi (1985), Näsi (1990) and Näsi, Laine, Mäkinen and Näsi (1993). If no information was found or not all the way to 2010, information was obtained from representatives of the institutions in question.

The third task was to identify dissertations in the field of management accounting. Based on the titles, most of the dissertations could be easily classified as studies in management accounting. More interpretation was required in a few cases. The search yielded 66 management accounting dissertations published 1945-2010. The very first management accounting dissertation completed at the University of Helsinki was also included.

Fourth, in part simultaneously with the identification of the dissertations, the 67 management accounting dissertations were read, analyzed, classified, and discussed by the two authors using the classification systems presented in Section 2 as follows:

- whether their themes are related to cost, control, or other areas (see Section 2.1),
- whether their research tradition is based on mainstream, interpretive or critical accounting research (see Section 2.2),
- what their theoretical approach is (see Section 2.2 and Appendix 1), and
- what their methodological approach is on the basis of the Neilimo and Näsi (1980) and Kasanen et al. (1993) classifications (see Section 2.3. and Figure 1 above).

Appendix 1 summarizes the 67 management accounting dissertations by author, name of university, title, research tradition, theoretical approach, methodological approach, type of publication and year of publication.

### **3. Results**

#### *4.1 Describing dissertations published*

A total of 67 doctoral dissertations in the field of management accounting were published. The time period 1945-2010 covers 66 years, giving about one doctoral dissertation per year on average. The actual distribution over time is less even. One of the dissertations was published in the 1940s, two in the 1950s, and one in the 1960s. Nine dissertations were published in the 1970s, eight in the 1980s, a total of 13 in the 1990s and 33 in the period 2000-2010. These numbers indicate growth in doctoral education in management accounting in the 1970s. This growth has continued. More than two thirds of the dissertations were completed in the past two decades and almost half in the 2000s. These results suggest that the number of management accounting doctoral dissertations published in Finland increased significantly in recent decades. Doctoral education in this field has also gained more resources over the years as the popularity of the subject increased..

The 67 dissertations published in management accounting 1945-2010 were conducted in the following ten universities:

- Aalto University: 17 (25.4%)
- University of Turku: 12 (17.9%)
- University of Tampere: 8 (11.9%)
- University of Vaasa: 7 (10.4%)
- University of Oulu: 6 (9.0%)
- Lappeenranta University of Technology: 4 (6%)
- Swedish School of Economics: 4 (6%)
- Åbo Akademi: 4 (6%)
- University of Jyväskylä: 4 (6%)
- University of Helsinki: 1 (1.5%).

This distribution indicates that most of the doctoral education in management accounting was conducted in the Helsinki School of Economics (today part of Aalto University), the oldest school of economics in Finland. It is followed by the Turku School of Economics (today part of the University of Turku, established in 1950, and the University of Tampere established in the mid-1960s.

Fifty (about three fourths) of the authors of the dissertations were men and 17 (about one fourth) women. The 1990s saw the first three doctoral dissertations written by female authors, while the other ten were written by men. In the 2000s, over 40 per cent (i.e., 14 out of 33) of doctorates in the management accounting field were by women.

The majority (48, about 70 per cent) of the dissertations were published as monographs, 14 as article collections, and 5 as essay collections. The first 21 dissertations published from 1940s to 1980s were monographs. The first article and essay collections were published in the 1990s. In the 2000s, 13 (i.e., about forty per cent) of all dissertations were article collections and three (about one tenth) essay collections. Hence, the share of essay and international article collections clearly increased in the 2000s. Articles were published in the following peer reviewed journals and series:

- Management Accounting Research: 6
- Finnish Journal of Business Economics: 5
- European Accounting Review: 4

• HSE Working Paper:	4	
• Proceedings:	3	
• Accounting, Organizations and Society:		2
• Qualitative Research in Accounting and Management:		2
• Accounting, Auditing and Accountability Journal:	1	
• Advances in International Accounting:	1	
• Advances in Management Accounting:	1	
• Electronic Journal of Information Systems Evaluation:		1
• International Journal of Business Environment:	1	
• International Journal of Business Performance Management:		1
• International Journal of Production Economics :		1
• International Journal of Productivity and Performance Management:		1
• International Journal of Project Management:		1
• Journal of Accounting and Organizational Change:	1	
• Journal of Industrial Management and Data Systems:		1
• Journal of International Financial Management and Accounting:		1
• Journal of Workspace Learning:		1
• LSE Working Paper:	1	
• Managerial Finance, Performance Measurement and Evaluation:		1
• Project Management Journal:		1
• TaY Working Paper:	1	
• Technological Forecasting & Social Change		1
<i>In total:</i>	44	

Regarding the language distribution of the dissertations, almost two thirds (42, about 63 per cent) of the dissertations have been written in English. About one third (22) of them has been written in Finnish and a few in Swedish. Initially, from the 1940s to the 1960s, all the dissertations were written in Finnish. In the 1970s, one dissertation was written in Finnish, but three in Swedish and five in English. Hence, for the first time, most of the dissertations were published in English in the 1970s. While most (62.5 per cent of) dissertations were published in Finnish in the 1980s again, most (i.e., 53.8 per cent of) dissertations were published in English in the 1990s. Over 80 per cent of dissertations were written in English during the most recent decade. The above results indicate impacts of general internationalization on higher business education as well as individual and institutional pressures to publish international journals.

#### 4.2 *Analysis and synthesis of the research themes*

In the first column of Table 1, we classify the 67 dissertations into the following seven main categories: cost accounting, management control systems, decision making, profitability and pricing, accounting information systems, management accounting history and change, and strategy and strategic management accounting. Management control systems are further divided into capital budgeting and investments, operating budgeting, performance measurement and evaluation, and organizational control. Based on our findings, the most popular research themes have been: 1. strategic management accounting, 2. capital budgeting and investments, and 3. organizational control (see the ninth column of Table 1).

Our results (presented in the columns two through eight of Table 1) clearly show that some of the management accounting research themes have been popular throughout the years. First, as the second row of Table 1 shows, cost accounting was the very first research theme selected for management accounting dissertations. Dissertations on cost accounting have been conducted all the way from the 1940s and 1950s to the 1990s and 2000s. A total of six studies (i.e., almost one tenth of the dissertations), addressed cost accounting. While the first two studies were on traditional cost accounting, the latter four addressed the use of activity-based costing.

Table 1 here

Another management accounting topic that has long been researched includes capital budgeting and investments. This was the second most popular management accounting practice with ten studies (about one seventh of all dissertations). The first study in this area was presented by Honko (1955) in the 1950s and the last one by Huikku in 2009.

Doctoral research on performance measurement and evaluation also began early on in the 1960s with Pitkänen's (1969) dissertation. While Pitkänen's study was on operational output objectives in the public sector context, the next three studies were related to contemporary nonfinancial and strategic performance measurements in the business sector and the final one on performance measurement systems of municipalities.

Several new topic areas proved popular from the 1970s on. These include studies on organizational control, decision-making, pricing and profitability, and accounting information

systems. A total of seven organizational control dissertations analyzed different aspects of organizational control and represent about one tenth of all dissertations. Decision-making was addressed in three dissertations, all of which were published in the 1970s. Profitability was the subject of one study in the 1970s as well as pricing in the 1990s. A total of five studies (about 8 per cent) have been conducted on accounting information systems.

All the other topics of management accounting have been researched since the 1980s. They include operating budgeting, management accounting history and change, and strategies and strategic management accounting. A total of four studies have been conducted in the field of budgeting in the 1980s and 1990s. Management accounting history and change have been a very popular topic area with a total of seven dissertations since the 1980s. The first two dissertations addressed management accounting history in general and the latter four studies management accounting change.

Finally, strategies and strategic management accounting have become the most popular area of research. Fifteen dissertations, which is over one fifth of all the dissertations, have been conducted in that area. The very first dissertation was completed in the 1980, four dissertations in the 1990s and ten dissertations in the 2000s. These dissertations addressed either issues related to strategies and strategic management, relations between selected dimensions of strategy and management control systems, and/or the use of various strategic management accounting techniques. Overall, the results suggest that some research themes were constantly popular, but new themes have also been considered over time.

#### *4.3 Analysis and synthesis of the traditions of research and theories*

Table 2 summarizes the research traditions represented in the 67 doctoral dissertations of management accounting. Overall, almost two thirds of the dissertations applied mainstream accounting research and over one third interpretive accounting research. We classified all the dissertations published from the 1940s to the 1970s as mainstream accounting research. The first interpretive accounting dissertation was published in the 1980s – Lukka's (1988). Thereafter, (i.e. in the 1990s and 2000s), nearly as many interpretive accounting studies were published as mainstream accounting studies. One dissertation published in the 2000s could be classified as critical accounting research.

Appendix 1, column 3 lists the theoretical approaches of the dissertations. Many theories were used especially in those dissertations consisting of articles and essays. Clearly, contingency theory has been used most frequently. Eleven dissertations were based on it alone and two dissertations in part. Economic theories come second (with seven cases) and behavioral approach third (with five cases). The strategic approach is fourth (with four dissertations based on it alone, four in part). Institutional theories come fifth (with three dissertations applying it alone and six dissertations in part). Decision-making theories come sixth, as two dissertations were based on it alone and four in part. Actor network theory and capital investment theories come seventh (each with two primary cases). One of the dissertations was classified to use the management accounting change approach alone but quite many (at least five) applied it in part.

Economic theories were used in the earliest mainstream dissertations from the 1940s to 1992. Decision-making and capital investment theories were applied in the 1970s and 1980s. The other mainstream studies applied contingency and strategic approaches ever since 1980s. The first interpretive studies conducted in the 1980s and 1990s applied behavioral accounting theories. Several other theories were used in the more recent studies, among them institutional theory (including both old institutional theory and new institutional sociology), management accounting change approach and actor-network theory. A few interpretive dissertations also applied critical theories, but were not so clearly oriented to radical change. A dissertation with critical accounting tradition applied actor-network theory.

Table 2 here

#### *4.4 Analysis and synthesis of the research methodologies*

Table 3 summarizes the methodological approaches applied in the 67 dissertations. While fourteen dissertations used two methodological approaches, a total of 67 primary approaches were found. The overall results presented in the final column of Table 3 show that the action-oriented approach was by far the most popular. About half of the scholars (34, about 51 per cent) used this approach. The nomothetic approach ranks second. It was used in 17 cases representing one fourth of all the dissertations. The other approaches were utilized less. The decision analytic approach was used in eight (about 12 per cent) cases, and both concept analytic and constructive approaches in four (6 per cent) cases each. Thus, most of the

doctoral dissertations were empirical in nature and utilized case studies either with an action-oriented or to a smaller extent constructive research approach.

Table 3 here

Further analysis of the various research methodologies shows that different approaches have been popular at different times. Several of the earliest dissertations were concept analytical in nature. Primarily concept analytical dissertations were conducted from the 1940s until the 1980s, but not recently. The decision analytical approach has been utilized first by Honko (1955) in the 1950s and it became very popular in the 1970s. A total of seven dissertations were conducted with this approach at that time. The action-oriented approach became very popular during the latter decades. It was applied as the primary approach in two dissertations in the 1970s, four dissertations in the 1980s, in nine dissertations in the 1990s, and in nineteen dissertations in the 2000s. The case studies conducted include 9 single and 19 multiple case studies and 4 cross-sectional (field) studies. The nomothetic approach was first adopted in three management accounting dissertations published in the 1980s. So far, it has been applied in a total of 17 dissertations and is, hence, the second most popular methodological approach. The constructive research approach, which is still very new in management accounting, has been applied in four dissertations, all of them were published in the 2000s.

Table 4 here

The very first dissertation published at the University of Helsinki applied a concept analytical approach. The scholars of Åbo Akademi University published decision analytical and nomothetic dissertations. The dissertations conducted at the Turku School of Economics and at the Universities of Tampere and Jyväskylä were primarily action-oriented case studies. Action-oriented and nomothetic studies were spread more evenly over the other universities, i.e., at the Helsinki School of Economics, Lappeenranta University of Technology, the Swedish School of Economics, the University of Oulu, and the University of Vaasa. These results indicate certain trends in the utilization of different methodological approaches and differences between universities.

## **5. Synthesis of results**

The very first Finnish dissertation in management accounting was published in the 1940s, doctoral education started to grow substantially in the 1970s, and the growth has continued since then. Initially all the authors of the dissertations were male, but the 1990s brought the first few female authors and their share increased rapidly. Internationalization of academics is clearly seen in that the dissertations have been increasingly written in English and published as collections of essays or international journal articles.

To date, there has been a relatively wide range of management accounting research themes. Cost accounting was the first research theme and capital budgeting the second. Dissertations on cost accounting have been published right from the 1940s to the 2000s. The first two (published in the 1940s and 1950s) were on traditional cost accounting; the latter (published in the 1990s and 2000s) on activity-based costing. Capital budgeting has been constantly popular since the 1950s. Dissertations have been published on performance measurement and evaluation since the late 1960s and on organizational control since the 1970s.

Other research themes have been trendy at certain times. Decision-making studies with mathematical modeling, for example, were popular in the 1970s, profitability and pricing studies in the 1970s and 1990s, and budgeting studies in the 1980s and 1990s. The “relevance lost” (see Johnson and Kaplan, 1987) debate may have increased interest in the strategy and strategic management accounting issues among management accounting scholars during the recent decades; likewise management accounting change has become popular.

The most popular methodological approaches have also changed over time. The first dissertations were concept analytical in nature. The positivistic dissertations were first decision analytical all the way until the 1970s and later on nomothetic. Scholars’ interest in empirical research conducted in real-world companies with case or field studies and surveys has clearly increased (cf. Johnson and Kaplan, 1987). Action-oriented case studies have been conducted ever since the 1970s and have become the most popular approach to date. The constructive case research approach is still new, but some dissertations have applied it during the most recent decade. While about 40 per cent of all the dissertations have been primarily positivistic (nomothetic or decision-analytical), over one half of the dissertations have been action-oriented or constructive case studies. Application of multiple methodologies has become more common since the 1990s. One fifth of the dissertations can be classified as

studies using multiple methodological approaches – often different approaches in different articles.

Two traditions of research have been most apparent according to our research. While almost two thirds of the dissertations represent mainstream accounting research, over one third of the dissertations have been classified as interpretive studies. Mainstream research has been conducted throughout the period of interest. The use of qualitative, interpretive accounting research has been popular since the 1980s and has continued ever since. To some extent, the research traditions and methodological approaches seem to overlap but not completely.

A wide range of theoretical approaches was identified. Many theories were used especially in those dissertations consisting of articles and essays. The five most frequently applied approaches were: contingency, economic, behavioral, strategic and institutional approaches. Economic theories were used from the 1940s to 1992. Decision-making and capital investment theories were applied in the 1970s and 1980s. Contingency and strategic approaches have been constantly applied since the 1980s. Behavioral accounting theories were used in the 1980s and 1990s. Several other theories were also used throughout the period. Overall, the above results indicate that research has expanded and become more diversified in the selection and use of research themes, traditions of research and theoretical and methodological approaches over time.

## **6. Conclusion**

This study presented a systematic longitudinal research strategic analysis of how management accounting doctoral research has developed in Finland over time. We first described the dissertations published and then analyzed their research themes, research traditions, theoretical and methodological approaches. Thereafter, we formed a synthesis of how management accounting has developed over time. Following a limited number of studies (Näsi and Näsi, 1985; Näsi, Laine, Mäkinen and Näsi, 1993; Näsi, 1994; Kihn and Näsi, 2010), we analyzed the research themes and methodologies of the dissertations. We extended earlier literature by analyzing a wider range of research strategic elements and a longer period of time.

As expected, our findings confirm that management accounting doctoral research has developed over time and became more diversified. Our findings propose new, traditional and borrowed developments. While scholars have selected new research themes, research traditions, theoretical and/or methodological approaches in different eras and times; others have been popular throughout the ages. The findings also indicate a strong influence of elements borrowed from other disciplines in increasing the diversity of research. The emphasis of research was initially on cost *accounting* and capital investments. Economic and decision theories and concept or decision analytical approaches were emphasized. In more recent times there has been an increasing interest in *management* related issues and philosophies such as performance management, strategic management, and strategic management accounting techniques. New theoretical and methodological influences have also been borrowed from management and other social sciences. These include the adoption of behavioral, organizational, strategic and institutional theories, and qualitative case and field study approaches all of which have broadened scholars' ontological and epistemological thinking. In addition, statistical research has also become popular.

Overall, these results imply that there are many ways to conduct doctoral research today. The interests of scholars and their supervisors, company practices and/or research financier's focus areas probably influence the choices made.

This study is subject to certain limitations. First, in categorizing the studies, a few dissertations could perhaps have been categorized or interpreted differently, although we wished to provide as comprehensive picture as possible. For example, even though, e.g., Björkman's (1989) dissertation could also be classified as a study in management, Näsi's (1990) as a study in accounting in general, Jokipii's (2006) as a study in auditing (in a broad sense), Pätäri's (2009) as a study in industrial economics, and Kurunmäki's (2000), Järvinen's (2005) and Rautiainen's (2010) as studies in public sector accounting, they are also included in the current study due to the scope of certain management accounting themes.

Second, given that we wished to analyze the management accounting dissertations published in Finland through the ages, it was not possible to provide an indepth description and analysis of each and every dissertation. Our work, however, is intended to provide the interested reader the ability to further study the dissertations. Finally, our results describe the case of Finland

only. Nevertheless, our results should be relevant in advancing the understanding about the development of management accounting research.

While accounting dissertations published in Sweden during the past five years have been examined by Catasús and Gerdin (2010), analysis of dissertations could also be extended to other time periods, disciplines and countries in the North, Europe and other continents.

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# Construction and re-construction of accounting models in the public sector

By

Anne Isabelle Robbestad<sup>3</sup> and Katarina Kaarbøe<sup>4</sup>

## **Abstract**

In 2002, the Norwegian government implemented a health care reform through which public hospitals were reorganized into legal entities. One consequence was the introduction of accrual accounting. The reform of the Norwegian health care sector made the use of accrual accounting compulsory in the reporting of financial information. In this paper, we focus on how private sector accounting norms were translated into accounting norms in the public sector. We use the concept of translation from actor-network theory (ANT). Our findings show that during the adoption of the health care reform, the Minister of Health and Care Services promoted the benefits of accrual accounting for the health care sector by de-contextualizing accrual accounting. This de-contextualization created problems and complexity during the translation process related to its implementation. As a consequence, competing translations promoted by actors with different purposes formed the construction and the understanding of the income statement.

**Keywords:** Translation, actor-network theory, accounting norms, health care sector, income statement

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<sup>3</sup> The author is from Høgskole Stord Haugesund (HSH), Haugesund, Norway.

Address for correspondence: Anne Robbestad, HSH, Bjørnsonsgt 45, 5528, Haugesund, Norway. E-mail: anne.robbestad@hsh.no

<sup>4</sup> Katarina Kaarbøe, NHH, Norwegian School of Economics, Department of Accounting, Auditing and Law, e-mail: katarina.kaarboe@nhh.no

## ***Introduction***

The Health Enterprise Reform 2002 was introduced into the Norwegian public health care setting in a radical way through the reorganization of hospitals into legal subjects, called health enterprises (HE). The health enterprise model assimilated hospitals as business enterprises. As a result, they were required to comply with the Norwegian Accounting Act used by the private sector. The implementation of the HE model was rapid, while the ensuing translation process took many years, most of which were dedicated to the construction of the financial statement. In this paper, we argue that even though the construction of the income statement used in the end was the same as the reform demanded the processes to reach this outcome served as a learning arena for the actors involved.

Previous studies of the implementation of accrual accounting have generally focused on technical aspects (Ellwood and Wynne, 2005; Ellwood, 2001; Lapsley and Pallot, 2000; Guthrie, 1998; Stanton and Stanton, 1998; Froud, Haslam, Sukdev, Shaol and Williams, 1998; Pallot, 1997). Thus far, this unilateral focus on the technical aspects has failed to explain the various outcomes of these implementations (Lapsley et al., 2000; Christaens and Rommel, 2008). In contrast to these studies, we focus on the socio-political aspects of implementing accrual accounting. In particular, we examine the process (es) and outcomes of the implementation of accrual accounting in the Norwegian health care sector to arrive at an understanding of how private sector accounting norms are translated into public sector accounting norms. We believe that the translation process itself is important to understanding the outcome of the processes.

The theoretical lens in this study is a translation perspective, We have been inspired by Latour's ideas (1986) about translation, In this analysis, the term "translation" is central to understanding what is happening when an idea moves from one context to another. When analysing translation, we focus on actors and their influence, as the actors have the power to reject the new idea, change it, add aspects or corrupt it (Latour, 1986, p. 267).

The empirical setting for the study is the Norwegian health care sector. The 2002 health care reform resulted in a structural change. The introduction of accrual accounting was one outcome of this structural change. The Norwegian health care sector therefore serves as a good illustration of a public sector setting that has undergone accounting change processes based on the new public management (NPM) ideology. The aims of the study are to describe the translation process (es) involved when accrual accounting was introduced into the Norwegian health care sector and to analyze how actors build networks to control the process (es) in order to increase our understanding of the consequences the process (es) can have for the accounting model. This will also help us to understand the challenges faced when introducing new ideas that are also technical artefacts.

As such, this study of the implementation of accrual accounting is restricted to the translation of private sector accounting norms into new, national health care accounting norms. The private sector accounting norms are represented by the Norwegian Accounting Act and its related standards. Although the study is about the processes (the "how"), it focuses on the "who" by highlighting the roles and influence of different actors (human and nonhuman) involved in the translation. The theoretical framework is actor-network theory (ANT), which links actors' interactions and the power balance among them to the outcomes of change processes. Notably, ANT highlights the fact that accounting is not a neutral representation of

an organizational entity measured in economic terms but rather an outcome of specific choices of methods. As such, it is subject to translation by actors with specific goals and interests.

Through ANT, or the “sociology of translation” (Robson, 1991, p.550), this study shows how the central government (CG) tried to channel the translation process towards the fulfilment of its own goals and interests. In particular, the study shows how the CG used and transformed accounting devices to fit its budget rationale rhetoric in order to enrol and convince other stakeholders. Moreover, the study helps in the visualization of how new accounting knowledge was constituted within the Norwegian health care sector as an outcome of complex processes. The complexity of the process was contingent on the controversies that arose between the CG and stakeholders during the translation of the private sector’s accounting norms. This view of how complex it is to create new accounting knowledge in a context is supported by Quattrone and Hopper. (2001, p.430) who argue that: “accounting knowledge needs to be treated as a co-production of different points of view across multiple organizational worlds, times and spaces”.

The remainder of this paper is divided into five sections. The next section presents an overview of international and national variations in accounting norms. It introduces the norm concept, and shows how translations of accrual accounting vary across and within countries. The second section positions the paper within the theoretical framework and describes the concepts used to analyse the empirical data. The research method is then presented in section three. The fourth section describes and analyses how the private sector’s norms were translated into the Norwegian public health care setting. It is followed by a summary of the findings of the empirical study in section five.

## ***International and national variations in accounting norms***

NPM is an ideological thought system promoting the introduction of new accountability mechanisms from the private sector in order to improve the public sector's efficiency (Pollitt, 1990). A main component of the NPM movement is "the seemingly endless list of accounting based techniques that are being drawn on in the pursuit of reform" (Olson, Guthrie and Humphrey, 1998, p.18). Such accounting-based techniques are at the core of NPM reforms. They rely on quantification as a means of demonstrating achievements, such as efficiency gains, and as a means of holding responsible persons accountable (Lapsley, 1999).

Traditionally, cash-basis accounting, which determines expenses and revenues based on payment time, has been the accounting framework for the public sector. While strict cash-basis accounting follows the cash flow exactly, modified cash-basis accounting includes some elements of accrual-basis accounting, such as inventory and property capitalization. Accrual accounting, which is the accounting framework typically used in the private sector, recognizes economic events at the time at which the transaction occurs rather than when payment is made (or received). The elements recognised under accrual accounting are assets, liabilities, revenues and expenses (International Public Sector Accounting Standards, 2004). In the public sector, financial accounting aims to give information about expenses, and to show how expenses match the budget allocations approved by politicians and how they are kept within matching revenues. In the private sector, the purpose of financial accounting is to provide information about the performance of an enterprise by providing measures of earnings and its components (§43, statement of financial accounting concepts Number 1, 1978, Financial Accounting Standards Board). In the private sector, to determine profit during the accounting

period, expenses (which are recognized when assets are consumed or liabilities created) are matched with revenues (the matching principle). Therefore, the purposes of financial statements differ depending on whether they are based on cash-basis or accrual accounting.

Inspired by the NPM, the public sector has moved towards accrual-based accounting models, such as modified cash accounting and full accrual accounting. However, many countries combine cash accounting at the macro level with accrual accounting on limited, decentralized micro levels (Olson et al., 1998). These models, which are inspired by the NPM trend, introduce non-cash elements (such as depreciation costs) in order to provide more complete management information (Kober, Lee and Ng, 2007). The implementation of NPM-inspired accounting has been challenging and complex due to the disparities between the private and public sectors' accounting rationales.

The following examples show that accounting changes, although inspired by NPM, have not necessarily followed a consistent path. Although the overall trend reflects a shift from cash accounting to accrual accounting, there have been numerous variations regarding the scope and level of implementation between and within countries. These differences may be attributed to various contextual factors, such as culture or structure (Pina and Torres, 2003), or the nature of relationships between central and local authorities (Pettersen, 2004). In this regard Olson et al.'s (2007) study, which was limited to three countries (Australia, the United Kingdom and Sweden), is representative, as the chosen countries have different characteristics in terms of the political parties in power, population sizes and governmental consumption expenditures (Olson et al., 2007). Although all three countries have followed the NPM trend, they illustrate the variety of accrual accounting translations that result in different norm systems.

Australia stands out as the only country with a single norm system that permeates all sectors and company types (Olson et al., 2007; Pina et al., 2003). Its norm system is based on the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). In 2000, the Australian Accounting Standards Board (AASB) decided that the IFRS standards would be applied to all types of companies throughout the private sector. This decision was extended to the public sector in 2005 (Olson et al., 2007).

Since 2000, the United Kingdom has moved from different cash-based accounting models (in local and central governments) to accrual accounting with the goal of consolidating all financial reports within the public sector at the national level. Even though the UK has adopted accrual accounting for the entire public sector, “markedly different accounting conventions” (Elwood, 2001, p.224) are evident across the country, highlighting the need for adaptations to fit the specificities of the public sector context. Lapsley et al. (2000, p.36) call the accounting practice used by local governments in the UK an “accounting mutation”. In contrast to Australia, the UK’s norm system includes both local and national accounting standards, although the influence of IFRS has been growing since 2004 (Hodges and Mellett, 2006). The health care sector, which is part of the UK’s public sector, has progressively adopted full accrual accounting since 1991. However, it follows specific accounting regulations, which, for example, prohibit the re-evaluation of assets (Olson et al., 2007; Elwood, 2001).

Sweden has followed the international trend by introducing accrual-based accounting norms to the public sector (Olson et al., 2007). Even though local and central government standard setters (the “Council for Local Government Accounting” and the “Swedish Financial Management Authority”) have closely followed IFRS and IPSAS, they have issued their own

national accounting standards in a manner similar to that seen in the UK. Therefore, although Sweden closely follows the most progressive countries, such as Australia, it uses country-specific accounting standards like the United Kingdom (Olson et al., 2007).

### ***Translation and ANT***

In previous accounting studies, translation has been used both within ANT and diffusion theory. Both theories emphasize the relationship between accounting and its context. Within ANT, translation is about creating a “protected space” within which one can control the process without disturbances from the outside world. Other ANT concepts, such as obligatory point of passage (OPP), black boxing, or framing and overflowing, are also used to draw attention to how power relations can be built to control the outcomes of change processes (Skærbæk, 2009; Skærbæk and Thorbjørnsen, 2007; Christensen and Skærbæk, 2007; Cuganesan, Boedker and Guthrie, 2007; Skærbæk and Melander, 2004; Lowe, 2001; Lowe, 2000; Chua, 1995; Lawrence, Manzurul and Lowe, 1994; Preston, Cooper and Combs, 1992).

The ANT concept of “framing”, which is based on Goffman (1971), is about creating boundaries within which actor interactions occur (Callon, 1998). As such, framing is crucial in a translation process, as it is about deciding which elements to take into account to solve a problem or a situation. Callon (1998) uses the framing concept to emphasize the role of nonhuman elements in the creation of tacit boundaries (the frame) that limit the interactions of participating actors in a given situation. If actors contest these boundaries, they bring in new elements from the outside world, which are conceptualized as “overflows”. Overflows may disturb and influence the course of the translation if they are not controlled.

In contrast, a “black box” has been defined as “a closed file, an indisputable assertion” (Latour, 1987, p. 23). The concept is important to the stabilization of a translation process not only in relation to the outcome of the process but also during the different phases of the translation. The black box may help stabilize a construction either by combining several elements or by putting several concepts within the same box, making them a part of an apparently strong construction (Callon and Latour, 1981). Notably, previous accounting studies also highlight the fragility and temporality of power (Skærbæk and Tryggestad, 2010; Skærbæk et al., 2004). These studies show that accounting in certain contexts plays a political role. As a result, the link between accounting and socio-political processes becomes important.

When analysing the implementation of the Norwegian Accounting Act, we focus on its “translation” by different actors within a specific context. Several researchers use the translation concept. Of these, some focus on diffusion among organizations and others on translation within organizations. Czarniawska and Sevón (1996) view translation as a key concept in understanding organizational change. These researchers further develop Latour’s (1986) idea by focusing on how ideas are diffused among organizations. Latour distinguishes between diffusion and translation, saying that “translating interests means at once offering new interpretations of these interests and channelling people in different directions. ... The results of such renderings are a slow movement from one place to another” (Latour, 1987, p. 17). The difference between diffusion and translation seems to lie in the understanding of the idea as copied or changed.

Latour (1986), Callon (1986) and Czarniawska et al. (1996) have developed models to describe the translation processes. Latour focuses on translation in terms of changes to the

idea, while Callon analyses the importance of the translators (actors). Czarniawska et al. focus on the materialization of ideas aiming at understanding the institutionalization of new ideas (translation in several steps). In this study, we have only included the first step of the translation – the step that encompasses the move from the Accounting Act to the norms of accounting in terms of determining the calculation method that should be used to establish the opening balance. Therefore, we use Latour’s interpretation of translation.

In this study, the central government translates the accrual accounting requirement into accounting methods that fit its purpose. However, other actors with different views interfere in the CG’s translation, which creates overflows that have to be contained. As a consequence, new accounting methods are continuously being presented by the CG in order to convince the reluctant actors of the need to adopt them. In so doing, the CG tries to control the process and the resource allocation among the health enterprises.

### ***Research method***

We draw on actor-network theory (ANT) to focus on the interactions among actors (human and nonhuman) involved in a translation process. In this regard, ANT helps to provide new explanations about the outcomes of such processes. In this study, ANT is used to describe and structure events as well as to analyse and explain the underlying processes that lead to the constitution of new knowledge within the Norwegian health care sector. This new knowledge takes the form of new national health care accounting norms.

Recently, Latour defined ANT in the following manner: :“ It’s a theory, and a strong one I think, but about how to study things, or rather how not to study them - or rather, how to let the actors have some room to express themselves” (Latour, 2005, page 142). As such, the

ANT framework is used to provide new sources of explanation to the various outcomes of NPM inspired accounting reforms. Setting aside the traditional boundaries of macro/micro levels, ANT focuses on actors, helping to visualize how actors try to control the path of the accrual accounting change by building heterogeneous associations made up of human and nonhuman elements.

According to Callon, the sociology of translation, especially the concept of translation is about defining and attributing roles well “*the delineation of a scenario*” (Callon, 1986, p.25). He adds: “*It speaks for others but in its own language*” (Callon, 1986, p.25). The focus is more on a description, which becomes an explanation and since such contributes to research on its own premises (Latour, 1991). As such, ANT accounts by nature fail the traditional acid test of validity issues. The main concern of the researcher is about telling a story which is interesting, that engages people, a criterion that might replace a more traditional criterion of validity influenced by a positivist view referring to: “...a *supposedly “out there “reality”*” (Quattrone, 2004, p. 241).

ANT provides both a set of theoretical concepts and a map for conducting empirical research (Mouritsen, Hansen and Hansen, 2010). The concepts of translation, framing, overflow and black boxing are particularly interesting for our study. Translation entails the development and transformation of an innovation because many actors are involved – actors who may compete in order to impose their own views and secure their interests. Therefore, by studying the process, one can follow the dynamics and interactions among actors and how they use various tools to build their own networks. Different levels can be mixed across space and time in order to convince reluctant actors to adopt the central actor’s views and follow a specific path to the desired outcomes.

Together, the concepts of translation, framing, overflow and black boxing direct attention towards contingent processes of change and how different actors made sense of the new Accounting Act. These concepts help in the visualization of how the actors build networks in order to frame a specific view, introducing new concepts through overflows and preventing controversies by black boxing accounting innovations.

The introduction of accrual accounting made the preparation of a new financial statement, the balance sheet (BS), compulsory when reporting HE financial information. Under the previous regime, hospitals did not have their own balance sheets, as hospital assets were incorporated in county assets and not valued separately. As such, a major element in the translation of private sector norms into this sector was to decide *which method* should be used *to value the elements of the balance sheet*, especially fixed assets, in order to calculate yearly depreciation costs at the HE level.

To study the translation process we have chosen one part we have focused on and that is the valuation of fixed assets. There are two arguments regarding the relevance of focusing the translation process on the valuation of fixed assets. The first argument is that depreciation costs were introduced at the HE level as a consequence of the change from modified cash accounting to accrual accounting. Depreciations costs represented 7% of the total costs in 2008, which is a significant portion of the HEs' total costs ([www.sintef.no/Projectweb/Startsiden/Samdata](http://www.sintef.no/Projectweb/Startsiden/Samdata)). The amount of depreciation costs to be imputed and how they are estimated depends on the methods chosen for the valuation of fixed assets. Therefore, different calculation methods have a bearing on the HEs' financial performance. Inventories were already accrued under the modified cash accounting regime. In terms of HEs' revenues, early in the implementation process it was agreed that the 1997 revenue concept, which mixed

grants and activities, would be maintained. As a result, revenues are set through a political process following the central government budget allocations and are not determined through market mechanisms. Therefore, a treatment of revenues was not a problematic issue during implementation.

The second argument is that the topic (fixed asset valuation) was easily accessed since it was so much discussed in public documents. Furthermore, the Ministry of Health and Care Services (CG) issued documents on the balance sheet valuation separate from the steering documents sent to the RHEs (regional health enterprise) that explained how this accounting issue should be handled (document on the balance sheet total valuation, 9 May 2003; documents on the valuation of fixed assets, 16 February 2004 and 22 December 2004).

Our study is based on different kinds of data, including texts (steering documents shared between the CG and the health enterprises, parliamentary reports and propositions (Ot. Prop. No. 56, 2004-2005)), answers given in the consultative round about an accounting regulation to be included in the Health Enterprise Act (Ot. Prop. No. 66, 2001) and documents from the Norwegian Parliament (including yearly state budgets and propositions, such as Report No. 3 of the *Storting* (2006-2007), CG accounts for 2006, Ministry of Health and Care Services' budget for 2008). In addition, an in-depth interview was conducted in 2007 with a partner of one of the auditing companies attached to the HEs. This partner emphasized the construction of the opening balance as the key issue of the implementation process. Furthermore, the first author was employed in the health care sector as a finance director from 1991 to 2001 and, in that position, was involved in the early phases of the implementation. The second author has studied Norwegian health care since the reform was introduced and has also been a member of the Committee for Evaluating Productivity and Efficiency in the Norwegian Health Care

Sector. The aim of this independent committee is to examine the challenges within the health care sector after the implementation of the Health Enterprise Reform.

Our approach is true to ANT in that we follow the actors through their actions, which are described in the different documents. In this regard, we, the authors, are also translators of the translation process as synthesized in the different documents and the interview.

### ***Empirical background***

The Norwegian health care sector had large budget deficits during the 1990s, which were an increasing problem. In an effort to show that it was going to address the problem, the government proposed the 2002 Health Enterprise Reform, which aimed to improve health care efficiency through organizational change.

The reform has two main components aimed, respectively, at improving governmental control and decision making. As a result of the reform, the central government handles the financing and ownership of the hospitals, while higher autonomy is evident at the provider level because hospitals are organized as health enterprises (HEs). HEs are autonomous legal entities and, as such, no longer an integral part of the public administration. They have their own responsibilities as employers and are accountable for all costs (included capital costs). However, they cannot go into voluntary liquidation because the central government, as the sole owner, has unlimited responsibility ([www.odin.dep.no/hod](http://www.odin.dep.no/hod)). This is key to understanding the behaviour of the HEs, which do not carry any financial risk.

One part of the Health Enterprise Reform was to introduce accrual accounting by forcing the health enterprises to follow the private sector Accounting Act. The American Institute of Certified Public Accountants (AICPA, 1974) states that the main intended functions of accounting are control (accountability) and decision making. The duality of these functions is reflected in the 2002 health care reform's two components. The first component of the 2002 health care reform is based on increased centralization at the national level and supports the CG's control of the growing health expenditures. The second component is intended to improve decision making at the local and operational levels. It includes more comprehensive management tools, such as accrual accounting, to help hospital managers in their decision making.

The Health Enterprise Act (Ot. Prop. 66, 2001) specifies that the reporting of HEs' financial information must follow the private sector's accounting norm system (the Accounting Act). However, the 2002 health care reform took place three years before the opening of IFRS (2005) to Norwegian companies. Therefore, the Health Enterprise Act only refers to the national norm system based on the Norwegian Accounting Act and its related standards.

### ***The process of translating the private sector's accounting norms into the Norwegian health care setting (2001-2007)***

In this study, accrual accounting's implementation in the Norwegian health care setting is viewed as a translation process. In this process, the central government (CG), represented by the Ministry of Health and Care Services, is defined as the central agency in charge of the implementation. Accrual accounting is viewed as an innovation, as it was introduced as a complete framework for the first time within the Norwegian public sector. However, accrual accounting's implementation was limited to the Norwegian health care sector. At the macro

level, the CG still operates within a cash accounting context. As such, accrual accounting's translation is conditioned by the contingencies of the CG, such as yearly budget allocations and limited resources. As a result, the CG tried to carry out the implementation of accrual accounting by focusing on the centralized control component of the 2002 health care reform instead of highlighting the beneficial characteristics of the accrual accounting innovation, which include the ability to show all hospital costs in order to improve local decision making.

Several categories of actors (including nonhuman elements, such as strategy documents) are described in this section. These were chosen as representative actors in the translation of the private sector's accounting norms. These actors are the lens through which documents are structured, described and analyzed to explain the final outcomes of the process.

Political actors are the first category. They played a prominent role in the adoption of accrual accounting. Furthermore, they strongly influenced the outcomes of the translation of the private sector's accounting norms, including the rejection of the 2004 accounting regulation proposal.

The second category of actors is the central government's administrative personnel in charge of the translation of accrual accounting into Norwegian health care. In this study, "central government" is referred to as a legal person, i.e., an actor in the modern institutional order (Czarniawska et al., 1996). In this manner, the central government is viewed as capable of cognitive action – the ability "to make comparisons and judgements and to act according to desires" (Czarniawska et al., 1996, p.49). The central government's actors are a small entity of employees from the Ministry of Health and Care Services. However, close collaboration between the Ministry of Health and Care Services and the Ministry of Finance is assumed in this study given the technicalities of the translation of private sector accounting norms and

because the Ministry of Finance is responsible for the consolidation of the financial statements from all sectors at the national level. The collaboration is not directly traced in the documents studied, as those documents mainly come from the Ministry of Health and Care Services. However, the collaboration is indirectly corroborated because the Ministry of Finance, unlike all others ministries, did not contribute an answer to the consultative round concerning the 2004 accounting regulation proposal. As such, it is understood that the calculations and technical argumentations for the proposal came from the Ministry of Finance.

The third category of actors includes two types of professions. The first, the *accounting profession*, encompasses the auditing companies and their auditors, which provide expertise in private sector accounting to the CG. This group also encompasses the Norwegian accounting community, which is principally represented by academia and the Norwegian Accounting Standard Board (NASB). The accounting community's expert opinion was an important contributor to the consultative round for the 2004 accounting regulation. The second type of actor in this category is *building experts*, who were drawn into the translation process because the CG needed support for its own translations of private sector norms based on alternative calculation methods. Building experts were also hired by the HEs to value their fixed assets. Furthermore, this category includes the actants (nonhuman elements) – mainly accounting artefacts or inscriptions – involved in the translation process. The artefacts are the different accounting frameworks rationales (private versus public) as well as the respective calculation methods presented by the central government and the accounting profession to support their own views.

The description and analysis of the tedious process leading to a new national health care norm system are structured in this paper in five “phases”, which represent the different translations

that were successively put forth by the actors involved. The successive stages illustrate the complexity of the translation process, a complexity that arose because actors with different rationales and contingencies tried to impose their own translation.

Phases	Content	Time	Issuing agent
<b>Phase 0, Model 0</b>	No depreciation costs at the hospital level  (modified cash accounting)	June  2001	Former owner (counties)
<b>Phase 1, Model 1: RC</b>  Verbatim translation of private sector accounting norms	Based on the Norwegian Accounting Act (accrual accounting)  <b>Method:</b> Replacement cost (RC) as a proxy for acquisition cost	Autumn  2001	Accounting experts (private sector auditing company)
<b>Phase 2, Model 2: BAD 1</b>  Budget adapted depreciations  Translation adapted to CG budget contingencies	Based on cash accounting  <b>Method:</b> Budget adapted depreciations (BAD 1) based on past allocated investment revenues	2003	CG (Ministry of Health and Care Services)
<b>Phase 3, Model 3: BAD 2</b>  Budget adapted depreciations  <a href="#">Translation adapted to CG budget contingencies, but a compromise between Models 1 and 2</a>	Mix of accrual and cash accounting  <b>Method:</b> Budget adapted depreciations (BAD 2) based on three-quarters of replacement cost	2004	CG (Ministry of Health and Care Services)
<b>Phase 4, Model 4: BAD 3</b>  Budget adapted depreciations  Coercive model: translation presented as a mandatory accounting regulation	Mix of accrual and cash accounting  <b>Method:</b> Budget adapted depreciations (BAD 3) based on two-thirds of replacement costs only for fixed assets prior to 1 January 2002  (Assets purchased after 1 January 2002)	2004/  2005	CG (Ministry of Health and Care Services)  Departs from accrual accounting framework: two different methods to value fixed assets before and after 1

	follow the Norwegian Accounting Act)		January 2002)
<b>Phase 5, Model 1: RC FINAL – Implemented</b> Verbatim translation of private sector accounting norms	Based on the Norwegian Accounting Act <b>Method:</b> Replacement cost as a proxy for acquisition cost	1 May 2005	Accounting experts (auditing company) supported by accounting academia, politicians, RHE and HE leaders

Table 1. Five phases over the translation.

Table 1 shows an overview of the accounting models presented during the five phases of the translation process. In each of these phases, the focus was on which method should be chosen to value HE assets and calculate depreciation costs. Different suggestions to accounting models sprung out of these phases. These suggested models (numbered from 1 to 4 in Table 1) were transformed or rejected at the end of each phase as a result of the interactions of competing groups of actors. These groups of actors used rhetoric based on different rationales, which were supported by specific accounting inscriptions. Through the rhetoric, the groups tried to impose their own views by winning over those who were reluctant to adopt the proposed model. Throughout the process, the main actor, the CG, tried to settle controversies about the new accounting norms by presenting hybrid accounting models in order to enrol opposing groups and control the process outcomes.

Any accounting model (private or public) rests on an accounting framework that structures and orders accounting information according to its own rationale. Hendriksen and Van Brenda (1992) argue that accounting concepts are merely artefacts of accountants with little or no interpretational significance for real world phenomena. As a result, accounting is socially constructed and cannot be viewed as a neutral tool that orders financial information in an objective manner. Accounting can be understood as an instrument “contributing to the construction and maintenance of organizational order” (Robson, 1991, p. 547). Therefore, the

outcomes of the process of translating private sector accounting norms to national health care accounting norms are contingent on the respective goals and interests of the actors involved. As a consequence, one would expect the power balance between groups of actors with different views to influence the choice of the methods used to value HEs' fixed assets and the depreciation costs imputed to the HEs.

The methods chosen formed the basis for the new accounting norms ("how accounting should be"). Accounting norms then guided the recognition and measurement of the elements included in HEs' financial statements. Therefore, the norms had a bearing on HE performance – their efficiency – measured in financial terms. The efficiency of HEs thus depended on the choices made during the norm-setting process. Moreover, the new national health care accounting norms should serve as the basis for the development of local norms and accounting practices within the regional health enterprises (RHEs), albeit in accordance with their own management and accounting systems (Social and Health Department, 2001, p. 1, 3).

### ***The adoption of accrual accounting within the Norwegian health care setting***

The 2002 Norwegian Health Care Reform, which introduced accrual accounting into Norwegian health care, followed an ambitious schedule. Only six months separated the adoption of the reform (June 2001) from its implementation (January 2002). As of 1 January 2002, the health care sector was expected to follow the Accounting Act for private companies. However, this meant that the hospitals' assets had to undergo a valuation, a requirement that was not discussed before the implementation became a reality.

During the political process, accrual accounting had been assimilated, in Callon's terms (1981), as a black box (Robbestad, 2011). Accrual accounting promised increased efficiency through the visualization of all hospital costs (including depreciation costs). As a result, accrual accounting was expected to enable benchmarking between hospitals and improve the basis for decision making. However, the black box of accrual accounting was kept hidden within the HE organizational model during the political process to ensure the passing of the reform within the desired time schedule. Consequently, all of the challenges associated with translating private sector accounting norms (the private sector Accounting Act) into public sector health care norms were not addressed.

As soon as the reform was passed, administrative actors took over from political actors. The CG, represented by the Ministry of Health and Care Services, was the central agency in charge of the implementation process. However, neither hospitals, which used modified cash accounting (Model 0 in Table 1) nor the CG, which used another modified cash accounting framework, had the accounting expertise necessary to accomplish the translation of the private sector's accounting norms, including the valuation of hospital assets, to the public sector in order to determine the cost of capital. Therefore, the CG brought in external expertise in the form of private sector auditors – the “big four” – to undertake the valuation of the hospitals' assets. In turn, the auditors issued an opening balance sheet accounting guideline for the HEs (Social and Health Department, 2001).

### **The first phase of the translation process: Model 1**

Soon after the adoption of the 2002 health care reform, the auditing companies issued an accounting guideline that listed the assets to be incorporated in the HE balance sheets and described the valuation rules that were to be followed. The auditing company's accounting model (called Model 1) recommended the use of replacement cost (current value) for the valuation of fixed assets with a deduction for wear and tear. The replacement cost method was a proxy for the acquisition cost method, which is the valuation method used in the private sector (Norwegian Accounting Act §5.3). The valuation of fixed assets was undertaken in collaboration with building experts. The analysis based on this model gave an estimated total value of NOK 116 billion for the HEs' fixed assets. Of this amount, the depreciation costs were NOK 5 billion.

If the CG accepted this model, it could choose between giving the HEs the same amount of money as in previous years, which would increase the budget deviation by NOK 5 billion (if efficiency was not significantly improved), or increasing revenue (an allocated resource) by NOK 5 billion in the hope that the HEs would save the funds for future investments and not use them for daily operations. Instead, the CG rejected the model. Most likely, the CG realized that the valuation of HE fixed assets based on Model 1 would be much higher than budget allocations allowed from the Ministry of Finance. In other words, the Health Ministry did not have enough resources to allocate to the HE. The auditors' valuation model would therefore result in large deficits for the HEs, as the income would remain the same, while the depreciation costs would be added to the usual costs. This, in turn, would send a negative political signal, as the new health reform had been introduced to signal that the government was trying to get the costs in the health care sector under control.

As a result, the CG decided that the opening balance had to be based on other criteria. Meanwhile, it created a temporary opening balance sheet that was to be used until the final valuation was complete. This temporary valuation was decoupled from the final valuation (KHD, May, 9, 2003, p.1). As a consequence, the HEs had two income statements: one based on the auditors' opening balance and one based on the temporary valuation. With the temporary valuation, the CG was able to charge the HEs yearly depreciation costs corresponding to the budget allocations.

## **The second phase of the translation process: Model 2**

The second phase of the translation process started with a new accounting model suggested by the CG, which contested Model 1. According to the new model, called Model 2 (see Table 1), the HEs' fixed assets were valued at an estimated NOK 45 billion. This valuation was about 60% lower than the previous valuation based on Model 1. The calculation techniques behind Model 2 were based on past-allocated revenues in order to match the CG's yearly budget allocations for the HEs. The CG's accounting model was presented in an appendix to the yearly 2003 steering document (Ministry of Health and Care Services, May 2003).

Model 2 was designed to control the HEs' increasing budget deficits by artificially matching the HEs' capital costs with allocated budgets. However, the CG did not seem to reflect on the requirements implied by the model. If the model was taken seriously, it implied that the real cost of future renovation and construction would have to be covered through a 60% improvement in HE efficiency. However, the CG could not force HEs to save for these future investment costs. One risk associated with the increased allocation of resources (revenues) is that the HEs would not save any financial resources but would instead only increase spending,

as they could not go bankrupt. The HEs could then speculate on the fact that the CG would probably have to give them more financial resources when a hospital building needed renovation or rebuilding in the future.

In this regard, the translation process can be understood as a game between the CG and the HEs. The CG tried to force the HEs to increase efficiency, while the HEs tried to use their new autonomy to decide whether the resources should be used for investments or daily operations.

In ANT terms, the CG reopened the accrual accounting black box by introducing a new valuation method (Model 2) in order to frame the translation of private sector accounting norms within national budget contingencies (letter from the CG to the RHEs, 9 May 2003, page 1). The CG's valuation of the HEs' fixed assets was based on the amount of expected revenues allocated through budgets to cover depreciation costs (Royal Proposition Number 1, 2003-2004). Past allocated investment revenues were proxies for the value of the HEs' total fixed assets.

To justify the lower valuation of the HEs' fixed assets, the CG argued that the recorded value of fixed assets could not be higher than the net realizable value according to the Norwegian Accounting Act (§5-3). For the CG, its own valuation was a proxy for the HEs' net realizable value. However, the calculation methods used in Model 2 were not based on private sector accounting norms, as the existing legislation relied on methods such as acquisition cost or replacement cost. Furthermore, the CG's calculation methods were not recommended in common accounting practice, such as the present value method, which is based on future expected revenues. Therefore, the sole purpose of Model 2 was to channel the new health care

accounting norm system from a national budget balance perspective. As such, we refer to Model 2 as budget adapted depreciations (BAD) 1. From an accounting perspective, it was a bad model.

In addition to the CG's own accounting model (Model 2), the CG tried to transform the content of Model 1, which was issued by the accounting experts, in order to reduce the gap between its valuation and the CG's budget allocations. The CG's rhetoric was based on two arguments designed to convince the reluctant accounting experts to make adjustments to their calculations. The first argument focused on the suggestion of replacing the concept of the economical lifetime of fixed assets with the concept of the technical lifetime of assets (Parliament Proposition No.1, 2003-2004, Box 1.1). This would extend the lifetime expectation for buildings by ten years and, as a consequence, reduce the yearly depreciation costs. However, the building experts did not support this view. Therefore, the CG introduced three additional concepts to weaken the building experts' recommendations, as those recommendations did not fit the CG's budget rationale. The first concept was called *utility value*.<sup>5</sup> The *utility value* concept represented the value of HE fixed assets and included two other concepts: "taxation decided by the the building experts" and "past investments expressed through 1990s' budget allocations". The CG's rhetoric was that the independent building experts' valuation "did not build on sufficient assumptions to form the sole basis of an optimal utility value of HE fixed assets", which would fit budget contingencies (25 March 2004, p.2). In other words, the CG suggested that the accounting and building experts lacked the requisite knowledge about the specificities of public sector's fixed assets and, therefore, their recommendations could be questioned.

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<sup>5</sup> Letters from the Ministry of Health and Care Services to the RHEs, 16 February 2004 and 25 March 2004.

Through the ANT lens, this move by the CG can be viewed as the introduction of an actant called “utility value” that combined two other actants – “taxation from the building experts” and “past investments expressed through 1990s’ budget allocations” in the valuation of HE fixed assets. By combining different actants, the CG tried to convince experts (such as auditors, building experts and academia) to accept its view on the best structure for the new accounting norms.

The second argument used in the CG’s rhetoric was that budgeted depreciation costs had been estimated at NOK 2.8 billion rather than the NOK 5 billion estimated in accounting Model 1. This argument was based on an earlier Royal Proposition (Parliamentary Proposition No.1, 2001-2002). The NOK 2.8 billion corresponded to expected allocated revenues calculated as “the average amount of investment within health care in the 1990s”. However, this amount did not include future investments. Furthermore, the CG introduced a new accounting concept called “adjusted income”. According to this new concept, most of the depreciation costs not covered through budget allocations could be retrieved from HE income. The new concept would therefore reduce the financial pressure on the HEs, as adjusted financial figures would be closer to the CG’s balanced budget targets. In other words, the HEs had two income statements: “the adjusted income” statement, for which they were accountable, and the income statement, for which they not were accountable.

According to the ANT terminology, the “adjusted income” concept can also be seen as an actant. It helped to reduce the CG’s financial demands on the HEs and, in so doing, it helped to convince reluctant actors that the CG’s translation was the right one because it secured both the CG’s and HEs’ interests. Both parties wanted the same outcome but for somewhat different reasons; the CG wanted budgets in balance in order to show that they had control,

while the HEs did not want to significantly increase efficiency because doing so would have a negative effect on quality.

### **Phase 3 and Model 3: The CG's compromise**

As the second model did not convince the accounting professionals, the CG proposed a new model to narrow the gap between the CG's own translation (Model 2 – BAD1), based on expected allocated revenues, and the accounting experts' model, based on replacement cost (Model 1). The new accounting model (Model 3 – BAD2), which initiated a third phase in the translation process, was presented as a compromise between the two previous models. With Model 3 – BAD2, the value of the HEs' fixed assets would be estimated at 75% of their replacement costs, giving a total value of approximately NOK 85 billion. Furthermore, the final valuation would be lower because of wear and tear since the first valuation (done in 2001, so this is three years later). Moreover, according to Model 3 – BAD2, only increased efficiency at the HEs would counterbalance the future higher depreciation costs due to the replacement of existing fixed assets.

In 2004, new accounting documents were sent to the RHEs as a result of the CG's latest translation (documents dated 16 February 2004 and 25 March 2004). These documents were based on the 2003 Proposition and on the CG's budget documents (B Innst. No. 11, 2003-2004). According to the documents, any amount of fixed assets greater than 75% of the replacement cost value would be recorded separately as a tied-up reserve under subscribed capital as a counterpart. The corresponding excess depreciation costs would then be recorded towards this reserve as an allocation of net income. This can be understood as indicating that

the CG did not trust the HEs to save money for future investments. Instead, the CG felt it had to force the HEs to save money in a reserve.

The calculation techniques behind Model 3 were based on private sector accounting norms and referred to the replacement cost method in valuing the HE fixed assets. However, the calculation techniques still followed a budget contingency rationale, as the model limited the valuation of fixed assets to three-quarters of the total replacement cost value. This random three-quarters limitation was not based on recommendations from accounting practice and was only promoted to fit the CG's budget allocation contingencies.

Once more, the new CG model (Model 3 – BAD2) failed to persuade the reluctant actors (accounting experts). Therefore, the CG took a drastic step. It developed a new translation, which it presented as a mandatory accounting regulation. The political pressure on the CG was now enormous, as the HEs' accumulated deficits were growing out of control, partly due to the new burden of depreciation costs. In the media, the health enterprise model was questioned because the deficits had only increased since its implementation.

#### **Phase 4 and the CG's obligatory point of passage (Model 4)**

In the fourth phase, the translation process took a drastic turn. The CG's argumentation for its new translation – Model 4 – was the following: "...It is necessary to introduce specific accounting regulations for the HE fixed assets repossessed at the time of the reform in order to use the financial statements as performance measurements according to the terms that are the basis of the parliamentary yearly budget resolution" (introduction letter to the consultative round, p. 2). This means that the CG used a budget contingency rationale to legitimate the fact

that Model 4 – BAD3, which was presented as an accounting regulation, was actually an exception to the Norwegian Accounting Act's valuation rules for fixed assets (§5.3), which recommended the use of the *acquisition cost method*. According to the new regulation, the value of the HE fixed assets purchased before 1 January 2002 would be estimated at two-thirds of total replacement cost value.

The rhetoric behind this translation was similar to the rhetoric used in the 2003 Royal Proposition (Parliamentary Proposition No. 1, 2003-2004). According to the regulation (Model 4 – BAD3), the new national health care accounting norms would be de-coupled from the private sector accounting norms. This move was designed to fit the public sector's budget contingencies, particularly the cash accounting model which have a one-year perspective.

As with Model 3, Model 4 used a method recommended in accounting practice (replacement cost as a proxy for acquisition cost). However, both models added arbitrary calculation techniques (three-quarters or two-thirds of replacement cost) in order to adjust the methods to the CG's rationale for national budget allocations. The choices of three-quarters or two-thirds of replacement cost had never been used before, nor were they recommended in accounting practice. Although Models 3 and 4 were derived from methods recommended in accounting practice, they were translated from the private sector's accrual accounting model to fit the public sector context. While the models were constructed to incorporate accrual accounting elements in order to win over the private sector accounting experts, they still fit the CG's aim of balancing the budget.

In the short term, the purpose of the accounting regulation (Model 4 – BAD3) was to give the CG control over health care expenditures by suppressing one-third of the value of the HEs'

total fixed assets from their balance sheets. Hence, the burden of depreciation costs would be reduced and the HEs' performance improved. Furthermore, Model 4 – BAD3 went one step further than Model 3- BAD2. It departed from the general accounting principles of the accrual framework with regards to comparability because Model 4 – BAD3 used two types of measurement methods (before and after 1 January 2002). Moreover, if Model 4 – BAD3 was passed as a mandatory accounting regulation, it would allow future translations whenever the CG needed to make adjustments to fit public sector contingencies. Hence, the Accounting Act could be viewed as unnecessary, as the CG could make adjustments when it so desired.

In the autumn of 2004, the accounting regulation (Model 4 – BAD3) was addressed in a consultative round. In their responses (37 in total), the opponents (accounting experts, the RHE and the HE leaders) stated that the CG's translation did not place enough emphasis on the decision-making function of accounting, which was one of the main goals behind the reform. In ANT terms, the opponents to the CG's translation used the *accrual accounting framework* (the Accounting Act) as an actant within their actor network to emphasize the fact that strictly following private sector accounting norms improved decision making. For these opponents, only accrual accounting could show the real performance of the HEs in financial terms.

Two arguments for a sheer accrual accounting model (like Model 1) were made. The first argument relied on the concept of *transparency*. Only full compliance with the accrual accounting model could show the real capital costs and consequently provide the best basis for assessing the HEs' budget allocation needs (the National Audit Office's reply to the consultative round). The second argument referred to the accrual accounting framework and

the qualitative characteristics of accounting information, such as *reliability*, *comparability* and *consistency* (Tellefsen et al., 2005 p.131).

Opponents to the CG's translation stated that the accounting information could not be reliable or comparable, as two different types of measurement were to be introduced (before and after 1 January 2002). In fact, the accounting regulation (Model 4 – BAD3) would have prevented comparisons not only between the public and private sectors, but also within the public sector (health care), as two different methods could be used to value the HEs' fixed assets. Fixed assets purchased before 1 January 2002 would only show two-thirds of their value, while similar assets purchased after 1 January 2002 would follow the regular valuation rules of the Norwegian Accounting Act (§5.3). In addition, the CG's accounting regulation was inconsistent because two different methods (before and after 1 January 2002) could be used within the same HE to value fixed assets.

In ANT terms, the accounting academia employed another powerful *actant* to reject the CG's translation: the concept of "earnings management". According to this group of actors, the accounting regulation (Model 4 – BAD3) would give public sector entities an advantage over the private hospitals by excluding some of their capital costs from the financial statements. As a consequence, the regulation would artificially improve HE performance (replies to the consultative round from the Norwegian School of Economics and Administration, and the Norwegian Auditors Association). Despite the scepticism expressed by Norwegian accounting experts, as well as the RHE and HE leaders, the accounting regulation was submitted to Parliament in March 2005 as an amendment to the Health Enterprise Act (Ot. Prop. No. 56, 2004-2005).

## **The CG's network disintegrates: Back to Model 1**

This phase is characterised by the CG's failure to move the process towards the desired outcome of budget control. The accounting regulation (Model 4 – BAD3) was first presented at a Cabinet meeting (18 March 2005), where it was approved for submission to Parliament. At that time, the government was run by the Christian People's Party, which had voted against the health care reform in 2001. Consequently, political actors backed up the CG's translation (model 4 - BAD3), as it weakened the introduction of the private sector's mechanisms to the management of health care in general and accrual accounting's role in particular. Nonetheless, the support from political actors in the CG's network for Model 4 BAD3 disintegrated when the regulation was debated in the social committee in Parliament. The leader of the social committee belonged to the right-wing Progressive party and had been one of the dominant actors in helping the Labour Party to pass the reform in 2001.

In ANT terms, the social committee added a new actant – “patients' health supply” to the rhetoric of the accounting academia network, thereby strengthening the arguments against the accounting regulation. The social committee felt that a valuation of the HEs' fixed assets that was lower than their actual value would result in a growing lack of maintenance. Such a valuation would also prevent necessary reinvestments and therefore threaten the supply of health care services in the future.

In May 2005, the accounting regulation (Model 4 – BAD3) was rejected by the social committee (Innst. O. No. 93 2004-2005). The committee stated that the rejection was a consequence of the uniform criticism articulated in the responses submitted in the consultative round.

As a result, after four different translations, the valuation of the HEs' fixed assets for the HEs' 2002 opening balance sheet was the same as that presented in the first translation (Model 1). This valuation was based on the replacement cost valuation method, which was recommended by accounting experts in the initial translation (Model 1). The method fully complied with private sector's accounting norms, such as the Norwegian Accounting Act and the related national accounting standards. As a consequence of the Parliamentary resolution, the CG increased the HEs' investment allocations from 80% of depreciation costs in 2007 to 100% in 2008 (Parliamentary Proposition No. 1 2007-2008, p. 119). In so doing, the CG finally acknowledged that the new national health care accounting norms would be based on private sector accounting norms. As a result, in 2007 the "adjusted income" concept was suppressed from the HEs' financial statements.

This could be viewed as increasing the pressure from the CG on the HEs' financial accountability, as the HEs now had to follow private sector accounting norms. However, this was not completely true. As the CG used the valuation from 2001 (six years previously), the amount of the valuation was relatively low. As a result, the CG increased the allocated resources (revenues) to the HEs that year (2007). Therefore, in the end, the CG succeeded in using Model 1, which allowed for nearly balanced budgets and ensured savings for future investments.

In summary, the process of translating private sector accounting norms into public sector national health care accounting norms was a complex process because the CG focused on translating the norms to fit the boundaries of existing health care budgets. As such, the CG translated the private sector norms into three different accounting models (Models 2 to 4). The

progressive transformation from Model 2 to Model 4 aimed at convincing reluctant actors, but always within the boundaries of the budget. Only Model 1, which was presented by private sector accounting experts, was based solely on private sector norms. That initial model was the model finally implemented after the CG failed to build an actor network strong enough to control the process outcomes.

## ***Conclusion***

The aim of this study is to describe the translation process(es) involved when accrual accounting was introduced into the Norwegian health care sector and to analyze and to analyze how actors build networks to control the process (es) in order to increase our understanding of the consequences the process(es) can have for the accounting model. As such, the study was limited to the study of the translation of private sector accounting norms into national health care norms. Furthermore, it focuses on the roles and influence of heterogeneous networks of human and nonhuman actors. The empirical study use actor-network theory (ANT) to describe how different actor networks used calculative devices to control the translation of private sector accounting norms into the new public sector setting.

The study offers two main findings. The first finding relates to the fact that the translation of private sector accrual accounting into the public sector was highly complex since the framework only were implemented in health care and no other sectors, leading to different forms of accounting regulations in different parts of the state. The second finding relates to the fact that the financial statement continuously changed throughout the translation process, as actors with different needs and rationales could not agree. While the accounting profession hold on a verbatim translation of the Norwegian accounting act to construct the financial

statements, the CG only focused on finding an acceptable financial statement without increasing the sector's budget allocation.

## **De-contextualisation and complexity of the translation processes**

Our first finding shows that during the introduction of the 2002 Norwegian health care reform, the Minister of Health and Care Services promoted the benefits of accrual accounting by de-contextualizing it. However, this de-contextualization was problematic when accrual accounting was implemented in the new setting. As a consequence, the process of translating private sector accounting norms into national health care norms was complex and was characterised by a five-phase translation showing how actors build competing networks based on different rationales.

The new accounting national health care norms (Model 1) were the consequence of the collective action of the accounting profession (Latour, 1986). Although the model at the end of the process was the same as the model at the beginning, the process itself was very important. The construction of the new norms created a learning arena for the different actors. In the beginning, the public sector actors did not know much about the private sector accounting norms and tried to derive an easy solution in order to allow the system to continue functioning almost as it had before. The CG attempted to keep the process of adopting new national health care accounting norms within existing national budget contingencies. Instead of accepting the opening balance calculated by the auditors, the CG tried to change it to fit the financial resources it wanted to allocate to the health care sector. Furthermore, the study highlights how actants, such as the different accounting models, were used by the CG to exert control at a distance (Miller, 2001; Robson, 1992; Law, 1986).

In the first phase of the process, the external accounting experts set up the framework of the translation by presenting calculation methods (Model 1) in accordance with the accrual accounting framework (the Accounting Act). However, the central agency (CG) did not accept this framing, as Model 1 implied additional allocations to the health care sector. As these allocations were higher than existing budgets allowed, the CG understood that acceptance of the model would result in the HEs creating large budget deficits.

Therefore, the CG disturbed the translation process in Phase 2 by creating “overflows”. In this phase, the CG introduced a new calculation method (Model 2) based on a cash accounting rationale of budget contingencies. However, this re-framing attempt was rejected by accounting experts.

In the third and the fourth phases of the process, the central agency (CG) tried repeatedly to frame the translation of accrual accounting within its budget contingencies (Models 3 and 4). In Phase 3, the CG showed a desire to reach a compromise in the form of a new model that mixed elements from both the accrual and the cash accounting rationales. When Model 3 was rejected, the interest between the different parts in the network was conflicting. Model 4 took the form of a mandatory accounting regulation that would force the translation process towards the CG’s aim of budget control. However, new overflows were created because emerging groups (accounting academia and health care leaders) criticised the model. Political actors backed up these emerging groups and rejected the accounting regulation. The CG’s final framing attempt failed.

Furthermore, during the fourth phase of the translation process, the CG adopted a black box strategy. When the CG failed to convince reluctant actors by presenting complicated calculation methods (Models 2 and 3), the CG tried to black box the whole translation within

an accounting regulation (Model 4). Moreover, the accounting regulation would have allowed for future translations steered by the CG's needs. As found in Skærbæk et al. (2004), black boxing is associated with power. In the Skærbæk et al. (2004) study, accounting devices are used as black boxes, where the content is hermetically sealed because detailed knowledge could endanger the desired outcome of the strategy process. This finding is also confirmed in previous health care studies that focus on the relationship between the complexity of the black box and power (Lowe, 2001; Lowe, 2000; Chua, 1995; Lawrence et al., 1994; Preston et al., 1992). However, in our study the CG failed to keep the black box closed and the CG's political failure led to a loss of decision-making power related to how the new accounting norms should be structured.

Consequently, the translation of accrual accounting was reframed based on the accounting experts' initial model (Model 1), which was a verbatim translation of the private sector's accounting framework. This unexpected turn led to the adoption of new national health care accounting norms in accordance with one of the two aims of the 2002 Norwegian health care reform – to improve local decision making by visualizing all costs (Minister of Health and Care Services' speech, 5 February 2001).

The eventual outcomes of a translation process reflect the comparative strength of two competing actor networks. In this study, the CG's network became unstable because the accounting models (and the related methods) were continually transformed with the goal of reaching a compromise and convincing reluctant accounting experts. However, the accounting experts' network grew stronger because its rhetoric was consistent throughout the process, a consistency that promoted a verbatim translation aimed at improving decision making.

As in Christiansen et al. (2007), this study focuses on the role of central agencies that use accounting devices to translate private sector mechanisms according to their needs and interests. However, contrary to Christiansen et al.'s (2007) finding that central agencies can succeed in transforming an innovation according to their information needs, our study shows that the central agency could not impose its view because it failed to convince political actors. In fact, the CG in our study had to return to the first model and find other solutions in order to handle the initial control problem. This was achieved by decreasing the autonomy of the HEs through such elements as increased reporting requirements and controls on loans, and by forcing them to save for future investments.

The second finding shows how the central agency (CG) focused on fulfilling its own interests by using the financial statement in as ways that did not reflect the private sector accrual accounting framework. For the CG, "financial statements" were viewed as tools that could be used to control budget allocations within the health care sector and, as such, to limit the use of public resources. In contrast, for the auditors and the emerging stakeholders, "financial statements" were tools to be used to visualize the financial situation of the HEs in order to provide accurate information about all health care costs. For these groups, only accrual accounting could fulfil this purpose and provide a sound basis for decision making. This situation can be understood as the CG trying to play a new game within a new context while the private sector auditors were trying to create a true valuation in order to help decision makers active in health care. In this regard, it can be viewed as a collision between political and accounting (professional) rationales.

The CG does not take into account the needs and aims of other users, such as accounting experts or HE managers and as such fails to build a strong network which will secure its view.

The calculative devices are tools to in the CG's power struggle instead of "an organizing rationale around which debates can take place" (Miller, 2001, p. 386). By calculative devices, we mean the different models leading to the different financial statements. Until the new accounting norms were settled, the HEs had one income statement based on accrual accounting and one based on the "adjusted income" statement (adapted to the budget frame). The "adjusted income" statement was used by the CG and therefore also by media. As a consequence, the CG succeeded in showing the population a budget situation that was better than the actual situation.

The different understandings of the aim with the financial statement are the reason why the financial statements, such as the balance sheet, fail to reconcile the different needs and views of stakeholders. As such, this study supports the findings of Skærbæk et al. (2010), in which accounting devices (calculations methods) shaped rationales that promoted the various goals and interests of actors with opposing views. Paraphrasing Perkins (1996), this study unravelled the CG's "skilled ongoing act of manipulation" to impose a rationale based on budget control contingencies. In this study, accounting devices are viewed as flexible, non-neutral tools that serve the conflicting purposes of human agency (Chua, 1995).

Accounting norms are the basis on which financial statements are prepared. In this respect, the financial statements visualize the HEs' performance when measured in financial terms. However, the contents and purposes of financial statements vary according to the accounting framework on which they are based. As such, financial statements can be flexible. This adaptability and flexibility comply with the definition of "boundary objects" (Leigh Star and Griesemer, 1989). The study's findings draw attention to the role of financial statements as boundary objects. In contrast to previous studies, however, this study shows that financial

statements as boundary objects failed to bridge different worlds based on different accounting rationales (Emsley, 2008; Åkerman and Peltola, 2006; Briers and Chua, 2001; Leigh Star et al., 1989).

This study also highlights the differences between the private and public sector contexts. The main role of the financial statement is two-fold, according to accounting textbooks. The financial statement's first function is to provide company decision makers with the information necessary to make the right prioritizations in terms of daily operations and investments. Prior to the introduction of the new system, the priorities in the Norwegian public sector were decided by the government, while the hospitals did not have much input. The costs of capital were unknown. To give HEs the authority to decide whether to prioritize investments or daily operations was not easy for the CG. The translation process shows that the level of trust between the CG and the HE was low. However, since the government had experienced that the HE promised to get budgets in balance but continued to have large budget deficits, this was to be expected. The second function of the financial statement, in form of an income statement, is to help investors decide whether they should invest in the company. Therefore, it is important for investors to have truthful information. As this role is not necessarily the same for the public sector, it seems to have been difficult for the CG to understand why it had to focus on truthfulness. Instead, the CG wanted to create pressure on the HEs to construct a cost-efficient health care network within the existing allocation frame.

This study increases our understanding of the challenges related to the introduction of private sector norms to the public sector. When accrual accounting is introduced in the public sector, it is often introduced in a hybrid form depending on various contextual factors, such as culture or structure (Pina et al., 2003), or the nature of the relationships between central and local

authorities (Pettersen, 2004). Many other forms of country-specific hybrids have been implemented (Olsen et al., 2007). Our study focuses on Norway's pursuit of a pure accrual accounting version. However, the Norwegian efforts have not been very successful with regard to the decision role of the financial statement, as the CG controls the HE in other ways. The issue, therefore, is not whether accrual accounting is the most appropriate accounting framework but what role the HEs should have. How much autonomy should they be granted and how should they obtain the information they need to make good decisions?

One interesting issue for future research would be the types of information that are used to prioritize daily operations or investments. In other situations, has there been more room for making such decisions? Furthermore, researchers may wish to investigate whether the HEs act as responsible actors or whether they are just playing another game with the CG.

## Appendix 1

### Accounting models in Norway (excluding public health care)

<b>Accounting Models</b>	<b>Central Government Accounting (CG)</b>	<b>Local Government Accounting (LG)</b>	<b>Private Sector Accounting (PS) (excluding listed companies that follow IFRS)</b>
Regulatory Framework	Norwegian national constitution with numerous guidelines and circulars	LG Act (KL) and accounting regulation (FOR 2000) with generally accepted LG accounting principles (GALGAP)	Norwegian Accounting Act (RL) and accounting standards (NRS)
Purpose of Accounting	Parliamentary control of public expenditure NON-PROFIT	Control of public expenditure NON-PROFIT	Useful information for decision making PROFIT (wealth creation)
Steering Accounting Principle	CASH accounting principle with exceptions	CASH modified (cash and accrual elements)	ACCRUAL
Techniques	Complicated (Bourmistrov et al., 2005, Table 1, page 254)	Mixed techniques from CG and PS	Consistent techniques with exceptions according to principles and qualitative characteristics
Revenues/ Expenses Concepts	Focus on inflows/outflows	Focus on inflows/outflows with exceptions (depreciation)	Focus on future economic benefits
Recognition Revenues  Expenses	Cash payments Cash (inflow)  Cash (outflow)	Current dues principle Immediate and later cash (inflow) Immediate and later cash (outflow)	Earned revenues (goods/services delivered)  Matched with revenues accrued (resources used)
Measurement	Value of the exchange (payment time)	Value of the exchange (payment time)	Value of the exchange (sales time)

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LAGGING GOVERNMENTAL PRACTICES AND DYNAMIC FINANCIAL MARKETS:  
HOW NORWEGIAN MUNICIPALITIES ENCOUNTERED FINANCIAL CRISIS – VIA  
GLOBAL FINANCIAL ENGINEERING AND MISPERCEIVED TRUST

Levi Gårseth-Nesbakk, PhD, Associate Professor

Both authors are affiliated Bodø Graduate School of Business, University of Nordland, Norway and Trondheim Business School, Norway.

Corresponding author: Levi Gårseth-Nesbakk (levi.nesbakk@hibo.no), phone: (+47)971 06 164/ (+47)755 17 695.

Frode Kjærland, PhD, Associate Professor

**ABSTRACT**

Historically, the management of financial resources in local governments (such as investments made in bonds, stocks etc.) has typically received little attention, despite the augmented attention on making the most of scarce resources at the municipalities' disposal. Still, other factors have impinged on the management of financial resources within municipalities. E.g., the supply and complexity of financial products have rapidly increased. Also, there has been a globalization of financial markets, meaning that securitization trends targeting local or segmented markets increasingly are spreading across markets and sectors, including also to the public sector. Hitherto, there is scarcity of research on this topic – despite the political and economic consequences that may follow from (problematic) handling of financial resources in local governments. This evoked the research interest and direction in this paper towards the following overall problem statement: What happens when global financial engineering is introduced to local governments? To tackle this overall problem statement, the following two research questions were formulated. Firstly, what happens when static regulation and practices intersect dynamic markets? (Referring in particular to the developments of financial markets, products and the inherent globalization trend seen in recent years). Secondly, how is global financial engineering (i.e. the financial packages) translated and framed locally? The frame of reference consists of transaction cost theory and mental accounting theory and the concept of framing inherent in prospect theory. This enables a discussion about the decision making processes taking place. Transaction cost theory also guides the discussion by emphasizing implications of outsourcing the financial investment and management function to others – as was done by Norwegian municipalities. Both of these components of the frame of reference aid in illuminating how the financial (Terra) scandal could unfold. Still, it is firstly when we combine the two theories that we are able at fully grasping the complexity of the structural transaction oriented elements of the case, and the particular local decision making processes. Predominantly, the Terra scandal emerged from a long series of misguided investments, inappropriate governance structures, overly reliance on trust, and simply bad luck. Combined, it was the recipe for financial disaster, leaving the municipalities with great financial losses, but also other severe impacts, such as the loss of trustworthiness and reputation. The research is based on document studies and interviews. The former is made up of regulation(s), critical reports published on the developments in Norway, but also historical documents and the media coverage of the Terra Scandal.

**Key words: Financial scandal, management of financial resources, TCT, framing, municipalities, Norway.**

# LAGGING GOVERNMENTAL PRACTICES AND DYNAMIC FINANCIAL MARKETS: HOW NORWEGIAN MUNICIPALITIES ENCOUNTERED FINANCIAL CRISIS—VIA GLOBAL FINANCIAL ENGINEERING AND MISPERCEIVED TRUST

## 1. Introduction

Historically, the management of financial resources in local governments (such as investments made in bonds, stocks etc.) has typically received little attention. Still, this topic has increasingly become more important with respect to the augmented attention given to the need to make the most of scarce resources at the municipalities' disposal. This relates to the increased demand for efficiency in public sector management (evident through e.g. the rhetoric of new public management [NPM] and new public financial management [NPFM], see e.g. Hood, 1995 and Olson et al., 2001). Even though NPM and NPFM have received much attention in research literature the ways in which municipalities go about managing their financial resources has received surprisingly little attention. Recent events have nevertheless made this a topic of increased concern. For instance, various changes have taken place during the last few years that have impinged on the frame of constraint within which municipalities manage their financial resources. E.g., more financial products are being offered, many of which are becoming increasingly more complex and intertwined. This trend has been referred to as "financial engineering". Complexity, change and turmoil are facilitated by the globalization of financial markets, meaning that securitization trends targeting local or segmented markets increasingly are spreading across markets and sectors, including also the public sector. Still, studying securitization in the public sector and especially globalized recipes of management of financial resources in government is long overdue given the severe consequences that may follow from (problematic) handling of financial resources in local governments. This solicits the question of what is written about this topic from before and what are the costs of not knowing about the diverse consequences that ignorance to this topic may bring about?

In their book about financial management for nonprofits, Shim & Siegel (1997) briefly hinted at what such ignorance could lead to. They namely referred to financial difficulties experienced by Orange County (located in the USA) some years ago, which subsequently spurred some research articles devoted to the Orange County scandal. Moreover, an issue of Research Brief (1998) stated the following:

"The Orange County bankruptcy: Who's next?"

That turned out to include a number of Norwegian municipalities, as was well described by financial Times (2007a, p. 1)<sup>1</sup>:

<sup>1</sup> We could of course have applied illustrations from many of the headlines in national Norwegian newspapers from this time-period. However, the Financial Times heading and text go straight to the core of what we want to discuss in the article and also show the severity of the issue at hand. It is namely not every day that Norwegian municipalities make the headlines of international press, certainly not the Financial Times, especially not page 1.

### **"Cold winds of global credit squeeze blow into remote Norwegian towns**

Few people in the remote Norwegian town of Narvik, 200km north of the Arctic Circle where the sun has disappeared until January, were likely to have given a lot of thought to the credit squeeze sweeping the global money markets - that is, until it threatened their wages over Christmas.

Narvik, along with three other similarly isolated towns of Hemnes, Rana and Hattfjelldal, has become the latest community to discover just how directly even the most remote places can be affected by the financial turmoil after it made multi-million dollar bets on complicated US-linked financial products. The towns invested about Dollars 96m (Euros 65m) in complex products linked to unspecified municipal bonds in the US, designed by Citigroup, and sold to them by Terra Securities, the investment banking arm of one of Norway's leading banking groups.

Now representatives of the towns have admitted that recent market movements linked to the credit crisis had destroyed most of the value of their investments."

Years later the involved municipalities are still struggling to cope with the financial aftermath of the Terra-scandal (NRK 2010). Yet, this is not an isolated Norwegian phenomenon. Similar incidents have been witnessed in other countries, including Sweden, Italy and Australia. Furthermore, in 2011, it became clear that Jefferson County in the U.S.A were on the edge of bankruptcy due to financial engineering of its sewer system that went terribly wrong as a result of the financial crisis (New York Times, 2011).

What has become vivid through these cases is the way that financial crisis has impinged on local government in many countries. This has clearly demonstrated an area that begs for research insight into the challenges faced by local governments in managing their financial resources, while facing global markets and creative financial engineering, assembled by big investment firms. Combined, this triggered us to study the management of financial resources at local government level in greater detail. In particular, we set out to answer the following overall problem statement: What happens when global financial engineering is introduced to local governments? To tackle this overall problem statement, the following two research questions were formulated. Firstly, what happens when static regulation and practices intersect dynamic markets? (Referring in particular to the developments of financial markets, products and the inherent globalization trend seen in recent years). Secondly, how is global financial engineering (i.e. the financial packages) translated and framed locally?

The paper's empirical contribution is to illuminate a phenomenon that has received little attention in the academic literature despite its tremendous political and economic consequences. The paper also illustrates ways in which local governments become exposed to tremendous complexity, brought about e.g. by financial engineering, difficult interpretations of the law vis-à-vis the dynamics of financial markets, but also the mixture of actors involved in orchestrating decision making, situated in particular, yet shifting (framing) situations. The paper is therefore cross-disciplinary in nature – spanning across fields like, finance, organizing (routines, setting up organizational units, allocating responsibilities etc.), trust, decision making and law. Albeit not of these factors are equally scrutinized at detailed levels, they cannot be ignored since it is these multiple and complex, yet fragile interrelations that bring about great challenges to the local government when things turn out differently than expected.

The paper's theoretical contribution consists of composing a framework that shows how both a frame of reference targeting individualistic decision making setting can be usually viewed from the more structural traits of the decision at hand, but also how fragile or easily affected the decision will be by the way in which the decision making setting is framed and the actors mental accounts.

The rest of the paper is organized as follows: Firstly the frame of reference is outlined (consisting of conceptual clarifications, literature on management of financial resources and the particular theories selected as the key analytical apparatus). Thereafter, the applied research method is explained, before describing the Norwegian case labeled the Terra scandal. The case is subsequently discussed and followed by the conclusions.

## **2. Frame of reference**

### *2.1. Conceptual clarifications*

#### **2.1.1. Management of financial resources**

What is coined “management of financial resources” refers to ways in which an organization (in our case municipalities) manages its financial assets and liabilities. This term includes topics within traditional financial investment literature (such as investment in stocks, bonds and various financial derivatives), but also what is often referred to as cash or liquidity management. The term also encompasses the liability side, dealing with matters like borrowing of funds for investment purposes, payments of principal amounts and interest rate payments, as well as various other kind

of debt structuring. The term –management of financial resources—therefore share several properties with the more established “financial management”, but is more limited in scope (e.g. by excluding capital budgeting, equity issues such as dividend payments). In very simple terms the term addresses—with respect to the asset side—how municipalities (in our case) manage their resources to obtain a certain level of financial return at certain risk levels. Regarding the liability side, typical questions faced by municipalities while conducting their management of financial resources include choices between short versus long term debt, interest rate levels, using (simpler form of) derivatives and the extent to which revenues or assets should be packed together with debt in more complicated financial packages, often referred to as representing financial engineering.

### 2.1.2. Trust

Bachmann and Zaheer (2008, p. 535-536) presented the following definition of trust:

“...the expectation that the counterpart will behave in a reliable, predictable, and fair manner, particularly when the potential for opportunism is present”.

We generally adhere to this definition, but in simple terms, trust is used in this paper to denote the state where two or more parties interact with little or no control features governing their relationship. Furthermore, trust—for our purposes—is closely aligned with outsourcing certain operative tasks to others. Hence, one party (in our case the municipalities) gives away its control and primary handling of a task (in this paper, the management of financial resources) on that basis assumes that it will be handled in a good way by its relationship-partner.

### 2.2. *Literature on management of financial resources in the public sector*

The subprime crisis has shown that the securitizations and the globalization of financial markets have created significant challenges for all participants - in private as well as public sector. The market turmoil has made clear how complex and how quick the transmission mechanisms are in a market-based, global financial system. Complicated financial instruments have played a key role in the Terra-scandal. The lack of transparency has led to the sad fact that players have not been aware of the risk they have been exposed to. This has been pointed out by several (see e.g. Markowitz, 2009). Innovative financial engineering have contributed to destabilization in a market of already complex securities (Harvard Law review, 2012).

Concerning scandals in municipalities and counties regarding loss on financial investments there have been some studies in the literature. However, the list is not long regarding research on local government management of financial resources. There are though some studies related to some of the more known cases that can be termed scandals.

The perhaps most famous case is the bankruptcy of Orange County, California, in the 1990s. The county treasurer lost \$ 1.7 billion through highly leveraged interest rates derivatives (Public Policy Institute of California, 1998). This scandal has inspired to some research regarding public management of financial resources, like Elson and Dinkins (2009) and Halstead et al. (2004). Elson and Dinkins (2009) approach concerns the possible catastrophe when public money is involved in complex financial instruments with low accountability and transparency. A clear finding from their study relates to the problematic lack of skills for both politicians and management personnel when assessing complex and sophisticated financial products. Halstead et al. (2009) have a totally different approach. They examine the spillover wealth effects of the bankruptcy announcement in December 1994 on municipal bonds, municipal bond funds, and bank stocks.

Another scandal, Green County (Alabama) is studied by Deal et al. (2009). However, even if financial mismanagement was the primary causal factor in this scandal, this case is not so clearly linked to investments in complex financial assets. Later, a more similar scandal to Orange County

occurred in Jefferson County, Alabama. This County listed about \$202 million in unsecured debt tied to general obligation bonds. Jefferson County became then a victim of the credit crisis in 2008. The sewer system's floating-rate securities were coupled with interest-rate swaps. The contracts, arranged by JPMorgan, were supposed to save money by offsetting the floating rates the county paid and giving it a fixed rate that was lower than on traditional bonds. The strategy backfired in early 2008 as the subprime-mortgage market meltdown sent ripples through Wall Street, undermining the credit ratings of companies that insured Jefferson County's bonds. Hence, investors dumped the bonds and the county's interest costs soared. When banks demanded early payoffs of the bonds, the county defaulted. The swaps exposed the county to hundreds of millions of dollars in fees to refinance. This case is studied by Howell-Moroney and Hall (2011) where they identify and examine the failures of transparency and accountability by several participants in the scandal. This article is highly relevant to our study.

Also municipalities in Australia became affected by the 2007 crisis. Three small municipalities invested in CDOs – similar to the Norwegian case. Most of the capital was lost when the mortgage crisis exploded in the U.S. The investment was provided by broker Grange Securities, who was owned by Lehman Brothers. According to Financial Times (2007b), the municipalities invested approximately \$ 65 million in the CDOs. Hence, the amount is lower than in the Norwegian case.

In addition, there seem to be some reports also from Arabic countries, Italy and Sweden regarding loss of public money due to risky investments by different local governments. Hence, the impact of misguided or otherwise misfortunate management of financial resources in the public sector is potentially tremendous and far reaching

### 2.3. Theory

To study the financial scandal in Norway, we rely on transaction cost theory prospect theory, herein the focus on mental accounting theory, supported by the concept of framing (on the basis of Kahneman and Tversky, 1979; Thaler, 1999). Mental accounting represents some kind of simple reasoning based on individual actors in decision-making situations. This enables a discussion about the decision making processes taking place locally in various municipalities, thereby shedding light on the way in which decisions were made to invest in complex financial products. Transaction cost theory also guides the discussion by depicting the rationale for, and implication of, outsourcing the financial management and investment function to others—as was done by Norwegian municipalities. For a while collaboration with financial advisors from the private sector seemed to function quite well. However, as the financial crisis unfolded, it became clear that things were not as they seemed. This combined frame of reference, consisting of prospect theory and transaction cost theory, enables us to capture and discuss structural elements and thus frame of constraints on a macro level as well as the way in which financial engineering is translated and framed locally, i.e. on a micro level.

#### 2.3.1. Mental accounting and the concept of framing

Prospect theory is a descriptive theory developed by Kahneman and Tversky as a response to normative decision-making theories. Kahneman and Tversky (1979) pointed out that people seldom acts as rational as often assumed in many traditional theories, leading them to suggest for instance that the way in which certain decisions are framed often lead people to reach different decisions even though the expected outcome may be the same. I.e. people discard properties shared by all prospects under consideration. They refer to this as the isolation effect. Another tendency observed by Kahneman and Tversky (1979) is the way in which people tend to put greater value on losses than on gains, i.e. the regret and “pain” associated with a loss of a certain amount far outweighs the joy of gaining the same amount. Moreover, *“people underweight outcomes that are merely probable in comparison with outcomes that are obtained with certainty.*

*This tendency, called the certainty effect, contributes to risk aversion in choices of involving sure gains and to risk seeking in choices involving sure losses” (Kahneman and Tversky, 1979, p. 263). This led Kahneman and Tversky (1979, p. 263) to propose a value function that is “concave for gains, commonly convex for losses, and is generally steeper for losses than for gains.”*

Shefrin and Statman (1985, p. 780) described mental accounting as follows:

*“The main idea underlying mental accounting is that decision makers tend to segregate the different types of gambles faced into separate accounts, and then apply prospect theoretic decision rules to each account by ignoring possible interaction... mental accounting also serves to explain why an investor is likely to refrain from readjusting his reference point for a stock. When the stock is purchased, a new mental account is opened.”* Furthermore, by referring others, Shefrin and Statman (1985, p. 781) also pointed out that *“investors are reluctant to accept and realize losses because the very act of doing so proves that their first judgment was wrong”*.

However, there are ways to overcome this mental accounting obstacle. Rather than realizing a loss it is possible to “transfer your assets”. This might be achieved by repacking asset portfolios or restructuring debt, alternatively, a combination of the two. Regardless, as pointed out by Shefrin and Statman (1985, p. 781), the trick is to frame the transaction as a transfer (without a disclosure).

### 2.3.2. Transaction cost theory

Transaction cost theory (TCT) is a theory of the firm that can be seen as a reaction to the neoclassical paradigm. TCT provides a more structural perspective on the ways in which transactions are structured and organizations interact.

TCT seeks to explain why transactions are arranged differently in diverse settings, and assumes, as a point of departure that there are many different ways in which an organization can organize its transactions.

TCT puts forward that interdependencies will only be organized if the gain from exchanging and pooling capabilities are greater than the costs of doing so. All potential rents will never fully be extracted due to the inability of the parties to organize transactions at a cost that is lower than expected rents. Hence, each alternative arrangement of transactions must be analyzed with respect to the existence of potential gains (the info problem), deciding or assessing who should get the gains—The bargaining problem—as well as how to carry out the contract (the enforcement problem). The problem inherent in the different ways of arranging the transactions is that transactions costs are incurred when performing these tasks.

TCT rejects the notion of full rationality. Instead it assumes that actors are characterized as displaying bounded rationality. I.e., agents are intentionally rational, but only limited so. Furthermore, individuals are said to behave opportunistically, meaning they are self-interest seeking. However the extent to which such behavior materializes in different settings can vary with the amount of legal or social control characterizing the environment of the transaction. Williamson separates between 3 governance structures: market, hierarchy (i.e. firms) and hybrids (an intermediate form in relation to the two other governance structures, such as contracts and equity joint ventures). It is argued that market transactions are governed by classical contract-law, whereas the two other governance structures are more adaptive and flexible. Furthermore, governance structures have to be aligned with the characteristics of transactions. Therefore an analysis must be conducted of the characteristics of transactions. Those are the following: Asset specificity, uncertainty and frequency. Asset specificity in simple terms refers to how standardized and common an asset is. Asset specificity is high when it is costly to redeploy to alternative uses. This increases switching costs and makes it possible for the more flexible party to exploit the less flexible one). Uncertainty refers to the environment in which the transaction

occurs, and the likelihood that things will proceed as planned. Uncertainty is also related to the degree of complexity in the environment. Frequency connotes how often a transaction occurs, which could range from a one time only type of transaction to repetitive transactions that happen over and over again. Typically, it is costly to set up hybrids and firms, suggesting that these governing mechanisms will only be economical for recurring transactions.

There are different versions of TCT (as for most other theories). One of the founding fathers of TCT, Williamson, has been criticized for his theorizing of trust (or the lack of so doing). He argues that although not all people will behave opportunistically, it is normally to resource demanding to identify those who do and those who do not act opportunistically. Consequently, one is better off assuming that everyone will behave opportunistically. However, it has been pointed out (Hennart, 2008) that such a “defensive” approach will drain organizations’ resources simply because it suggests that a lot of additional costs must inevitably stem from always taking precautions.

### **3. Method**

The research setting is the local government level (i.e. municipalities) in Norway. Data collection methods consist of documents, interviews and informal conversations.

Examples of documents that are relied on this study include: financial statements, internal regulation, external regulation, evaluation reports (by the office of the Auditor general and hired externals), newspaper articles and information on municipalities’ home pages.

Semi-structured interviews were made with employees working with “management of financial resources” in nine municipalities (administrative staff members). Additional informal conversations were also made with employees in involved municipalities. Interviews and documents combined have allowed us to cover 15 Norwegian municipalities concerning their management of financial resources. Our sample of 15 cases include cases particularly affected by the Terra scandal, but also cases that represented municipalities which struggled with their management of financial resources, but still had not been “crucified” in the media as a “scandal” municipality. Finally, we also included some cases (i.e. municipalities) which had not been depicted as a struggling municipality. The choice of including the latter was motivated by the potential for learning about what these cases had done differently from those municipalities that ended up being coined a “scandal” municipality. Nevertheless, the commonality of all cases selected was that they were enjoying higher revenue than other municipalities, and thus were in a position where they had a non-trivial amount of cash or revenue streams that had to be financially managed in a good way, according to the law, regulation and sound practices.

For each interview we relied on an interview guide that was sent to the interviewee one or more days before the interview took place. We took notes from the interview and created a summary of the interview which we e-mailed back to the interviewee, allowing them to alter and add the text that we had put together. Each interview lasted about one hour. Four of the interviews were made face to face and five interviews were made over the telephone. Most municipalities have a small administration working on accounting, budgeting and other management control oriented affairs. In several municipalities they may only have one or two persons working on these tasks. Consequently, for our purposes there were not many people to talk to in each municipality. To learn more about how the management of financial resources had been dealt with in each municipality we contacted them and scheduled an interview with the chief financial officer [CFO] (typically in charge of several different tasks). Sometimes the chief administrative officer also participated in the interviews.

## **4. Description of the Terra scandal**

### *4.1. Fall of structures—predecessors*

Excess revenue growth disproportionate to competence and the work situation

Norwegian municipalities are in different economic situations. Many are relatively poor and have no available financial resources for investments, while other more fortunate municipalities control considerable funds and thus find themselves challenged by how these funds ought to be managed in the best possible way. So-called “power municipalities” are characterized by the fact that they have fairly good economy because of the presence of hydropower plants. Exploitation of Norwegian hydropower resources is subject to various laws, which ensures that the municipalities are compensated. Hence, they receive considerable amounts in return. This includes license fees (annual fee determined by NVE – the regulator), natural resource tax (special tax on energy companies), property tax (an entirely municipal tax) and so called concession power. Concessionary is a statutory right of withdrawal of a part of a power plants capacity that will mean a lasting economic benefit to the municipalities. Concession power consists of up to 10 % of the average amount of a power plants yearly capacity to the municipalities and the county where the plant is located. This can be a considerable amount of power, representing significant values.

Of these four sources of income, only the natural resource tax is included in the income equalization system (KRD, 2005). Hence, municipalities with significant revenues from power plants have a considerable higher level of free income compared to other municipalities. In addition, some have received a lump amount at construction of plants and furthermore, many municipalities also receive dividends through the ownership of generation companies. Before deregulation (The Energy Act<sup>2</sup> was implemented in 1991) there existed an overcapacity of hydropower generation. Hence, electricity prices remained low during the 1990’s. An emerging increase in demand in this decade, and limited change in supply, then led to an increase in prices. The regulator limited access to profitable projects and, in addition, extremely volatile prices and hence uncertainty made investors reluctant to initiate more generation capacity during the first decade of deregulation. The shortage of production capacity became especially visible in the shock winter of 2002-03, when a “dry” autumn led to a temporary extreme increase in electricity prices.

<sup>2</sup> The Energy Act (short form) of ”Law of production, transformation, transmission, sale, distribution and use etc.” of 29<sup>th</sup> June 1990 No. 50.

Marginal cost of new generation is determined by the investment cost of hydropower plants, and later on by investments in other generation technologies. The marginal costs have increased significantly since major hydropower projects are now deemed passé (politically decided), and other generation technologies have become the marginal. In addition, energy prices in general have increased, especially the price of oil, pulling the price of electricity upwards. Furthermore, integration of different European electricity markets has accelerated, in turn pulling Norwegian (and Nordic) prices closer to the level of other North-European markets. Finally, the ever-increasing focus on environmental issues, such as the introduction of CO<sub>2</sub> allowances, has made hydropower, as a renewable energy source, relatively more profitable as compared to contaminating power generation.

This development has thus provided financial strength. Through sale or ownership and tax income, these municipalities have during the last decade come into a position of controlling considerable financial resources that needed management. At the same time, low level of interest rate for risk free investments, especially in the period 2003-07, made more risky alternatives more appealing (Oslo Stock Exchange increased with more than 300 % during the years of 2003 – 2007). Whereas the revenues jumped, enabling municipalities to invest their excess funds, the competence and organizational structure had not developed in the same pace. Very few persons work with financial affairs in municipalities and of these, almost no one had special expertise in various financial products. The municipalities therefore faced a competence challenge when finding themselves getting rich “over night”. Moreover, little attention had at that point been

given to the management of financial resources because this situation was very new to the local government structure. Therefore, many municipalities did not have routines firmly in place, suggesting how the management of financial resources should be handled.

Finding a loophole in the funding structure for financial investments

Both the net present value of future concession power as well as license fees, have been a key element in the financing of the investments through Terra Securities ASA. Another key element concerns the so called Vik-letter, a letter from the Ministry of Local Government and Regional Development to the municipality of Vik (in 2002) – allowing for borrowing with security in future income from concession power and license fees, to make these investments. Hence, the municipality identified a loophole, since this authorized a rather peculiar way of financing risky investments – defining this as no loan, despite that the arrangement had all typical properties of debt financing.

When it became clear that this opportunity applied principally to all municipalities in Norway, The broker company Terra Securities ASA started on what is best described as a round trip around Norwegian, approaching municipalities they had reason to believe would have funds available to invest in financial products.

The development in financial markets and the need for a dispassionate approach

In several interviews, it was mentioned that the municipality frequently was contacted by financial institutions seeking to sell them financial products or offer them financial advisory services. In an interview it was said that the following considerations were laid forth regarding how such broker requests ought to be tackled:

The number of different types of financial products that exists have recently increased. There is a wide range of groups/actors that we receive requests/offers from. We do not choose (between different providers/firms) without having consulted others and received offers from several different providers. We furthermore demand simplicity, i.e. we must be able to understand the product.”

The quote above, combined with the one below, illustrate the need for a dispassionate approach and critical approach towards the way in which the management of financial resources are carried out. An interrelated interview quote is as follows:

”It is challenging to estimate the return on the financial investments in the next year’s budget. We have usually budgeted with a solid return in our operating budget...in the next year’s budget we do not intend to budget any return on our financial (risk exposed) investments”

Later on in the interview it became clear that the reason why they had taken a more defensive position on how to budget with a return on financially risk-exposed investments is that they had lost money last year and therefore had to report a loss rather than a surplus. In hindsight they therefore found it better to be a bit more cautious.

Laws and regulation were not aligned with practice

Norwegian municipalities’ management of their financial resources is governed by the Local Government Act (25 Sep. 1992 No. 107), saying: “Local authorities shall administer their funds in such manner that a satisfactory return may be achieved, without the entailment of any significant financial risk” (§53, no 3). Later, in 2001, this act was extended by a regulation governing such fund administration.

Our interview data illustrates the municipalities’ tendencies of changing their own regulation to make it fit their investment practices rather than the other way around:

“The financial regulation... has been modified three times, but not during the last year. The changes were made in order to adjust the regulation to new financial products (in the market), as well as adjusting the thresholds of the various investments categories (i.e. how much could be invested in different financial products). We were careful in 2003, but when experiencing good years (i.e. an upswing in the market) as of the beginning of 2003, we became fervent, and thus became engaged more actively (in the market). Changes were made to the regulation at that point.”

The tendency of adapting regulations to practice rather than vice versa (as intended), brought some of the municipalities into trouble. In the aftermath of the scandal's outbreak, there was soon a demand of investigations into the different municipalities. The reports stated that the involved municipalities violated national law and regulations as well as their own indorsed financial regulation. E.g. in Narvik there were not evaluated whether Terra's proposal for the investment was in line with financial regulations. Hence, the regulations were violated in connection with investments made between the years of 2005 – 2007. Also in Rana they violated their own financial regulations. Regulations were also amended in connection with investment in foreign interest rate instruments in Dec 2002. The municipality ignores that they then exposed themselves to currency risk – accompanied with incomplete drafts and not in line with § 23 in the Local Government Act. In Hemnes, financial regulations were changed in 2002 regarding the agreement with Terra. PwC reviews the significant changes. This happens in "a hurry" to fit the agreement, but is not in conjunction with § 52 in the Local Government Act - which requires such regulations. Their own regulated limitation of NOK 5 million for investments in bonds, were consequently violated – several times and quite severely.

Local governmental accounting model and standards fail to capture the financial complexities  
The local governmental accounting model in Norway represents a hybrid model, resembling modified accruals, based on a fund flow model. In the accounting standards there have not been much detailed demands or requirements regarding how financial investments ought to be tackled, beyond some general guidelines covering more traditional investments options, like stocks and bonds. Moreover, there requirements concerning the amount of disclosure note information that is warranted in the financial reports are not very demanding. Most municipalities therefore report very little, making it very difficult to learn much about the financial investments from the annual accounts.<sup>3</sup>

<sup>3</sup> For a further discussion, see Mauland and Aastvedt (2008).

When conducting its ex post investigation into problems in the Terra scandal, PwC stated the following in its report (2008): *"Municipality accountants have generally little experience in handling complex financial investments, and it is not clear how such investments will be presented correctly in the municipal accounts."* They follow this up by pointing out that the accounting rules for municipalities are not adapted to the challenges that come with this type of financial instruments.

Lack of sufficient political involvement and other government hierarchical support

The relationship between the politicians, at local level, reveals also something static in contrast to a rapid world of dynamic financial markets. In Narvik the politicians have shown little interest in these matters. It has been believed that the risk was low, the investments outperformed the benchmark and that the field is complicated. In Rana, PwC points out unsatisfactory case preparation, failure to review investment risks and assessment of alternatives. The politicians did not capture the range of what was taking place. In another municipality the comment was: "Maybe the county should have a more supervisory function than what they have had. We have never received a single inquiry about the accounts or financial management from the department or county, with one exception. When we have problems with skills one can imagine the challenges some of the smaller municipalities have concerning their financial management.

Lack of proper administrative routines and critical assessments of financial prospects

In the ex post investigate report of Hemnes municipality (prepared by Indre Helgeland kontrollutvalg, 2008), the following critique was lashed out: there are structural weaknesses in the municipality's internal controls; both in relation to the reports, the execution of decisions, legality and audit (even if the auditors did raise questions along the way, they delivered an unqualified statement (i.e. clean statement, free of any reservation in the audit report). Concerning Haugesund

Municipality, the report addresses the auditor's role regarding quality assurance of the financial strategy, and follow-up on the financially engineered investment products (i.e. the CLNs and CDOs—see description later in this section). KPMG concluded that the auditors failed to carry out these tasks properly. Thus weaknesses are found in the whole system, not only the administration but also the audit unit responsible for assessing the administrations routines and actions.

In Rana Municipality relevant questions were apparently raised regarding the accounts, along the way, but the focus was on audit technicalities and not consideration of what the investment actually meant, including associated risk assessments.

A pattern concerning the municipalities involved in the Terra-scandal is the exclusive contact with only one provider of financial services. Consequently, the separation of seller vs advisor have been erased. One municipality (Rana) made an agreement from 2001 concerning confidentiality, stating that Terra Securities ASA was the only allowed advisor. In various reports, Terra's information was pasted into drafts as basis for decisions. Terra was regarded as a counselor and has had great confidence – especially in the cases where the municipality lacked relevant competence.

Several of the reports do stress the unfortunate situation of not consulting external expertise. Hence, also several debt agreements were unfavorable. In Hemnes one debt obligation came out almost one percent higher than normal municipal borrowing costs. In Haugesund the committee questioned the use of Terra to renegotiate the terms of the swap agreements with other financial institutions. Obviously, other potential providers should have been contacted.

Another feature concerns the limited information about the fee. In Rana the management did not know about the colossal broker margins. The Chief Executive and Financial Manager indicated explicitly that they were not familiar with the size of these fees.

Furthermore, when the brokers (representatives of Terra Securities) presented the prospect/investment opportunity it came in a Norwegian version and an English version. When later explaining what happened, government officials stated that they had only read the Norwegian version of the prospects, believing that it equaled the English version. It turned out that the English version was far richer in detail and gave several warnings about the risks associated with the investments, which was said to be left out of the Norwegian version (according to the public servants).

Details of the financial investments made

The core of the Terra-scandal is the CDOs issued by Libretto Capital PLC in 2006 (Libretto) and Starling Finance PLC in 2007 (Starling) (also other CDOs were involved for some of the municipalities as shown in Table 1). These CDOs were mediated by the broker company Terra Securities ASA to the municipalities of Bremanger, Kvinesdal, Vik, Haugesund, Hattfjelldal, Hemnes, Rana and Narvik.

Most of the municipalities made a conversion in 2006, when their funds were invested in the Libretto. This was a CDO issued by special enterprise Libretto, which was a company established by City Group. This organization was motivated by U.S. accounting laws. CDOs are packed bonds that are usually divided into tranches of varying risk. Such bonds are evaluated by rating agencies. Libretto (Starling) showed the highest possible rating, AAA, which made sale of this financially engineered product simpler all over the world. The role of rating companies' is very interesting, and studies have shown that they obviously gave too good ratings (especially S&P and Fitch), and thus has its share of responsibility for what happened later (Brennan et. al, 2009). The risk with the Libretto was particularly related to liquidation (dissolution) of the bond. Liquidation could occur when there was a pre-defined "credit event". Such a credit event could be

non-performing loans, but it was complicated to get an overview of these credit events. It was also defined an event that would occur if the market value of the collateral and the benchmark fell below a certain level, the 55% - clause, of the original principal.

In 2007, there was a new reinvestment. This time the CDO was issued by the special enterprise Starling Finance (who also City Group stood behind). This CDO had a link to American municipal funds. This transaction involved that the Starling CDO bought the Norwegian municipal holdings of the Libretto bonds. Thus Libretto-bonds became security for the Starling-bonds. The dramatic consequence of this was that they were still exposed to risk in the Libretto. If Libretto was liquidated, so would also Starling. Starling was actually more risky<sup>4</sup>. In addition, one became exposed to the risk associated with the U.S. municipal fund. The relationship between Starling and Libretto meant that the pledge of Starling in itself was a CDO, so that Starling can be described as a squared CDO,  $CDO^2$  (Starling = (Libretto) x (Libretto)). Aside from some administrative costs may the Starling investment be perceived as a bilateral zero-sum game where the two players were the investors against the City Group Global Markets ("the swap counter party"). An interesting aspect of the sales prospect is that they emphasize that the facilitator (City Group) may be in possession of information about the U.S. municipal fund, which is not available to investors. In other words, this granted the existence of asymmetric information. By offering  $CDO^2$  City Group signaled that they actually had lower expectations for trends in the municipal fund than the market!

<sup>4</sup>Rana municipality wanted at this stage to reduce their exposed risk, but was by Terra Securities ASA recommended Starling – which in fact increased the risk considerably (PWC, 2008).

The relevant bonds (CDOs) issued by the special enterprises Libretto and Starling are closely linked and led to the well-known result that the facilitator of the investments, pursuant to the contract, chose to terminate the investment before maturity on the basis of a so-called credit event. This again led to the dramatic loss for the Norwegian municipalities.

#### *4.2. The official outbreak of the Terra scandal—the awakening and handling*

The official outbreak of the Terra scandal emerged from the work of an investigative journalist named Hofstad (who later won a prize for the work on this story). The journalist stumbled across some short reports about how Hemnes Municipality had invested 84 million NOK in the debt market in the USA. He started to dig into the case and found more and more intricate issues along the way as more and more municipalities turned out to be involved the debacle. His story ended up on the front page of *Finansavisen* 31<sup>st</sup> October 2007. The news immediately spread to newspapers around the country, and marked the beginning of a long period in the media's hotspot that seldom have been seen in Norway (particularly concerning the topic of how the municipalities manage their financial resources). Soon after, the Terra scandal also hit the international press (e.g. the *Guardian*, 2008; the *New York Times*, 2007)—so much so—that it became a topic of discussion during the American president election [i.e. the primaries] (Flydal, 2008). Hofstad later wrote a book about the Terra scandal (Hofstad, 2008), entitled: *“The fairy-tale about TERRA and the eight small municipalities that went to Wall Street to become rich”*.

Table 1 provides an overview of eight Norwegian municipalities that were involved in the Terra scandal, including the amounts they invested.

During some weeks before the outbreak of the crisis and to some extent after, the municipalities insisted that they had lost nothing—it was only a “paper loss”. However, what appeared to be a big scandal at the outset escalated quickly to something more dramatic and severe. The initial problem in the first place—the complex intertwined financially engineered investment packages tied to the USA markets—soon yielded larger losses. As the financial crisis hit the global economy the markets plummeted. This also strongly affected the values of the investments made by the Norwegian municipalities. However, they also faced a liquidity squeeze in this market segment—

virtually no one wanted to buy these products as soon as the global financial crisis hit the markets. Anyway, due to the complex structure of the investment, the municipalities were ordered to put up more money to guarantee for the investments. If they did not, Citygroup would enforce a sell due to contract clauses when the price would drop below 55 % of the principal value. The affected municipalities had initially paid some money, but refused to continue to pay any more money. Consequently, Citygroup sold the investments at the current market price which was very low. Moreover, other municipalities that had made other kinds of investments were enforced to sell as well because these investments were found to be in violation of the law and thus illegal. The amount of issues stirred up led the Norwegian authorities and oversight bodies to launch investigations into the details of the case. As a consequence, Terra Securities ASA got its license withdrawn (Kredittilsynet, 2007), meaning they could no longer operate as before. This combined with the amounting reimbursement demands and threatening lawsuits from the affected municipalities led them to file bankruptcy towards the end of 2007. Later on, the auditor general in Norway launched an investigation into the way the ministry of local government and regional development had handled the “Vik-letter” (Riksrevisjonen, 2008).

Beyond suing Terra Securities and looking into the possibilities of going after also the two main brokers that were particularly active in selling the financial packages to the municipalities, they also decided to halt their payments to the banks that initially lend them the money to investment in the products in the first place. The municipalities argued that the banks should have known that such investments were illegal. Consequently, when the banks nevertheless tried to earn money on this, they were at blame, according to the municipalities. This was actually a somewhat risky maneuver because the banks decided to take the municipalities to court to get their money back. In this light, beyond paying millions in fees to their own lawyers and other advisors, the municipalities risked having to pay extra rent as well as the lawyer fees and other expenditures incurred by the banks as well. In this way the municipalities engaged more risk to try to emerge from the crisis in one piece.

#### Changes in the external regulation

The regulation was revised in 2009, as a consequence of the Terra-scandal. It provides a framework for investments, risk assessments and reporting procedures to the municipal / county. The changes in 2009 can be described as adjustments or clarifications. The new regulation states that it shall be adopted at least once in every municipal period. Moreover, it should be made a report twice a year, and the regulation specifically mentions 13 conditions, as a minimum, to be accounted for in these reports. Furthermore, the regulation specifically says that the fund management must be in accordance with the knowledge and understanding of finance and risk assessment. A regulation note also clarifies the distinction of consulting advisors versus "sellers" of financial products.

### **5. Discussion—antecedents and facilitators of trust failures**

Combined the factors outlined in the empirical section relating to the fall of structures implied that the Norwegian municipalities were bound to two scenarios concerning their management of financial resources: They either had to manage, herein invest their resources, in a very careful and simple manner—typically by placing the money in the bank, or they could invest in financial products involving the prospects of varying risks and return scenarios. The former allowed them to invest on their own, but the latter option implied, in the case of many municipalities, that they had to get help from others. Some were ill-fated enough to end up with Terra Securities and their reckless investment prospects.

#### *5.1. Insight from transaction cost theory*

The case material from the Terra scandal clearly shows that the municipalities relied heavily on trust when engaging with Terra Securities ASA, the broker firm. Even though Williamson's

position on trust has been challenged more recently (e.g., Hennart, 2008), it is clear that in the case of Norwegian municipalities, that they became subject to all the dangers that Williamson warned about.

For instance, when depicting Terra to be the solitary broker and furthermore also mixing the roles the firm had of being a broker and an advisor, the municipalities became subject to an unfortunate hold-up situation. As predicted by TCT, this led the municipalities to pay more than they should have in fees for the services Terra provided.

Furthermore, the case also displays great levels of asymmetric information, at least by the tales of the Norwegian municipalities. They claimed that information was withheld from them regarding the true nature of the investment packages. Had they known just how risky the investments were, they would ostensibly never have invested in them. Moreover, the municipalities also claimed that that information was incorrect or even fabricated. The level of information asymmetry actually seems to have been widespread. Almost only a few people in Citygroup truly understood the product that hit the world market and the Norwegian municipalities, alongside many others. Moreover, the entire Terra case is actually an epitome example of actors behaving opportunistically. Firstly, Terra Securities, together with Citygroup clearly acted opportunistically in the way they pushed doubtful investment opportunities on municipalities that were in no position to comprehend what they actually bought. Thereafter, the municipalities also behaved opportunistically via their blame gaming. For instance, they tried to pin the fault also on the banks that lend them the money in the first place, despite that it was not at all straightforward that they were to blame for what happened. In the later court cases on the matter, it was also ruled that the municipalities had to pay back the principal amount they had borrowed, but with no additional interest charges.

Still, even though all actors behaved opportunistically, most of the key players failed to protect themselves sufficiently against such opportunism. In fact, rather than making detailed and specified contracts with their broker, the municipalities not only pasted the brokers' statements directly into their formal decision making foundations, but also failed to sufficiently read the text provided by the broker. In this way, the whole Terra scandal resembles, in certain aspects, the Enron case, in which people believed in the stories they were told, despite an increasing amount of warning signs, of a logical economic (fundamental) nature, but also what was available in written formal reports (for a discussion, Chabrak and Daidj, 2007).

From a transaction cost theoretical viewpoint, the municipalities should have arranged the task of managing their financial resources as a hierarchical governance form or as a hybrid form. Instead they arranged it in such a way that the handling closely resembles Williamson's market governance form. That is indeed paradoxical since Williamson's primarily suggested that the market governance form would be suitable when engaging simple, uncomplicated transactions, and for transactions that is not frequently repeated. By judging from the Terra-scandal, it seems advisable to adhere to Williamson's position on trust, i.e. to assume that actors will be opportunistic rather than trustworthy. That would have saved a lot of grief in this case. On the other hand, it seems as though when repositioning after the Terra scandal, actors have to greater extent sought to arrange their financial transactions differently, and more closely aligned with the hybrid or hierarchical forms (varying from municipality to municipality).

Consequently TCT helps us to derive at a governance form that would have been more compatible with the complex, tailor-made financial products. However, beyond that, how can we understand the diametrical opposite direction in which the municipalities all headed (when compared to the suggestions made by TCT)? It turns out that prospect theory, emphasizing 24

mental accounting and framing, is capable of illuminating the actions taken by the actors in the Terra scandal that do not all seem to be rationally founded.

### 5.2. *Insight from prospect theory and the framing concept*

In many ways the Terra scandal emerged from the "Vik letter": Many of the investments made by municipalities that experienced problems in relation to their financially engineered packages—constructed by Citygroup and sold by Terra Securities—started out from the "Vik letter". When the Ministry (KRD) allowed Vik municipality to receive money from banks in exchange for future revenue from the production of electricity, it represented a go ahead signal to everyone. Terra Securities ASA realized what opportunities this represented and exploited it aggressively. This is probably best understood as a case of framing. By altering the interpretation of the investment by means of technicalities, the ministry ended up as considering the prospect to be something different from what it truly was. Almost everyone (in hindsight) regarded this transaction to be de facto a loan, except the ministry, which said that technically this does not represent a loan. Later on this assessment was severely criticized by the Office of the Auditor General in Norway. This framing incident illuminates how a seemingly technical question might spur great turmoil and unforeseen problems, and tragically illustrates the vulnerability that characterizes the decision making in smaller communities.

Even though the representatives from the municipalities claimed they had been "framed" in the Terra scandal, the case itself unfolded as a series of framing episodes, each of which facilitated the emergence of the large-scale financial scandal. For instance, when the brokers (i.e. representatives of Terra Securities ASA) presented the prospect/investment opportunity, it came in a Norwegian version and an English version. When later explaining what happened, government officials stated that they only read the Norwegian version of the prospects, believing that it equaled the English version. It turned out that the English version was far richer in detail and gave several warnings about the risks associated with the investments, which was said to be left out of the Norwegian version (according to the public servants). This exemplifies (explicit) translation issues, but also a typical framing situation as discussed in prospect theory. After all, prospect theory argues that actors are likely to reach a different decision, even when facing the same type of transaction or economic event, given that the prospect is presented differently to them. Of course, the framing issues were not only a language issue, but related just as much to the compelling story told that by the brokers from Terra.

A part of their story was that what they offered would yield higher return without any increase in risk. Judging from traditional finance theory, this is too good to be true. Nevertheless, the brokers managed to convince the representatives from the municipalities that this was indeed the scenario they faced. Furthermore, the way the Terra brokers' fees were presented and the statement made by some of the representatives from the municipalities: *"we never would have agreed to this if we had known how expensive this really was"* furthermore represents a case of framing. The financial product was put together in such a way that the full size of the fees was not easily identifiable. In fact, the complex financial products that were sold to Norwegian municipalities had been financially engineered in such a way that it became clear that virtually no one fully understood them, beyond the financial architects at Citygroup. In the same vein, the municipalities later on complained that they had received unfavorable interest rate conditions by the banks. All of these illustrates fit well with the reasoning provided by prospect theory.

Nevertheless, when it comes to prospect theory, we also find that some of data directly contradicts some of the key ideas of the theory. In particular, we found that actors became more eager to take risk when they had won their prospects in the past (i.e. earned a confident positive return). However, when facing losses the municipalities reacted a bit differently. On the one hand, it is true that the municipalities showed a willingness to take on more risk after having lost in the past

(as the theory would predict)—evident through the reinvestments and refinancing during 2006 – 2007. These incidents can be coined an example of “transfer of assets” from one financial package to another, but unfortunately even more risky one. Conversely, we also see how the municipalities decided to abandon their investment even when having incurred huge losses. However, this took place in the dramatic turmoil, orchestrated by the media, something which created tremendous pressure on the municipalities. What seem to have happened is that they felt bad about the losses, but nevertheless seemed to be just as motivated or more so when it came to showing political decisiveness and strong leadership, yet also the need to cast the blame on others. Actually, by judging on the municipality leaders’ behavior, it seems as though it for them because extremely important to not close the case—i.e. their mental accounts—in such a way as to be left with the blame for the errors. Actually the prospect of being left with the blame seemed to have spurred the municipality leaders to engage more risk (e.g. by starting a financial “war” with the banks). As such, one can at least raise the question of whether the “blame account” was more important for the municipality leaders than the “financial account”?

This possibility contributes to prospect theory by adding not only a new item to the list of accounts, but also the possibility that blame functions as an intermediary variable than triggers risk taking—not to regain the financial loss, but to avoid being stuck with the blame for the problem. Additionally, the findings in this paper raise questions about to what extent it is reasonable to assume that actors actually are fully aware of the prospect they face. Even though prospect theory suggests that actors may make a different decision given that the framing of the problem or situation at hand is different, it nevertheless supposes a sort of an overview of the prospects. If not, then the actors would not have engaged in the more risky prospects either when having suffered a loss earlier. The latter assumption also shows that the theory do presuppose that the actors understand the problem at hand fairly well. Our data questions whether this holds.

## **6. Conclusions**

In this paper we have studied what happens when global financial engineering is introduced to local governments. To tackle this overall problem statement, the following two research questions were formulated. Firstly, what happens when static regulation and practices intersect dynamic markets? (Referring in particular to the developments of financial markets, products and the inherent globalization trend seen in recent years). Secondly, how is global financial engineering (i.e. the financial packages) translated and framed locally?

The Terra scandal represents ignorance of an area no one knew much about in the public sector, namely the management of financial resources. Yet, a series of misfortunate events led to dramatic consequences which by large were implicitly allowed to happen because of a strong reliance of trust, coupled with overly weak and inappropriate governance forms. This spurred from a tendency to delegate responsibility and the interrelated reliance on trust in the democratic structuring of government affairs. When seeing this in tandem with the limited focus exerted on the management of financial resources in Norway, it led to problems. As a result, how to manage financial resources has to a great extent been left alone for the local administrative staff to handle. Such local translations have at times been difficult. The description of the fall of structures (in Section 4.1.) illuminates this in several ways. Nevertheless, one important aspect that started the problems was the lack of competence and experience. In many ways this meant that municipalities that wanted to invest in financial products had to rely on others and thrust that their considerations were reasonable. Another important reason for the difficulties can be related to the recent structural changes witnessed in financial markets. This concerns both the number and types of products being offered and the way they increasingly have become global in their form and spreading (including across sectors). This startled the actors involved and brutally challenged both regulators and municipalities. A key challenge encountered by the municipalities related to the

situation where seemingly knowledgeable actors took advantage of their competence and the structural changes in financial markets to gain money.

In short, the Terra scandal is a story about misperceived trust, leading to the arrangement of financial transactions at the local government in such a way that left the municipalities at great risk if the markets turned against them, which they did. The orchestration of financial transactions in the Terra case clearly did suffer from not adhering to how things would have been done if basing it on recommendations from TCT. However, surprisingly perhaps, in this case everyone turned out to become losers. Most of the parties involved lost a great deal of money, some lost their jobs, and individuals—if not the organizational and financial structures at large—suffered a hit in their reputation.

Suggestions for future research include the following: The rich media debate and the actors' reactions to it represent a promising setting for a more detailed study of the blame-game actions undertaken by the involved parties. Further studies into prospect theory might consider the intermediate roles of blame shifting and the struggle to avoid losing one's reputation as being just as strong, if not stronger than the way in which one may have to settle with closing an account at a financial loss.

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**Performance measurement challenges in a NGO—whereas volatility enforces pragmatism and demolishes structures, opaque performances function as a buffering mechanism**

Levi Gårseth-Nesbakk (Corresponding author)

Bodø Graduate School of Business, University of Nordland,  
8049 Bodø, Norway

Tel: (+47) 755 17 695 E-mail: len@uin.no

AND

Konstantin Timoshenko

Bodø Graduate School of Business, University of Nordland,  
8049 Bodø, Norway

Tel: (+47) 755 17 914 E-mail: kti@uin.no

**Abstract**

This paper is a case study dealing with performance measurement in a non-governmental organization (NGO) and addressing the following research question: What challenges does a NGO encounter in measuring its performance? An accountability perspective (namely, Sinclair's, 1995 notion of the chameleon of accountability and Messner's, 2009 notion of the limitations of accountability) represents the theoretical frame through which we tackle the above-mentioned question. Data were collected through interviews and documents. The following major challenges were unveiled throughout the research: maintaining control in times of growth, challenges related to identifying and developing appropriate KPIs, the dilemma of centralization vs. decentralization—relating to structure and the way the NGO is organized, financial dependency on donors, the level of details to be reported (instigating both performance measurement issues as well as management issues), high employee turnover, some of the management control tools (e.g. BSC) are deemed useful in planning, but beyond that they do not work as anticipated, highly contextualized/ heterogeneous measurement project settings, an increasingly unstable environment—much more about politics (facing high uncertainty), problems in visualizing results internally and externally, multiple performance forms and demands (creating an administrative burden and making comparisons/benchmarking difficult to carry out). Having identified the performance measurement challenges, we infer the following: whereas volatility enforces pragmatism and demolishes structures, opaque performances function as a buffering mechanism.

**Key words:** Performance measurement, accountability perspective, NGO.

**Performance measurement challenges in a NGO—whereas volatility enforces pragmatism and demolishes structures, opaque performances function as a buffering mechanism**

**1. Introduction**

Most if not all organizations are asked to perform as good as could be expected, given their organizational context and demands from the stakeholders. This is not new, but something that has changed is nevertheless the competitive environment faced by the organizations, stimulated e.g. by global competition, performance standards, the Internet, financial crisis and so on. To cope

within such a competitive environment, organizations are not only expected to measure and report about their performance, but also to rethink and to improve the ways in which they measure and manage their performance. In short, organization members are asked to think more holistically about their performance. In light of this development, organizations have moved beyond performance measurement and now need to increasingly focus on performance management (Otley, 1999). Beyond the technicalities of measurement, organizations must also address factors in their organizational environment (Ferreira and Otley, 2009).

Yet, despite that the aforementioned arguments in favor of broadening the focus are appealing and easy to agree with at face value it is far from clear how broadly based performance frameworks are handled within a single study. Furthermore, it is still puzzling to what extent they correspond to matters of interest and perceived challenges amongst practitioners dealing with their organization's performance. On the contrary, it is likely that practitioners, within their given organizational context, will predominantly center on a few of the elements in the performance management framework. We expect this to be the result of the need to simplify hectic and complex daily activities when facing scarcity of resources.

Given that many studies on performance measurement have found that this is challenging and complicated in private sector organizations (e.g. Grafton, Lillis and Widener, 2010; Jordan and Messner, 2012), it is reasonable to expect these challenges to be just as large or probably larger in not for profit organizations (NPO), herein non-governmental organizations (NGOs). For instance, Everett and Friesen (2010, p. 482) argues that "...large institutional donors are unable to adequately attend to or even understand the needs and problems of humanitarians." After all, NPOs and NGOs often target objectives that are less defined than the profit measure, making it more challenging to measure the organization's performance and thus to make changes accordingly. Humanitarian organizations are one particular kind of organizations that frequently operate within multicultural contexts, facing fierce and potentially volatile funding requirements and thus multiple stakeholders that must be satisfied simultaneously.

The importance of the work carried out by humanitarian organizations has, if possible, become even more prominent in recent years given the global financial crisis. The latter namely suggests that humanitarians and other NGOs are likely, explicitly or implicitly, to have to take over responsibilities from the government. Governments struggling with balancing their finances must namely reduce their spending and activities on a variety of issues—some of which are likely to be taken over by humanitarian and other NGOs. Another trend is also making the work of humanitarians and NGOs increasingly important, namely the increasing sustainability and environment concerns, as evident for instance by more extreme weather and climate conditions. It is not only war or general poverty that brings about the need for humanitarian work. Whenever there are floods, earthquakes and similar extreme weather and nature instances, humanitarian organizations are often needed to provide aid to displaced people and people that try to survive without normal infrastructure and governmental assistance.

Nonetheless, only recently has increasing attention been directed to issues of accountability in NGOs (O'Dwyer and Unerman, 2008). As of yet, little is known of the variety of accountability challenges circumstancing the ways in which humanitarian organizations deal with their organizational performance (Everett and Friesen, 2010), particularly the emergence of accountability in specific NGO contexts (O'Dwyer, B. and Unerman, J., 2007; 2008).

To learn more about this, we have conducted a case study dealing with performance measurement, addressing the following research question: What challenges does a NGO encounter in measuring its performance? An accountability perspective (namely, Sinclair's, 1995 notion of the chameleon of accountability and Messner's, 2009 notion of the limitations of accountability) represents the theoretical frame through which we tackle the above-mentioned question. Data were collected

through interviews and documents. In this paper we seek to make two contributions. Firstly, what elements in the performance management framework developed by Ferreira and Otley (2009) are predominantly in focus when in an NGO with respect to its performance? Secondly, based on our empirical findings from what makes it particularly challenging to be accountable for one's performance as an NGO, we add theoretical elements to the literature on the "accountability" concept, as well as enrich the discussion on certain topics that only very recently have been in focus in the accountability literature.

The rest of the paper is organized as follows. Section 2 presents the frame of reference—consisting of a literature review and an accountability perspective. The method underpinning this study is described in Section 3, followed by the empirical description in Section 4. In section 5 we present a joint discussion and conclusion section that ends the paper.

## **2. Frame of reference**

The frame of reference is introduced by depicting the move from performance measurement toward performance management in research literature. Thereafter, in Section 2.2 follows a literature review of NGOs viewed from an accountability perspective, with particular emphasis given to humanitarian aid providing organizations. In Section 2.3 the second part of the frame of reference is presented, namely the applied accountability perspective in this study.

### **2.1. From performance measurement toward performance management**

Otley (1999) argued for the need to study control and organizing from a holistic viewpoint: "The intention of this paper is to provide a perspective more focused on the operation of overall control systems, and to do so by looking beyond the measurement of performance to the management of performance."

Otley (1999) discussed three major systems of organizational control (budgeting, EVA and Balance scorecard), but found them to be too narrow to serve the purpose of broadly based performance management frameworks which were sufficiently holistic to guide organizations in their performance management. As a result, Otley (1999) formulated five questions that organizations were encouraged to ask and answer while seeking to improve their performance. Otley (1999) referred to these five questions as the performance management framework. This study was followed up by Ferreira and Otley (2009). When outlining their performance management framework, Ferreira and Otley (2009) expanded the performance management framework from five to twelve questions, representing factors they believed ought to be considered when working with performance management. The last question is about overall links. The first eleven questions cover, in brief, the following areas (Ferreira and Otley, 2009, pp. 266-67):

For public sector managers, political, parliamentary or "upward" accountability is expressed in the desire to be loyal to one's political party. The duty to serve clients and the public constitutes public or "outward" accountability. As a result of NPM efforts and attempts to 'reinvent' the public sector around the globe, more recent theorizing has given much more prominence to managerial or financial accountability (Guthrie *et al.*, 1999; Panozzo, 2000). The latter embodies the concepts of managerial autonomy, efficiency, and effectiveness. It is reinforced by the very impetus for quantification, that is, specification of measurable results (i.e. outcomes), performance

or objectives by managers and their superiors, accompanied by a relaxation of formalized controls over inputs and processes (Sinclair, 1995; Lapsley and Miller, 2005). Finally, professional and personal accountabilities to one's profession and one's code of ethics are also indispensable parts in Sinclair's typology.

Her findings provide strong evidence indicating that the aforementioned types of accountability are not mutually exclusive, but contextually dependent, meaning that organizations may be accountable in more than one way. For example, in his study of the reform of the Italian public sector Panozzo (2000) points out that managerial accountability has become transformed into a matter of legal compliance – *management by decree* – rather than a mechanism for promoting change. In a similar vein, Kurunmäki (1999) has documented a narrowing of the basis of accountability resulting from Finnish health care reforms which led to a conflict with the broader societal conceptions of accountability held by medical professionals. That is why accountability is a chameleon-like, multiple, fragmented, and continually constructed (Sinclair, 1995).

### 2.3.2. *The limitations of accountability*

Messner (2009), taking a basis in the ethical dimension of accountability, cautioned about the limits of accountability, something that appears more pressing when individuals face multiple accountability pressures simultaneously (as explicated by Sinclair, 1995). Messner (2009, p. 925) applied the term “opaque selves” to spell out limitations of accountability, defining the term as follows:

The first constraint upon every account of oneself is grounded in those areas of the self and its conduct that remain foreign to the self. This foreignness marks a limit to every effort to know oneself and therefore restricts one's ability to a full story of oneself... Therefore, I cannot explain everything that I have done, and I cannot tell a coherent story of who I am and what I have experienced because my experience and conduct have not been motivated exclusively by my conscious efforts and deliberations and because the minutiae and complexity of what happens will often exceed my recognition and memory.

This reasoning provides understanding as to why individuals held accountable sometimes become frustrated when asked to explain their conduct in the backdrop of full rationality. Messner (2009, p. 934) furthermore informed us what we then might have to expect from individuals held accountable: *“The idea that there are limits to accountability suggests that escaping or resisting accountability is not necessarily an unethical act. It may be an understandable reaction to a situation in which demands for accountability have become an ethical burden for the accountable self. One may even argue that that resistance to accountability is, to some extent, a normal feature of everyday organizational life. Indeed, from time to time, discussions or debates have to be avoided and critical questions have to be ignored in order to move forward and to ‘get things done’.”* In this way, Messner (2009) shed light on sources of conflicts in organizations and experienced frustration amongst those held accountable.

## **3. Method**

Because of the need to depict the complexity of a phenomenon only receiving a little attention from accounting researchers and accountability literature hitherto, we decided to conduct a single case study.

The data consists of primary and secondary data. We have conducted three interviews with employees at the headquarters in Oslo in the case organization. Furthermore, different assessment/evaluation reports exist of the case organization's performance in different programs. These evaluation reports are normally requested by the case organization's donors, interested in whether they receive value for money (according to one of the interviewees). Furthermore, we

also have secondary data from a master thesis written on the same organization. The master thesis consists of data from documents and eight interviews. Beyond that we have also collected information from other reports, made available by the case organization (e.g. annual reports) and external parties (e.g. media).

#### **4. Case descriptions**

##### *4.1 Background description of the case*

This case description is based on a Policy Paper prepared by the case organization in 2012 (Case organization, 2012).

“The case organization is an independent, humanitarian, non-profit, non-governmental organization, established in 1946. It has defined the following vision: Rights Respected and People Protected”. Furthermore, the case organization has formulated the following mission statement: ‘

“[the case organization] works to protect the rights of displaced and vulnerable persons during crisis. Through our programmes we provide assistance to meet immediate humanitarian needs, prevent further displacement and contribute to durable solutions. Through our stand-by rosters we provide expertise as a strategic partner to the UN, as well as to national and international actors. Through our advocacy we strive for rights to be upheld and for lasting solutions to be achieved... We take action during situations of armed conflict, and engage in other contexts where our competencies will add value. We are a rights based organisation and are committed to the principles of humanity, neutrality, independence and impartiality... We achieve our vision through our actions.”

“The case organization’s primary focus is the emergency stage where needs are often most acute. However, we recognise that emergency relief alone cannot deliver solutions, and that it can also create aid dependency. [The case organization] therefore pursues a holistic rights based approach, encompassing emergency relief and early recovery, seeking to build on displaced persons’ own resilience to promote sustainability and recovery. The case organization specialises in a dynamic, adaptive and mutually reinforcing set of core competences, including Shelter, Food Security, Education, Water, Sanitation and Hygiene (WASH) and Information Counselling and Legal Assistance (ICLA) with a particular focus on Refugees and IDPs. We may also include host communities in our activities given the important role that they often have in supporting displaced people and contributing to durable solutions. We aim to ensure equal access and service to all vulnerable groups, especially by meeting the different needs of men, women, boys and girls. We involve displaced persons and host communities in the identification of their needs as well as in the design, implementation and evaluation of programmes. We promote environmental sustainability and climate adaptation in our activities, and continuously adapt to changing needs.

Risk management is an integral part of all [the case organization’s] operations in order to ensure the safety and security of displaced and vulnerable persons, and our staff... The case organization seeks to enhance the capacity of the international community and national actors, in particular the United Nations, in all stages of crisis; from prevention / early warning, preparedness and response, to monitoring, reconstruction, conflict resolution, sustainable development and democratic governance. As a strategic partner, we aim to ensure the rapid deployment of specialist personnel, whilst also supporting continuity of operations and internal capacity building. An overarching goal is to ensure that people in emergencies receive protection and assistance according to their needs and rights, with particular emphasis on the protection of civilians and the implementation of relevant UN resolutions.

**Advocacy** The case organization advocates towards decision-makers in order to obtain full respect for the rights of displaced and vulnerable people. We advocate at local, national, regional and global levels; basing messages and strategies on our first-hand experience and specialised

expertise. Advocating with the United Nations, especially with protection mandated agencies, is a priority in order to strengthen humanitarian response. We also engage with a range of other relevant actors in order to secure and maintain access to displaced and vulnerable people. The case organization conducts regional and inter-governmental outreach through strong presence in strategic capitals such as Geneva and Brussels, including by working with the Internal Displacement Monitoring Centre (IDMC) which is a global leader in monitoring, reporting and advocating on internal displacement and the rights of IDPs. We are committed to living our core values: Dedicated, Inclusive, Innovative and accountable.

These core values are fundamental in all our actions and in the workplace. They apply internally towards our colleagues and externally towards our partners, whilst the needs and rights of displaced and vulnerable persons remain at the heart of everything we do. [the case organization] is committed to non-discrimination, respect for human dignity and prioritising the most vulnerable. We recognise that it is the primary duty of States to protect and assist displaced and vulnerable people. Where States are unwilling or not wholly able to fulfil this duty, we endeavour to respond and advocate with them to fulfil their duty. We work in partnership and alliances with local communities, authorities and UN agencies. The case organization promotes respect for the rights and duties contained in international human rights and humanitarian laws, particularly the Refugee Convention and Protocols, the Guiding Principles on Internal Displacement and the Kampala Convention on IDPs in Africa. Specific focus is given to the protection of vulnerable groups and minorities, especially women and children.”

The case organization is committed to accountability and transparency in all activities, and adheres to a number of principals, including:

“Code of Conduct for the Int. Red Cross/Red Crescent and NGOs in Disaster Relief”,  
“Humanitarian Accountability Partnership”, “SPHERE Humanitarian Charter and Minimum Standards in Disaster Response”, “INEE Minimum Standards for Education in Emergency” and  
“Do No Harm’ principle”

#### *4.2. Challenges—experiences across projects*

##### *4.2.1. Maintaining control in times of growth*

The organization being studied has grown greatly in size (measured both in revenue, staff members, as well as number of programs and activities undertaken). Although they have welcomed this development it is also clear from the interviewees that this has been challenging. One issue is following up on a larger number of programs and activities but also to make sure the management and accountability/steering structure is satisfactory. What used to be adequate is no longer sufficient, according one interviewee.

##### *4.2.2 Balancing central and decentralized control—relating to structure and organizing*

One interviewee said that the case organization historically had tended to apply centralized control, whereby the headquarters in Oslo would be heavily involved in following up on the various programs. Nonetheless, the interviewed pointed out that this is about to change. The organization growth (see Section 4.2.1.) for one thing has made it necessary for the organization to allow for more decentralized controls and decision making structures.

##### *4.2.3. Financial dependency on donors*

Financial dependency on donors creates various performance measurement related challenges. One type of challenge relates to the risk of being overly influenced by donors in terms of where and how funds should be spent. For instance, individuals and institutions providing funding are might delegate the allocation decision to the case organization, but might on the other hand want to clearly influence such decisions themselves. This is problematic for different reasons. It is a principal problem of being too much dictated by funders It has for instance an ethical dimension

in the sense that the case organization might strongly believe that funds that donors are suggesting to spend on a predetermined cause (i.e. country and project), might be better spent on other projects. Furthermore, if the case organization—due to reasons mentioned previously—fails to perform according to its ordinary standard in terms of quality of services provided or value for money (herein efficiency considerations) it could reflect badly on its reputation, causing problems in the field (in the specific project or when negotiating access) or to secure funding from others and thus its long term survival or position is threatened.

Moreover, the organization faces practical challenges of the need for planning for the long run (and predominantly act accordingly) at the same time as its funding sources frequently are short term oriented, at least with respect of the period over which money is appropriated or guaranteed. Thus, the case organization risks both its financial resources as well as reputation. Consider for instance the following statement by Thomas, Szabo and Hinestroza (2011):

“Funding from humanitarian sources tends to be short-term (projects of not more than one or two years), with short-term "results" identified and few requirements in terms of baseline data collection, longer-term performance measurement and detailed reporting. [the case organization's] funding mechanisms are designed for an "emergency" response modality, whereas [the case organization] is in reality engaged in a much longer-term strategic role in Colombia that goes beyond direct humanitarian relief.”

Furthermore, since funding institutions often allocate money to the case organization through its budget, it often means that the money are not available to the case organization until several weeks or a few months into the year to which it was appropriated. In the mean time the case organization must either choose to halt its operations or alternatively put up a lot of its own money (i.e. working capital) to fund the operations in such budgetary transition periods.

#### 4.2.4 High staff turnover

The case organization struggles with high staff turnover for different reasons. Nonetheless, high staff turnover brings about great challenges for the organization's performance. For instance: “The year 2009 and into 2010 saw a high turn-over. According to the 2009 ... Colombia Annual report, and validated in the field, "2009 saw high turn-over of national staff in all regional offices, with the office of Magdalena most affected after the entire team either renounced/or did not renew their contracts in the latter part of the year. To replace departing staff members, a relatively high level of resources in the recruitment processes has been invested and an aim for the coming year is to ensure staff retention." When the evaluation visited the Magdalena office, it was confirmed that the only staff that were not new to the operation were the driver and the housekeeper, and staff were anxious about answering questions about projects activities from only 2008 or 2009 that they had no knowledge or experience of. Such levels of staff turnover must be recognized as a serious cost to the organization in terms of knowledge, capacity and management time required for training and orienting a new team. It should be noted that the situation is improving and staff retention since January 2010 is stable and high.”

An interviewee explained how the case organization's high turnover of staff members caused them problems. For instance, it takes time for new staff members to get acquainted with the organizational routines and systems. If they do not possess the required competence they must also be trained beyond the system technicalities. Therefore, for some time, new staff members are unable to report and execute performance in the intended way. Then, after a while, when they have learned how to report and execute organization performance, they are on average likely to leave the organization. The staff leaves their positions for different reasons. Still, it is the case organization's policy to limit the staff members' contract periods in the field to a predetermined limited time period, due to safety reasons and to avoid wearing out staff members.

As a result, it becomes very difficult to maintain planned and systematic performance assessments and desired performance levels. Consider for instance the following description found in one of assessment reports of the case organization:

“Some staff interviewed felt that they had little knowledge and understanding of the organizational culture ... beyond their regional office or the country program and would like to know more about this organization as whole, and what is happening beyond their borders. ... the case organization’s Colombia unit should communicate to staff, for example, about successful experiences and strategies that have been tried in other country operations so that as an INGO, [at the case organizations Colombia unit] can project a more "international" experience and image.”

One performance management tool deployed by the case organization is the balanced scorecard (BSC). One interviewee stated that BSC functions as a useful planning tool, but beyond that it does not work. The main problem is that it takes years to train to the staff members to use BSC in the intended way and when they have learned they often leave the organization.

4.2.5 Operating within increasingly unstable environments—much more about politics “When considering the development in recent years there is a general development trait associated with the entire [humanitarian] sector: working with aid or humanitarian work has become much more challenging due to a politicization of the entire [humanitarian] sector... we operate within humanitarian principles according to which we are supposed to be independent, neutral etc. [this] has become very difficult. The safety situation... in many of the countries we operate in—due to that many actors do not accept humanitarian principles etc., is another dimension making it more complex and difficult [for us] to operate... These factors make it harder and harder for us to reach the most vulnerable groups, of e.g. displaced people, in accordance with humanitarian principles. We must be able to speak with all parties... and help those with the biggest needs independent of which side [of the conflict] they belong to or the area they live in... we shall help the most vulnerable groups of displaced people... It has become harder and harder due to political factors.” When elaborating on the aforementioned, the interviewee stated that The interviewee also made the point that aforementioned factors “requires much more from the organization in terms of competence and management.”

Summing up his viewpoint in this area, the interviewee stated that: “All of these [aforementioned] factors have created much greater complexity for the organization and a much more demanding organization to manage. When we for instance are to measure the results of what we do, it is clear that all these influencing factors make it more complex to measure results.”

#### 4.2.6 How much details should be reported?

One interviewee stated that the case organization struggles with deciding on the reporting details. The organization prepares monthly performance reports, whereby staff members in the field are asked to report data at the end of each month. One problem with this system is that the staff members in the field believe this reporting exercise to be overly detailed and time consuming, thus “stealing” valuable time from their core work activities (as they see it). Furthermore, it is not fully clear how all the reported data can be made use of in a reasonable way. The case organization also prepares quarterly performance reports for external reporting purposes.

#### 4.2.7. Challenging to identify and develop appropriate KPIs

Having assessed the case organization’s Colombia program, Thomas, Szabo and Hinestroza (2011) commented the following about the case organization’s result based management framework (RBM):

“An examination of [the case organization’s] project proposals and reporting for the years 2008-2010 shows that:

- [the case organization] is not currently using a results-based management system, with the exception of the CIDA funded education project.
- [the case organization] is not measuring project or program performance over longer periods, beyond the brief life span of its project submissions.
- [the case organization] does not systematically refer to any baselines by which to measure change.
- [the case organization] Colombia's proposals and reports generally provide only output-level indicators, rather than indicators that measure more substantive quantitative or qualitative changes over time.
- [the case organization] appears not to be systematically monitoring or evaluating its performance beyond the completion of specific activities.

In the absence of a RBM framework at the level of project and overall, therefore, it is extremely difficult to show the cumulative, multi-year impact of [the case organization’s] work, giving the impression that no meaningful results have been achieved overtime. These factors detract from the many positive results and outcomes, at various levels, that are being achieved by [the case organization’s] Colombia program.”

The vision and mission 2. Key factors believed to be central to the organization’s overall future success 3. The organization structure 4. Strategies and plans 5. Key performance measures 6. What level of performance does the organization need to achieve for each of its key performance measures, how does it go about setting appropriate performance targets for them, and how challenging are those performance targets? 7. What processes does the organization follow for evaluating performance? 8. What rewards/penalties are in place 9. Information flows (feedback and feed-forward), systems and networks 10. What type of use is made of information and of the various control mechanisms in place? 11. Does the PMS relate to the environment and change dynamics in a proactive or reactive manner?

2.2. Literature review of NGOs viewed from an accountability perspective Focusing on NGOs at large, yet principally studies on humanitarian aid providing organizations, we review findings in the literature on how accountability has been studied. For instance, Rodon, Maria Serrano and Giménez (2012) discuss the management of cultural conflict during the provision of humanitarian aid (HA), particularly between providers of humanitarian aid and the beneficiaries. The discussion centers on the extent to which the culture characterizing the NGO interacts with the local culture in the field in which the NGO operates. They find that “culture is not immutable but dynamic—being constantly produced and reproduced during HA operations.” Rodon, Maria Serrano and Giménez (2012, p. 366) With respect to development oriented NGO (NGDOs) “accountability relations have traditionally fixated on functional accountability. ... short term in orientation, focusing on accountability from NGDOs to funder organizations ... . It uses funder instigated evaluation and monitoring mechanisms such as ‘logical framework analysis to demonstrate accountability for spending designated monies for designated purposes’” (O’Dwyer and Unerman, 2007, p. 449). The tradition in which humanitarian NGOs are usually evaluated by their funders rather than their beneficiaries is unwarranted according to Pérouse de Montclos, (2012): “First party evaluations, in particular, raise many conflicts of interests, as they do not have enough ‘critical stance’ to assess the performance of a humanitarian institution” (Pérouse de Montclos, 2012, p. 158). Examples of such conflicts include the avoidance of “bad eggs” from being evaluated, the circularity in which the evaluation (system) must be approved by those who are evaluated, and the neglect to name names. Furthermore, such evaluations are deemed inferior because of their formal and technocratic nature, and because they do not help the involved parties

to learn from their mistakes (Pérouse de Montclos, 2012, p. 154). Responding to this seemingly inferior accountability form between donors and funded humanitarians, O'Dwyer and Unerman (2007) have studied attempts to install a social accountability relation between donors and the funded organization. Within such a social accountability relation the parties seek to avoid short term driven measurement of isolated project activities, and instead target "second and third order effects of NGO actions ... NGDO impacts on their key beneficiary constituencies (O'Dwyer and Unerman, 2007, p. 450)". Another important trait associated with this kind of social accountability relation is its emphasis on downward accountability to beneficiaries (as opposed to upward accountability vis-à-vis the donors). Nevertheless, on this matter, Everett and Friesen (2010, p. 482) argues that "...we see donors, with the help of academics ... asking humanitarians to adopt largely technical or hierarchical forms of accountability. Humanitarians counter by calling for greater beneficiary accountability, revealing in the process their moral obligations and primary concern with the suffering other."

Moreover, O'Dwyer, B. and Unerman, J. (2008) chiefly found organizational internal traits to be in focus, making it difficult for the case in question to embrace its accountability relations in a more holistic manner. Accountability is good – there is little disagreement on this point around the globe. However, it is not an easy task to find an organization branded "too accountable" (Koppell, 2005). While there is a wealth of literature on this topic, accountability is inherently 'contentious' and 'complex', 'contradictory and indeed contrary', ill defined and poorly structured concept (Sinclair, 1995; Kearns, 1994; Roberts, 1991; Mulgan, 2000). Sinclair (1995: 219) refers to the "chameleon of accountability" which is a "cherished concept, sought after but elusive". Yet, she continues that "accountability is multiple and fragmented: being accountable in one form often requires compromises of other sorts of accountability" (Sinclair, 1995: 231). Likewise, Kearns (1994) claims that "it is laden with competing assumptions and complicated by contextual factors that make the notion of accountability the ultimate "moving target" (p. 187). The lack of clarity and coherence regarding the meaning of accountability is particularly striking in contemporary literature. For instance, accountability connotes bureaucratic control in some articles, transparency in others, while some commentators treat "accountable" as synonymous with "law-abiding" (Koppell, 2005).

The traditional view of accountability is that of a relationship involving "the giving and demanding of reasons for conduct" (Roberts and Scapens, 1985: 447). In this broad sense, accountability can be seen as "a chronic feature of daily conduct" (Giddens, 1979: 57). At the very heart of this relationship is stewardship. If one is accountable, then one is answerable to another party, and is bound to give an explanation for actions taken (Jönsson, 1988; Ijiri, 1975; Robinson, 2003; Gray and Jenkins, 1993; Roberts and Scapens, 1985). With the passage of time, however, the scope and meaning of accountability has been extended in a variety of directions well beyond its core sense of being called to account for one's actions. Munro and Mouritsen (1996) suggest that accountability should be understood as a broad concept, one that goes beyond a formal order to encompass a complex system of reciprocal rights and obligations that abound in organizations.

Roberts (1991) emphasizes the latter and argues that accountability also embraces varied social practices by means of which we tend to remind each other about our reciprocal dependence. Such reciprocal dependence can be thought of in both instrumental and moral terms; we are bound up with each other not simply in narrow, calculable ways, but also more broadly in intended and unintended ways. That is why Roberts (1991) divides the concept of accountability into individualizing and socializing forms. In turn, Lindkvist and Llewellyn (2003) propose using terms *accountability* and *responsibility* to connote instrumentality and morality, respectively. Accountability in the public sector has been given the extensive literature coverage (Mulgan,

2000). Even though there is a clear-cut agreement that accountability in the public sector is a prerequisite, there is a tiny consensus on which mechanisms should prevail at any point in time. This has resulted in “a complicated web of multiple, overlapping accountability relationships” within which public officials must operate (Romzek, 1998: 197). The search for ways to keep public officials accountable has led scholars to identify various mechanisms of accountability, and a great deal of research efforts on the topic is vividly indicative of that (Sinclair, 1995; Romzek and Dubnik, 1987; Kearns, 1994). For example, Barbara Romzek and her associates (Romzek and Dubnik, 1987; Romzek, 1998; Romzek and Ingraham, 2000) characterize accountability relationships that “reflect both internal and external control strategies and vary in the degree of autonomy they afford the accountable manager” (Romzek and Ingraham, 2000: 242). This typology for public sector accountability is believed to be among the most influential. In essence, this approach yields four accountability types – hierarchical, legal, professional, and political – each of which is associated with a different “value emphasis”.

*Hierarchical* accountability is based on close supervision of individuals who possess low work autonomy. *Legal* accountability entails detailed external oversight of performance for compliance with established mandates which managers are obliged to fulfill. *Professional* accountability is based on deference to the expertise of one’s peers or work group. Finally, *political* accountability is established by responsiveness to the concerns of key external stakeholders. The different values and behavioral expectations pertinent to each accountability type are collected in Table 1. As the literature demonstrates, public sector managers tend to “work under one or two of these types on a daily basis with the remaining types being in place but underutilized, if not dormant” (Romzek and Ingraham, 2000: 242). In addition, there is often a shift in focus and priority among the different types of accountability in times of reform (Romzek, 1998; Johnston and Romzek, 1999). This is also identified by Sinclair (1995) in one of a few empirical studies of accountability. She unveils five types of accountability – political, public, managerial, professional, and personal – which can be crossed with two discourses – structural and personal.

#### .2.8. Problems with visualizing results internally and externally

To satisfy its donors and other stakeholders, it is important for the case organization to report about their results. Furthermore, to manage their performance and resources in the best possible way the case organization also must be able to visualize results for internal management purposes. However, visualizing results and the various ways in which the case organization performs has proved to be difficult:

“Overall [the case organization] has performed extremely well in terms of achieving expected results and outputs, and donors should be satisfied with results achieved at all levels. However, [the case organization’s] Colombia’s many successes are not being systematically tracked and reflected in project reporting.”

“Many of the weaknesses that have been identified by some donors in terms of the lack of in-depth reporting and a clear results-based management system within [the case organization], are in part related to their own lack of demand for such. As humanitarian donors they request and require only very limited, and very short-term reporting. In particular, local SIDA staff at the Embassy is unsatisfied by the low level of [the case organization’s] reporting which conveys little of the substance of progress being made year to year, on various issues of concern to donors.”

#### 4.2.9 Highly contextualized/heterogeneous project measurements and settings

One interviewee made the point that it is very difficult to compare the different projects the organization operate:

“When MFA and NORAD are going to assess our Somalia program, it is clear that how they collect primary data in a context in which the security situation is very unpredictable, and might vary from day to day [will be pivotal to the program assessment].” In this way the interviewee

made the point that the evaluation of the Somalia program was deemed to be very difficult to carry out and use as a basis for considering the results achieved by the case organization simply because the situation might be considerably different at the time when they conducted their operations and later on, when others would try to assess them.

#### 4.2.10 Multiple performance forms/structures/demands

One of the interviewees pointed out that their donors tend to apply different performance measurement and reporting templates, making it necessary for the organization to juggle multiple performance measurement frameworks simultaneously. This clearly increases the organization's administrative reporting burden, but also make it more difficult to report the findings or insight provided by one donor with that of another donor.

### 5. Discussion and conclusions

This paper is a case study dealing with performance measurement in a non-governmental organization (NGO), addressing the following research question: What challenges does a NGO encounter in measuring its performance? An accountability perspective (namely, Sinclair's, 1995 notion of the chameleon of accountability and Messner's, 2009 notion of the "limitations of accountability") represents the theoretical frame through which we tackle the above-mentioned question.

The following major challenges were unveiled throughout the research: maintaining control in times of growth, challenges related to identifying and developing appropriate KPIs, the dilemma of centralization vs. decentralization—relating to structure and the way the NGO is organized, financial dependency on donors, the level of details to be reported (instigating both performance measurement issues as well as management issues), high employee turnover, some of the management control tools (e.g. BSC) are deemed useful in planning, but beyond that they do not work as anticipated, highly contextualized/ heterogeneous measurement project settings, an increasingly unstable environment—much more about politics (facing high uncertainty), problems in visualizing results internally and externally, multiple performance forms and demands (creating an administrative burden and making comparisons/benchmarking difficult to carry out). One overall finding in this study is that our focus on NGO performance and what staff at a NGO finds particularly challenging represent a balanced set of challenges relating to measurement (of performance) on the one hand and management of performance on the other hand. This suggests there being a main technical difficulty to accountability alongside a more environmental, i.e. contextual difficult dimension. The management category refers to the challenges outlined in Section 4.2.1-4.2.5. The technical and more performance measurement oriented category refers to the challenges described in Section 4.2.6-4.2.10.

When assessing the technical aspects of performance measurement against the management aspects of organizational performance the common feature deriving is contextual uncertainty, complexity and opaqueness. Thus, with respect to technical measurement as well as program management it is difficult to fully know what is going on and what the better humanitarian approach would be in a particular context. Consequently, on the one hand, whereas volatility by means of contextual differences and incomparability enforces pragmatism and demolishes accountability structures, opaque performances function as a buffering mechanism. I.e., opaque performance structures and few benchmarking opportunities may function as a buffering mechanism for humanitarian organizations—making it easier to justify their performance vis-a-vis external stakeholders.

Viewed from upward accountability relations (i.e. with respect to the donors) this is regarded as a problem, resulting in the request that the case organization ought to standardize its practices

across programs so that the “case organization’s way” becomes more easily identifiable across programs. Effectively, this means that accountability pressure spurs institutionalization processes. As a result, when comparing the case organization with the typical way of making NGOs accountable, the case organization appears to fit the mainstream type of functional accountability. This is paradoxical since the case organization itself strives to focus on long-term results and improve the situation for the beneficiaries by means of making sustainable changes, not short-term results. One reason for this is found in the deviating time horizons of the case organization versus the donors. The donors have traditionally been short-term oriented, making it difficult to measure and/or achieve long-term sustainable changes. Another paradox is found when delineating who is driving accountability. Interviewees in the case organization clearly stated that the international donors are far more demanding to deal with concerning the performance reporting than domestic donors (particularly units related to the government). At the same time, single foreign donors provide relatively small amounts (in percentage terms) of the program funding. Still, they are primarily the ones driving performance measurement forward, seemingly making it more and more functional.

When considering the multiple challenges identified in this study with viewpoints exerted in many of the reviewed studies (see Section 2.2), the latter seem to overemphasize the accountability relationships and oversimplify the technical challenges of preparing an account of itself. It appears excessively simplistic to only conclude that the organization ought to move away from functional accountability relations. It is after all understandable that institutional donors want to know what is being achieved, and in their terms whether they get value for money. Conversely, it is understandable when staff members in the case organization underline the problems of comparing programs. In short the case illuminates a dilemma between the local and the centralized need for control, i.e. pragmatism versus (quantifiable) control at a distance.

In this regard this paper contributes to the NGO accountability literature by purporting principally the concept of professional space into the discussion (McMillan, 2004). Judging from the empirical findings in this study, the most promising way forward is therefore to make humanitarian NGOs accountable through broadly based principles rather than via detailed technical rules. Hence, we find support in the argument made by McMillan (2004), who argues in favor of allowing the profession—or what we might coin the field workers—sufficient space to exercise its judgment, rather than trying to control it through detailed reporting standards. From this we infer that it is better to develop broadly based unified standards that allow for sufficient contextual interpretations vis-à-vis downward accountability, yet sufficient benchmarking opportunities for upward accountability needs. Consequently, we conclude on the basis of the findings in this study, and with respect to findings in other papers discussing NGO accountability related to humanitarian organizations, that it is better to endorse a discipline of space rather than a discipline of enclosure. We also find support for this position through (Messner’s, 2009) notion of the “limitations of accountability” as well as Jordan’s and Messner’s (in press) discussion about enabling control when dealing with incomplete performance indicators.

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# Management control systems in schools – a framework for an empirical study

Liv Bente Hannevik Friestad, University of Agder

## 1. Introduction

Recent analyses of Norwegian primary and lower secondary schools report significant differences in student performance between schools and regions (Utdanningsdirektoratet, 2011, 2012). Even if student performance is adjusted for students' family background and other factors known to influence student performance, there is still significant unexplained variance in performance (Bonesrønning & Iversen, 2008, 2010). Students in the Oslo region and in the county of Sogn og Fjordane perform better than students in other parts of Norway, and students in municipalities with less than 2500 inhabitants deteriorate compared to students in larger municipalities (op.cit). In their studies, Bonesrønning and Iversen (2008, 2010) follow a long tradition of school research. Since the Coleman report (1966), economists have carried out a large number of studies and used a variety of mainly econometric methods in order to investigate what factors that influence student performance and in order to estimate school efficiency (e.g. Hanushek, 1986, 1997; Hanushek & Welsh, 2006; Worthington, 2001). Whether and how reforms such as free school choice (e.g. Friedman, 1997; Goldhaber, 1996), and block grants and devolved financial management (e.g. Grosskopf & Moutray, 2001) affect school performance and school efficiency are examples of other issues studied by school economists. In general, school economics research finds that students' family background has a significant effect on student performance. For factors controllable by schools and school authorities, such as teacher quality, school size, class size and school resources as well as for reforms like free school choice and devolved financial management, the estimated effects on student performance are more ambiguous (e.g. Hanushek & Welsh, 2006; Lamdin & Mintrom, 1997).

Within school economics research there is limited research on management control systems and processes within schools (Friestad, 2008), and after about 50 years of school economics research, there is still a gap of knowledge with respect to whether, how and under what conditions factors controllable by schools and school authorities significantly affect student performance. Management accounting research is concerned with issues such as cost and performance measurement and management and with systems, structures and management processes inside organisations (Kaplan, 2006). Within management accounting research there is a small strand of research on primary and lower secondary schools and education. A number of studies have focused on issues related to implementation of formula funding, devolved financial management and local management of schools (Agyemang, 2010; Broadbent & Laughlin, 1998; Edwards, Ezzamel, McLean, & Robson, 2000; Edwards, Ezzamel, & Robson, 1999; Edwards, Ezzamel, & Robson, 2005; Edwards, Ezzamel, Robson, & Taylor, 1995; Edwards, Ezzamel, Robson, & Taylor, 1996; Laughlin, Broadbent, Shearn, & Villig-Atherton, 1994; Levacic, 1990). Other studies have investigated school district efficiency using DEA analysis (Chalos, 1997) and stochastic frontier estimation (Dopuch & Gupta,

1997), applied a cost driver approach to understand cost differences in schools (Bjørnenak, 2000), compared the accountability models in education in respectively New Zealand and England (Broadbent, Jacobs, & Laughlin, 1999), and studied Private Finance Initiative in schools (Ismail & Pendlebury, 2006) and whether and how formula funding and devolved budgeting affect equity in education (Mayston, 1998). Apart from the number of studies focusing on formula funding, devolved financial management and local management of schools, the body of management accounting research on schools and education is fragmented with respect to topics researched, and studies focusing on the relationship between design and use of management control systems and student performance are virtually absent (Friestad, 2008).

The unexplained variance in student performance combined with the lack of studies on the relationship between management control systems in schools and education and student performance, have spurred an interest for studying this relationship. It is interesting to study both 1) the relationship between management control systems at the school level and student performance and 2) the relationship between management control systems used by superior school authorities and management control systems at the school level and student performance. The present paper constitutes a starting point for a research project on these topics.

It is reasonable to assume that similar organisations might differ with respect to what management control systems they have as well as with respect to how they use the different management control systems. What management control systems organisations have might depend on characteristics of the organisation, the production process and the ability to measure output (e.g. Hofstede, 1981; Ouchi, 1979; Simons, 1995) and other factors internal and external to the organisation (Chenhall, 2003). In addition, whether new or altered systems are implemented might depend on whether and how managers make rationale choices or are influenced by fad, fashion and other forms of external influences or pressure (Abrahamson, 1991; Ax & Bjørnenak, 2002; Bjørnenak, 1997; Lapsley & Wright, 2004; T. Malmi, 1999). When it comes to how management control systems are used, we know that organisations might have the same or similar management control systems but use the systems differently (e.g. Margareth A. Abernethy & Brownell, 1999; Simons, 1995) and that the use might neither be as intended nor in accordance with normative theory (e.g. Broadbent & Laughlin, 1998; Brunsson, 1989; Edwards et al., 2000; Fältholm & Nilsson, 2010; Høgheim, Monsen, Olsen, & Olson, 1989). For these reasons, a study of the relationship between management control systems in schools and education and student performance should not only focus on what management control systems schools have, but also on how the systems are used.

The objective of the research project is to study the relationship between design and use characteristics of management control systems in Norwegian primary and lower secondary education and student performance. The research project will apply a quantitative research approach.

However, the research project will start out with a case study in order to get an in depth understanding of design and use of management control systems in primary and lower secondary education and how different management control systems and approaches relate to each other. The objective of the present paper is to develop a theoretical framework for this case study.

Within management accounting research, there has been a tendency to focus on specific management control systems rather than on a holistic understanding of the package of management control systems and how the different management control systems relate to each other (Chenhall, 2003; Ferreira & Otley, 2009; Teemu Malmi & Brown, 2008). Studies of only one or few management control systems might result in underspecified models and spurious results (Chenhall, 2003) as well as a “piecemeal” understanding of how management control systems works in organisations (Margaret A. Abernethy & Brownell, 1997). To avoid such pitfalls, researchers have proposed different holistic frameworks for studies of management control systems in organisations (e.g. Anthony, 1965; Ferreira & Otley, 2009; Teemu Malmi & Brown, 2008; Otley, 1999; Simons, 1995; Tessier & Otley, 2012). In the present paper, Malmi and Brown’s (2008) “management control systems as a package” framework constitutes a starting point and skeleton for development of a theoretical framework for the design dimensions of management control systems, while Simons’ (1995) “levers of control” constitute an important element in the discussion of use dimensions.

To facilitate a basic understanding of the research setting, the following section gives a short introduction to Norwegian primary and lower secondary education. Section three discusses design use and time dimensions of management control systems while section four contains a discussion of how these dimensions relate to each other and present a holistic framework for studies of management control system design, use and time dimensions. Section five contains some concluding remarks and sketch out the next steps in the research project.

## 2. Norwegian primary and lower secondary education

In Norway, almost all primary and lower secondary schools are public schools. In the school year 2010/11, 97.3 % of the about 614,000 primary and lower secondary school students in Norway attended about 2840 public primary and lower secondary schools. The other students attended 173 private schools. About 2800 of the public schools are owned and controlled by the local municipalities. For these schools, the school size varied from 1 to 887 students, and the average school size was 213 students in the school year 2011/12.

<sup>1</sup> [www.wis.no/gsi](http://www.wis.no/gsi)  
<sup>2</sup> [www.ssb.no/Kostra](http://www.ssb.no/Kostra)

<sup>1</sup> [www.wis.no/gsi](http://www.wis.no/gsi)  
<sup>2</sup> [www.ssb.no/Kostra](http://www.ssb.no/Kostra)

All public schools are publicly financed, and the non-public schools get the most of their funding from public sources. Teachers are the dominant group of employees, and they constitute an important stakeholder group in schools. In 2011, about 80 % of the 79 600 man years in Norwegian schools were held by 73,428 teachers

The schools and municipalities operate under laws and regulations given by the Government and the Ministry of Education. The County Governors are the Government's and the Ministry of Education's local representatives in the control of schools and municipalities. In 2011 there were 439 municipalities and 19 County Governors in Norway. Figure 1 illustrates the primary and lower secondary education hierarchy and how the different levels reports to the superior levels and control their subordinate levels. In the rest of the paper, the terms "schools and education" and "education" are used interchangeably and refer to the education hierarchy illustrated in figure 1, while "schools" refers to the school level in the hierarchy.

**Figure 1: The primary and lower secondary education hierarchy**

In Norway, the overall school objectives are stated in the Norwegian Education Act ("Opplæringslova," 1998). The school objectives are broad and cover a lot more than achievement of academic knowledge and skills. It is reasonable to assume that students, parents, teachers, schools and other stakeholders might have different opinions with respect to how important the different objectives are and how much effort they are willing to offer in order to achieve the different objectives. Possibly, they might also have their own additional objectives. In addition, the objective statement in the Norwegian Education Act is formulated in a way that allows different interpretations. Consequently, what school objectives that are considered the most important, and how they should be achieved, might differ between schools, school stakeholders, municipalities and districts. Even if the present research project recognizes that schools have multiple objectives and that the set of objectives might vary between schools, the project focuses on achievement of only one type of school objectives; students' achievement of knowledge and skills measured by tests, exams and term marks.

## 3. Theoretical framework

Management control systems has been defined and described in different ways by different researchers (Ferreira & Otley, 2009; Teemu Malmi & Brown, 2008). The present paper follows Malmi and Brown (2008) and defines management control systems, or controls which are the notion they use, as *“all the devices and systems managers use to ensure that the behaviours and decisions of their employees are consistent with organisational objectives and strategies, but exclude pure decisions support systems”* (Teemu Malmi & Brown, 2008, pp. 290-291). Consequently, management control systems include both management accounting systems and other types of formal or informal controls (Chenhall, 2003; Teemu Malmi & Brown, 2008).

It has been mentioned that Norwegian primary and lower secondary education has multiple objectives and that the knowledge of the school production process is limited. In addition, achievement of the different objectives might be difficult to measure. According to Ouchi (1979), output control, in terms of performance measurement, is a useful control approach when the ability to measure output is high, independent of knowledge of the transformation process, while clan control, rituals and ceremonies are useful control approaches when the ability to measure outputs is low and the knowledge of the transformation process is low. Comparison of Ouchi's (1979) framework with school production characteristics indicates that, dependent of how headmasters and school managers consider the possibility to measure output, both output control and clan control might be useful approaches in schools and education. The fact that Malmi and Brown (2008) include both cultural controls and traditional management control systems including output controls in their management control systems as a package framework, and in addition include administrative controls, make it an appropriate framework for a study of design characteristics of management control systems in schools and education.

## **Management control systems design**

Malmi and Brown (2008) propose to group management control systems, controls, into five types of controls; cultural controls, administrative controls, planning, cybernetic controls, and reward and compensations. The way they illustrate the management control system package (figure 2) indicates that planning, cybernetic controls and reward and compensations constitute one category of control systems, in the following referred to as *“traditional management controls”*, while *“cultural controls”* and *“administrative controls”* constitute two other categories of control systems.

*Figure 2 The control package (Teemu Malmi & Brown, 2008)*

### **Cultural controls**

Malmi and Brown (2008) follow Flamholtz et al (1985) and define organisational culture as *“the set of values, beliefs and social norms which tend to be shared by its members and, in turn, influence their thoughts and actions”* (p158), and they define cultural control as consisting of three *“aspects of cultural control; value based controls, symbol-based controls and clan controls”* (Teemu Malmi & Brown, 2008, p. 294).

Malmi and Brown's (2008) first aspect of cultural controls, values, is related the control systems called belief systems by Simons (1995). Values function as a control mechanism when the values influence behaviour in the desired direction. Vision statements, credos, objective statements and codes of conduct are examples of documents and expressions used in order to communicate and facilitate the building of common values, objectives and directions for the future within the organisation (Malina & Selto, 2001; Teemu Malmi & Brown, 2008; Simons, 1995). Values are assumed to influence behaviour in three ways, through recruitment of individuals sharing the organisational values, 2) through socialisation of the individual employee/groups of employees resulting in individual values aligned with the organisational values and 3) when individuals behave in

accordance with organisational values even if their personal values might deviate from organisational values (Teemu Malmi & Brown, 2008)

The second aspect of cultural controls in Malmi and Brown's (2008) framework is referred to as "symbol based controls" (Teemu Malmi & Brown, 2008). Symbols are visible expressions used in order to produce beliefs and values (Feldman & March, 1981) and to maintain or develop a particular type of culture (Schein, 1997 referred in Malmi and Brown, 2008). Dress code and design of buildings and workspace are mentioned as examples of visible expressions signalling organisational culture (Teemu Malmi & Brown, 2008).

"Clan controls" is the third aspect of cultural control in Malmi and Brown's (2008) framework. "Clans" refer to groups of individuals with a common understanding of values and beliefs (Dent, 1991), while clan controls refer to the informal social structures within an organisation (Ouchi, 1979). Clan control is defined as the common understanding of values and boundaries the employees are socialised into when they enter the organisation, and clan control is often carried out by use of rituals and ceremonies (Teemu Malmi & Brown, 2008). If groups of employees have been socialised into a common understanding of values and practices during their education, this type of clan control is referred to as professional control (Ouchi, 1979). In professional organisations, where the employees belong to one or several professional groups, it is reasonable to assume that conflicts might occur between organisational and the different professional values and norms. For that reason, both professional control and clan control are mentioned as aspects of cultural control in the following.

The above discussion states that symbols contribute to the building of values, and that clans are built on common values. In addition, it is mentioned that values and clans are influenced and maintained by a continuous focus on credos, visions and objective statements as well as by use of symbols, routines and ceremonies.

The present paper makes a distinction between visual and written expressions and other "facilitators" of values such as vision, mission and objective statements, ceremonies, symbols, rituals and routines, and organisational values, professional values, clan control and professional controls. Organisational values, professional values, clan control and professional control are referred to as four aspects of cultural control while symbols, vision, mission, objectives and other statements, rituals, ceremonies and routines are assumed to carry and facilitate organisational values. Further, education and training within and/or outside the organisation is assumed to be important for the building of professional values and professional control. It is further assumed that professional values might influence organisational values and vice versa. The assumed relationship between the "carriers/facilitators" of organisational and professional values and the four aspects of cultural controls is illustrated in figure 3.

**Figure 3: Carriers/facilitators of value and four aspects of cultural control**

Even if culture is considered a contextual variable influencing and pervading the management control systems without being a control system or control system element itself (Ferreira & Otley, 2009), and even if organisational culture is not totally controllable by managers, it is reasonable to assume that managers could influence organisational culture and consequently use organisational culture as a control approach. Therefore, the present paper follows Malmi and Brown (2008) and includes cultural controls in a holistic management control system framework.

## **Planning**

Planning, the second type of control in Malmi and Brown's management control systems package, is defined as the process where goals for the organisation and the organisational units are set, and the "standard to be achieved" and "the level of effort and behaviour expected" are made clear to

organisational members (Teemu Malmi & Brown, 2008, p. 292). Others define planning as “*a process of choosing and setting in train activities to achieve certain goals*” (Berry, Broadbent, & Otley, 2005b, p. 45) and strategic planning as the process where “*decisions are made within the context of the goals and strategies that emerged from the strategy formulation activity*” (Anthony & Young, 2003, p. 18). Planning constitutes an ex ante form of control (Teemu Malmi & Brown, 2008) and even if definitions of planning are some different, the definitions agree that planning is a process where future goals, standards, activities to achieve the goals, decisions and expected behaviour and levels of effort are decided.

Malmi and Brown (2008) split planning into action planning which is planning for a short horizon and with at tactical focus, and long range planning which has a more strategic orientation . Although short run planning, action planning, could have a time horizon of only a few days (Berry et al., 2005b), short term planning do often refer to planning with a one year time horizon while long range plans might be prepared for several years or even decades (Anthony & Young, 2003; Berry et al., 2005b) Malmi and Brown (2008) define planning as a separate form of control distinguished from budgeting, financial and non-financial performance measurement and the cybernetic control process, and they mention that planning could take place without reference to budgets or financial measures. In other conceptual control frameworks, for instance in the management control process (e.g. Anthony & Young, 2003), planning constitutes one of four phases in a cyclical management control process.

Planning has been criticized for always been wrong because it is impossible to estimate the future accurately and for the possibility that plans are interpreted rather than followed (Anthony & Young, 2003). Despite this, planning and plans are considered as potentially important activities and control devices and considered a separate type of control system.

### **Cybernetic controls**

The third type of controls in Malmi and Browns’ (2008) management control system package is cybernetic controls. A cybernetic control process is a purposive process where actual performance is compared to a standard, where any deviation between the two is reported backwards and where necessary changes are made to modify activities or systems in order to reduce or eliminate the deviation (Green & Welsh, 1988). Malmi and Brown (2008) include budgets, financial measures, non-financial measures and hybrid systems, containing both financial and non-financial measures, in the “cybernetic controls” type of management control systems. However, they also mention that the types of systems included in this category might be used as information and decision support systems for the individual manager.

From management accounting and control theory, we know that plans, budgets and financial and non-financial performance measurement systems might be used as cybernetic control systems, but also for other purposes. Even if Malmi and Brown (2008) focus on budgeting and performance measurement as elements in a cybernetic control process, they also mention that budgeting and performance measures might be used as information and decision support systems for the individual manager. In addition, these types of controls might be used to communicate goals and strategies to employees and other stakeholders and to direct attention towards activities and behaviour of strategic importance (Berry, Broadbent, & Otley, 2005a; Malina & Selto, 2001). Further, we know that formal management control systems, as well as planning, can be used for legitimating purposes (Brunsson, 1989; Edwards et al., 2000; Edwards et al., 1995) and to prevent organisations or organisational units from undesirable influence from their superiors/superior organizational levels (Broadbent & Laughlin, 1998; Laughlin et al., 1994).

The term “cybernetic controls”, referring to one of several possible uses of budgets and performance measurement systems, is too narrow for a study of management control systems in schools and

education. In the present framework the “cybernetic controls” category is split into “budgeting” and “performance measurement/ management”.

Planning and budgeting are referred to as ex ante forms of control, and a budget is defined as a plan transformed or “translated” into monetary terms (e.g. Anthony & Young, 2003). In the same way as planning could be short term and/or long term planning, budgeting can also be short and/or long term. For these reasons, planning and budgeting could have been handled as one type of controls. However, the present framework follows the “management control process” (e.g. Anthony & Young, 2003), and refers to planning and budgeting as two separate types of controls. The remaining part of the “cybernetic controls” in Malmi and Brown’s (2008) framework includes three types of controls; financial, non-financial and hybrid measurement systems, indicating that performance evaluation should be based on formal performance measures. Ferreira and Otley (2009) propose another approach to performance evaluation and include both subjective, objective and mixed performance information as well as formal and informal information and controls. Organisations, and especially public organisations providing professional services, might have ambiguous objectives and/or produce services that are difficult or impossible to measure. Therefore, it might be difficult or impossible to use only formal and objective performance measures for control purposes (Hofstede, 1981; Ouchi, 1979). In the framework proposed in this paper, Malmi and Brown’s (2008) financial, non-financial and hybrid measurement systems are replaced by a group of control systems referred to as “performance measurement and evaluation systems”. This type of control systems includes both formal performance measurement and evaluation systems and routines such as evaluating accounting reports against budgets and actuals performance against plans, and other forms of formal and informal performance measurement and evaluation procedures based on subjective and/or objective measures and information.

According to normative theory, performance measures should be coupled to objectives, formal mission statements, visions, strategies, plans and budget in a holistic management control system as well as reflect and support organisational and governance structure (e.g. Anthony & Young, 2003; Ferreira & Otley, 2009). However, management accounting and control research have found that the assumed couplings might not always exist (e.g. Edwards et al., 2000; Høgheim et al., 1989) and that organisations might deliberately implement performance measurement systems not directly coupled to overall organisational objectives (Johnsen, 1999).

### **Rewards and compensations**

Rewards and compensations is the fourth group of controls in the management control package (Teemu Malmi & Brown, 2008). Rewards and compensations might be monetary (compensations) or non-monetary and might be given to individual employees and/or to groups of employees. Bonus and salary increases are examples of monetary rewards, while recognition, praise, titles, and job and office assignments are examples of non-monetary rewards. Absence of rewards and “naming and shaming” are examples of negative rewards/punishment (Merchant & Van der Stede, 2012). Rewards might be linked to formal control systems, such as budgets, but also to other and more informal control systems and information and/or subjective evaluations (Teemu Malmi & Brown, 2008; Merchant & Van der Stede, 2012). They might be extrinsic, which means that they are “*tangible, observable outcomes given to the individual upon completion of a task*”, or intrinsic which means that “*rewards can be received and experienced by the individual independent of the organizational evaluation process*” (Flamholtz et al., 1985, p. 43). Further, they might be used in order to motivate to increased effort and performance and to build or maintain cultural control (Teemu Malmi & Brown, 2008). From management control research, it is also known that although incentive systems might have the intentional motivating effect, unintended and adverse effects are common (Merchant & Van der Stede, 2012).

In the following, rewards and compensations is maintained as a separate type of control systems included in the group of management controls referred to as “traditional management controls”.

### **Administrative controls**

Administrative controls, the fifth type of controls in Malmi and Brown’s framework (2008), is split into three subcategories; organizational structure, governance structure, and procedures and policies.

Organisational structure refers to *“the formal specification of different roles for organisational members, or tasks for groups, to ensure that the activities of the organisation are carried out”* (Chenhall, 2003, p. 144). Consequently, it is about how the employees in an organization are organized in groups and hierarchies and it *“determines the responsibilities and accountabilities of organisational participants; it equally defines the activities that individuals with specific roles should not pay attention to”* (Ferreira & Otley, 2009, p. 269). In addition, organisational structure influences motivation, effort and efficiency of individuals and groups of individuals, as well as the flow of information and how control systems are designed (Chenhall, 2003).

In the management control literature, organisational structure is considered a management control system contingency factor (e.g. Chenhall, 2003) as well as a control system (e.g. Ferreira & Otley, 2009; Teemu Malmi & Brown, 2008). Since organisational structure normally is a result of managerial decisions in order to influence behaviour and accountability, the present paper follows Malmi and Brown (2008) and Ferreira and Otley (2009) and consider organisational structure a control system itself.

Governance structure is related to the organisational structure and it is about board structure and composition, management and project teams, the formal lines of authority and accountability, and about systems to secure vertical and horizontal coordination of activities within the organisation (Teemu Malmi & Brown, 2008). However, organisations having the same organisational structure might differ with respect to governance structure, for instance, with respect to what the organisational units are accountable for. The organisational units in organisations with identical organisational structure might for instance be accountable for quantities of inputs used, activities performed, quantities produced, revenue, cost and/or profit and/or responsible for characteristics of the production process (Merchant & Van der Stede, 2012).

The third type of administrative controls, policies and procedures, are referred to as *“the bureaucratic approach to specifying the processes and behaviour within an organization”* (Teemu Malmi & Brown, 2008, p. 294) and this type of controls include standard operating procedures and practices, rules and policies and action control (op.cit.).

Standard operating procedures and practices, rules and policies include *“the set of written rules, procedures, policies, and operating manuals (SOPs)”* that are *“used to guide managers as they administer their departments”* as well as *“policy guidelines, job descriptions and prescriptions for how managers should handle operational situations that might arise”* (Macintosh & Daft, 1987, p. 51) while action control includes behavioural constraints, preaction reviews, action accountability and redundancy (Merchant & Van der Stede, 2012). Physical constraint such as locks and passwords, administrative controls such as restricted decision making authority and separation of duties for instance related to payment, are examples of behavioural constraints. Preaction review refers to superiors’ review of a subordinate individual or an organisational unit’s plans before the plans are approved and carried out. Action accountability is about holding employees accountable for actions performed or expected to be performed, while redundancy refers to *“assigning more employees to a task than is strictly necessary”* or *“having backup employees (or equipment) available”* (Merchant & Van der Stede, 2012, p. 84) in order to avoid that critical operations stop or that tasks are not carried out due to lack of employees or equipment (op.cit.).

### **A revised management control as a package framework**

The above discussion of Malmi and Brown's (2008) management control system as a package framework, leads up to a somewhat altered framework for studying design dimensions of management control systems. The altered framework is illustrated in figure 4. First, the altered framework emphasizes that all types of control systems and approaches should be based on and communicate organisational values and objectives. Organisational values and objectives are typically stated in vision, mission and objective statements. Therefore, "vision", "mission" and "objective statements" are mentioned in the top of the illustration even if such statements are also mentioned among the "carriers/facilitators of organisational values" that constitute an element in cultural control. Further, figure 4 illustrates the assumed relationships between carriers/facilitators of organisational and professional values, organisational and professional values and clan and professional control, as well as the couplings between planning, budgeting and performance measurement proposed by normative theory (e.g. Anthony & Young, 2003) and between organisational structure and governance structure.

**Figure 4: An altered management control system package framework**

### **Use dimensions of management control systems**

Simons (1995) categorizes management control systems into four types of control systems mainly according to how and for what purposes the management control systems are used (Ferreira & Otley, 2009). Even if Simons (1995) emphasizes the needs of organisations operating in competitive environments, his distinction between belief, boundary, interactive and diagnostic management control systems might also be appropriate for the discussion of use dimensions of management control system in organisations operating in more stable environments.

The first of Simons' (1995) levers of controls is the *belief systems*. A belief system is "*the explicit set of organizational definitions that senior managers communicate formally and reinforce systematically to provide basic values, purposes and directions for the organization*" (Simons, 1995, p. 34). Visions, credos, mission statements and objective statements are examples of belief systems conveying core values of the organization, and "*used to inspire and direct the search for new opportunities*" (Simons, 1995, p. 7). Also symbols and symbolic use of information as well as performance measurement systems and other management control systems might communicate and direct attention to organizational values and objectives (e.g. Berry et al., 2005a; Malina & Selto, 2001) and consequently function as belief systems. Belief systems relate to the "cultural controls" in the "management control system package" (Teemu Malmi & Brown, 2008).

The second type of control systems in Simons levers of control (1995) are the boundary systems. Boundary systems are "*used to set limits of opportunity-seeking behavior*" in order to avoid risks (Simons, 1995, p. 7). Boundaries might be communicated through the same types of documents and other means of communication as for the belief systems. For instance, a mission statement might at the same time convey information about what the individuals and the organization as such should be and achieve, and about what the organization should not carry out or put effort into. Simons' (1995) describe the relationship between belief and boundary systems as a yin and yang relationship. Diagnostic control systems are the third type of "levers of control". These systems are "*used to motivate, monitor and reward achievement of specific goals*" and they typically contain critical performance variables (Simons, 1995, p. 7). Diagnostic use of management control systems refers to comparing actual performance against standards, objectives, plans, budget, and/or benchmarks. Diagnostic control systems could be cybernetic control systems, but diagnostic management control systems do also include management control systems not fulfilling the strong cybernetic objective/standard, activity, measurement and feedback circle. Diagnostic use of management

control systems and information within an organizational unit is typically carried out by one of a few managers (Margareth A. Abernethy & Brownell, 1999).

The fourth “levers of control” are systems “used to stimulate organizational learning and the emergence of new ideas and strategies” (Simons, 1995, p. 7). Systems used for this purpose are referred to as interactive management control systems, and these systems are considered useful for organizations facing strategic uncertainty (Simons, 1995). The same (formal) control systems, for instance a performance measurement system, might be categorized as an interactive or a diagnostic control system. Whether it is the one or the other depends on how it is used. Interactive use of management control systems is characterized by involvement of managers from different levels of the organization. Typically, interactive use takes place as an open-minded interpretation and discussion of information conveyed by formal systems and information from other sources (Margareth A. Abernethy & Brownell, 1999).

Interactive and diagnostic use relates to how information provided by systems is used. However, the terms “diagnostic” and “interactive” are also used to describe how management control systems are or could be prepared. For instance whether budgets are prepared interactively in a process involving managers from different levels in an organization or prepared diagnostically by one manager without involvement of other managers or employees (Margareth A. Abernethy & Brownell, 1999). So far it has been mentioned that the same systems, and/or devices might constitute elements in both beliefs and boundary systems, and that the same systems could be both prepared and/or used interactively or diagnostically. For instance, performance measurement and management system, such as a balanced scorecard, might be prepared and used interactively or diagnostically as well as be a means to communicate organisational strategy, values and boundaries to members of the organisation and thereby also function as a belief and/or boundary system. Consequently, the same measurement control system might fit into all four types of control systems in Simons’ “levers of control”. For this reason, it is uninteresting to ask whether a particular control system is a belief, boundary, diagnostic or interactive system. It is more interesting to ask whether the different types of systems and devices are prepared and/or used interactively or diagnostically and to what extent managers intentionally use the different systems and devices in order to communicate beliefs and boundaries.

### **Dimensions of time**

Management control systems might be used continually or more or less frequently. In addition, the information communicated and provided by formal management control systems might be more or less updated, preparation and revisions might take place more or less frequently, and controls like plans and budgets might be prepared for shorter or longer periods of time. It is reasonable to assume that how often management control systems, or management control system elements, are prepared, changed, updated and/or used might indicate how the managers emphasize the different control systems or system elements in their control of individuals and organisational units. In addition, when systems were implemented or altered is interesting information related to discussions of effects of management control systems. Therefore, when and how often the different control systems were and/or are prepared, changed, updated, and used are dimensions of time that should be added to the dimensions of design and use discussed above in order to achieve an in depth understanding of how important the different management controls are in managers’ control of their subordinates.

Now and then organisations make changes in or implement new management control system. Either an existing system is altered or a new system is implemented, it may take some time from the change is carried out until intended or unintended effects materialize in behaviours and performance. For these reasons, studies of effects of management control systems should also focus

on whether management control systems have been recently altered and, if so, when they were altered.

#### **4. A holistic framework for studies of design and use of management control systems**

In the above discussion of design dimensions of management control systems, the systems were grouped into three main categories of controls; cultural controls, traditional management controls and administrative controls, each consisting of several aspects or types of controls. In addition, the discussion resulted in six dimensions of use and a set of time dimensions. In this section, it is discussed how the dimensions of use and time relate to the different types of management control systems – the design dimensions. The discussion leads up to a holistic framework for empirical studies of design, use and time dimensions of management control systems. Inspired by Ferreira and Otley (2009), the framework is presented as a set of questions for each type of management control systems discussed above.

##### **Cultural controls**

###### **Value carriers/facilitators**

In the above discussion it was mentioned that organisational values are expressed in and communicated by documents such as visions, mission and objective statements, and by use of symbols, rituals, ceremonies and routines. Further, it was mentioned that professional values typically stem from education and training inside or outside the organisation and are maintained by many of the same types of “value facilitators” as organisational values.

For each document or statement, ritual, ceremony and routine used to build values, either these are to be characterized as organisational or professional values, it is interesting to investigate to what extent the actual control system element is intended to function as a belief or boundary system and whether it actually function as one. Further, it is interesting to study whether it is prepared and brought into attention in an interactive or diagnostic manner as well as when it was formulated or established, how often it is reformulated, revised or changed and how often it is brought into attention.

Dress code, design of buildings and workspace, and codes of conduct are mentioned as examples of symbols that might be used in order to build organisational values (Teemu Malmi & Brown, 2008; Simons, 1995). In a study of management control systems in a particular organisation, or type of organizations, it is interesting to investigate what symbols that are used to signal organisational values as well as whether the symbols communicate beliefs or boundaries. Depending on type of symbols, when they were implemented or altered as well as whether decisions and/or implementation of symbols took place in an interactive or diagnostic manner, might be appropriate questions. For symbols, diagnostic or interactive use is assumed to be an irrelevant dimension of use. Education and training is mentioned as carriers/facilitators of professional values. Many professionals participate in different types of more or less regular supplementary professional education and training in terms of education programs or separate courses or seminars. Such education and training might contribute to maintenance of or altered professional values. Therefore, it is interesting to study how many of the employees that attend supplementary education and training as well as how often they attend or have an opportunity to attend. To what extent employees attend supplementary education or training might depend on factors such as types of education and training and how interested they are, but also on to what extent they are allowed by their superiors to attend courses and programs. Further, it is interesting to investigate to what extent superiors use employee attendance in courses and education in order to build organisational values and clan control.

###### **Values, clan control and professional control**

In the discussion of cultural controls, values are split into organisational and professional values indicating that organisational values not necessarily are aligned with professional values and vice versa. For this reason, it is interesting to investigate to what extent the organisation is characterised by common values and whether the common values are to be characterized as professional values or internally built organisational values. If the organisational members reports that the organisation to a minor extent share common values, it is interesting to investigate the variance in values and whether some values influence the organisation to a larger extent than other values.

“Use” of values is about clan and professional control. It seems irrelevant to discuss whether values, as well as clan and professional control, are prepared and/or used interactively or diagnostically.

However, it might be relevant to investigate to what extent values, and thereby clan control and/or professional control, function as beliefs and boundary systems; i.e. to what extent the employees consider the values to direct attention and inspire desirable actions and efforts (belief systems) or whether they delimit undesirable activities and/or effort (boundary system) (Simons, 1995).

When it comes to time dimensions, it is interesting to investigate whether there have been recent changes in values and in the balance between professional and organisational values, and thereby between professional and clan control.

**Figure 5: A framework for studying design, use and time dimensions of cultural controls**

## **Traditional management control systems**

### **Planning and budgeting**

Organisations might prepare and use different types of plans and budgets, and plans and budgets might be prepared for the whole organisation or for different organisational units or activities.

Therefore, what plans and budgets the organisation prepares is the first questions to be asked.

Plans and budgets might be prepared in an interactive or diagnostic way, and when used for performance control they might also be used interactively or diagnostically (e.g. Margareth A. Abernethy & Brownell, 1999). Further, plans and budgets should be built on and communicate objectives, strategies, beliefs and boundaries to employees and other stakeholders. Hence, they might also function as belief and boundary systems. Therefore, whether plans and budgets are prepared in an interactive or diagnostic manner, and whether they signal values and/or boundaries, are relevant questions related to the use dimension of plans and budgets. Control of actual performance against plans and budgets is an element in the performance measurement and evaluation type of controls.

With respect to time dimensions, the length of respectively the planning and budgeting horizon, how often plans and budgets are prepared and whether and how often the plans and budgets are revised are interesting questions in an in depth study of the design and use of management control systems.

### **Performance measurement and evaluation**

The former discussion of the performance measurement and evaluation controls concluded that the revised package of management control systems should follow Ferreira and Otley (2009) and focus on *“What processes, if any, does the organisation follow for evaluating individual, group, and organisational performance? Are performance evaluations primarily objective, subjective or mixed, and how important are formal and informal information and controls in these processes?”* (Ferreira & Otley, 2009, p. 267). In addition, it is interesting to focus on whether the evaluation as such, and measures and information used for evaluation, are coupled to vision, mission and organisational objectives and to plans and budgets.

With respect to the use dimensions, both performance measurement and evaluation and implementation of new or altered formal performance measurement systems and processes might take place as an interactive or diagnostic process. In addition, performance evaluation systems should be coupled to and communicate organisational values and consequently function as beliefs and boundary systems. Consequently, the proposed framework includes questions focusing on these issues.

Regarding time dimensions, performance evaluation processes and systems might be categorised according to how frequent data and information are collected and measures are prepared, how often and when performance measures and evaluation reports are presented and how updated they are when presented. In addition, it is interesting to focus on when performance evaluation systems and routines were implemented and whether and how the set of measures and indicators have been recently altered.

### **Rewards and compensation**

A holistic study of management control systems should also investigate whether the organisation has formal financial and/or non-financial rewards and compensation systems as well as how and when such systems are prepared and used. Further, it is interesting to investigate whether and how rewards and compensations are coupled to the other control systems used within the organisation and to what extent it is facilitate and/or delimit actions and effort. It is reasonable to assume that formal rewards and compensation systems might be prepared, and possibly also used, interactively or diagnostically. Therefore, it is interesting to investigate who participate in preparation of the system as such and in target setting, measurement and interpretation take place in a diagnostically or interactively style. Regarding time dimensions, it is interesting to investigate when rewards and compensation systems were implemented and/or altered, and how often rewards and compensations are provided.

In addition to formal rewards and compensation systems, organisations might have more informal systems. It is interesting to investigate whether there exist informal rewards or punishment systems within the organisation, and what characterize such systems.

**Figure 6: A framework for studying design, use and time dimensions of traditional management controls**

### **Administrative controls**

Administrative controls include organisational structure, governance structure and policies and procedures. It is interesting to investigate how the organisational and governance structures are, when they were last altered, why they were altered, and whether changes were discussed and decided in an interactive or diagnostic manner.

The types of controls referred to as policies and procedures includes standard operating procedures and practices, rules and policies and action control. A holistic study of management control systems in organisations should also include an examination of what types of policies and procedures the organisation or organisational units have and when they were implemented and altered. The types of rules, procedures etc. that exists within an organisation might signal to what extent these controls put boundaries on or facilitate employee activities and initiatives. Whether new or altered policies and procedures are implemented in an interactive or diagnostic manner might be relevant for these types of controls, while the concept of interactive or diagnostic use seems to be irrelevant.

**Figure 7: A framework for studying design, use and time dimensions of administrative controls**

## **5. Concluding remarks and directions for the future**

The present paper represents a first attempt to develop a theoretical framework for studies of design, use and time dimensions of management control systems, and how the different types of management control systems relates to each other. With its focus on design, use and time dimensions related to the whole package of management control systems and approaches, the framework is demanding. However, it is primarily developed in order to study management control systems in primary and lower secondary schools and education. Normally, schools and other organisations within primary and lower secondary education are small organisations operating under stable conditions and regulations and consequently assumed to have relatively simple organisational and governance structures and a limited number of other management control systems and

approaches. This might make it possible to achieve a holistic understanding of design, use and time dimensions of the whole package of management control systems in schools and education and how the different controls relate to each other.

The next step is to test the framework in a few schools. In parallel with, and as a result of, the testing of the framework, it will be further developed/refined before it is used in a case-study in a group of schools and other organisational levels of primary and secondary education. If the framework, or a revised version of it, seems appropriate for studies of management control systems in schools, it will constitute a theoretical framework for the quantitative study of the relationship between management control systems and student performance.

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Research proposal:

# **Management accounting and control in highly professionalized organizations**

**Per Ståle Knardal, Trondheim Business School (TØH)**

## **Abstract**

The aim of this thesis is to analyse the role of management accounting and control in highly professionalized non-profit organizations. Traditionally management accounting and control has focused on providing formal and quantifiable information with the purpose of assisting managerial decision making. However, since the end of the 1980s there has been an increased discussion whether traditional management accounting and control practices are relevant for decision making. Consequently it has been stated that management accounting and control has to have a broader scope and be adapted in to the actual context where it operates.

The empirical field for the thesis is mainly symphony orchestras. The thesis will also contain a comparative case study between symphony orchestras and the hospital sector. Symphony orchestras and hospitals are large economic entities primarily funded by the state. In addition, symphony orchestras can be characterized as highly professionalized non-profit organizations, which are very different from hospitals. These characteristics will cause a number of contextual variables. The overall research problem for the thesis is:

## **What is the role of management accounting and control in highly professionalized organizations?**

The thesis is planned to contain four articles, and both quantitative and qualitative research methods will be used in order to give further insight to the overall research problem.

## **1. Introduction**

In 1987 Johnson and Kaplan published the book *Relevance lost – the rise and fall of management accounting*. In this they stated that: “Today`s management accounting information, driven by the procedures and cycle of the organization`s financial reporting system, is too late, too aggregated, and too distorted to be relevant for managers` planning and control decisions” (Johnson and Kaplan, 1987: 1)

Johnson and Kaplan`s statement is based on observation of early management accounting and control (MAC) processes and the early definitions focus on “*the provision of more*

*formal, quantifiable information to assist managerial decision making*” (Chenhall, 2003: 129). Chenhall (2003) describes the evolvement in management control systems definitions. In newer definitions of MAC, the scope is much broader, and now includes broader information such as *external information related to markets, customers, competitors, non-financial information related to production processes, predictive information and a broad array of decision support mechanisms and informal personal and social controls* (Chenhall, 2003: 129). Hence, the characteristic of MAC is the broad approach to control, which is emphasized in several central definitions. Robert N. Anthony and Govindarajan’s much used definition is: *“Management control is the process by which managers influence other members of the organization to implement the organization’s strategies”* (Anthony and Govindarajan, 2001).

The references above frame the background for the topic of this study. I will discuss and analyse MAC in organizations which are (1) highly professionalized and (2) in the non-profit sector. In the 1980’s the idea of new public management emerged. An implication of this was that the distinction between public and private sector regarding issues like continuity, ethos, methods of doing business, organizational design, people, rewards and career structures was removed. However, research since 1980 has stressed that contextual variables influence management accounting and control (Chenhall, 2003).

Modell (1998) argues that professional organizations can be characterized by having simultaneity of production and consumption, intangibility of service outputs and a great reliance on human resources in production. In addition to the characteristics listed by Modell (1998), Løwendahl (2000) also highlights the importance of subjective quality assessment as a fundamental characteristic of a professional service. Further, a non-profit organization will, according to (Baumol and Bowen, 1966), share at least two characteristics; they earn no pecuniary return on invested capital and they claim to fulfil some social purpose.

In the thesis two cases will be explored, the symphony orchestra and the hospital sector. The main case is the symphony orchestra, and a selection of orchestras is chosen with the aim of studying the topic. Modern symphony orchestras contain 80 to 110 musicians and an administration of between 12 and 20. In Norway, orchestras are primarily funded by the governments, and the governmental support lies in the range of 80 % and 90 % of the orchestras’ total revenues. Hence, the symphony orchestras are large economic entities and a lot of tax money is used to run the orchestras. In addition to being economic entities, symphony orchestras have got some specific characteristics. Because of the large proportions of professional musicians and the focus on other measures than profit-measures, my assumption is that symphony orchestras hold the characteristics of highly professionalized non-profit organizations. The function of the processes in an orchestra is primarily to ensure collectively high quality in the moment of truth, the concert, and I base my research on the assumption that the role of management accounting and control will differ from management accounting in profit oriented entities and other service organizations in general.

Some central characteristics in a symphony orchestra are that output is difficult to measure according to traditional management accounting and control, productivity cannot be increased in the single performances, many actors have to perform at a high level

simultaneously in the making of the performance and in addition the orchestras have got to take in to account the role of the conductor. Consequently the orchestra is a good arena to study MAC in very special organizations. The hospital sector will have a comparative function because it is interesting to compare management accounting and control in different types of highly professionalized organizations.

The thesis is planned to contain four articles, and it is considered useful to use several methodological approaches to answer the research questions.

Based on this background, the overall research problem for the thesis is:

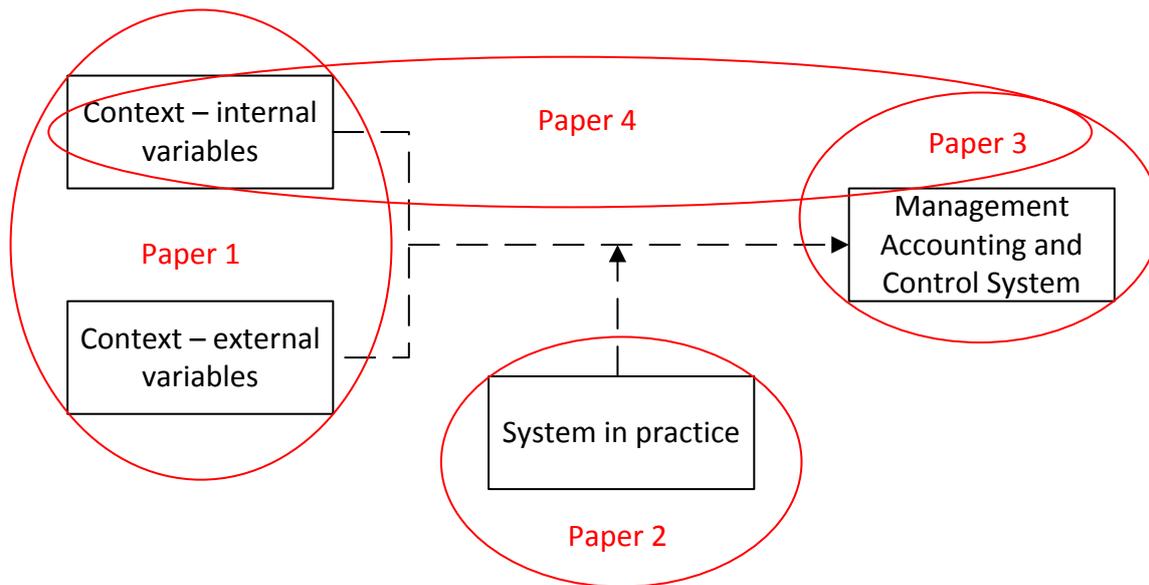
### **What is the role of management accounting and control in highly professionalized organizations?**

The concept of role is complex, and in the theoretical perspective I will define the classical role as described by Anthony (1965). However, other theoretical frameworks are also important in understanding the complexity in the role of MAC. Frameworks such as institutional theory that emphasizes symbolic roles of MAC (Meyer and Rowan, 1977) and actor network theory (Callon, 1986) that describes that different actors may have different understanding of the role of MAC within the organization are also described in the theoretical outline.

The overall research question is subdivided into the following research questions:

1. What do we know about the use of management accounting and control in highly professionalized organizations? A state of art description.
2. What is the relation between performance measurement and performance management in highly professionalized organizations?
3. What characterizes the management accounting and control practices in highly professionalized organizations? A study of orchestras.
4. What are the differences in the use of management accounting and control in highly professionalized organizations? A comparative study.

Figure 1: Overall structure of the thesis



The proposal is further organized as follows. First, a theoretical framework for the thesis is outlined. This is followed by a description of the context in which the thesis mainly will operate and the context is in chapter 3 also connected in to the theoretical framework. In chapter 4 a brief description of the four different articles is given before research methodology for the different papers is discussed in chapter 5. Chapter 6 contains some ethical considerations and limitations.

## 2. Theoretical framework

### 2.1 Management accounting and control

The basis of MAC lies within the field of financial accounting. However, management and coordination of scarce resources must be influenced also by other theoretical directions within the business economy. The subjects within the business economy are influenced by a number of perspectives with the aim of providing knowledge about decisions made at the micro-level, i.e. decisions made within private and public organizations to coordinate scarce resources so the organisation's goals are achieved in the best possible way.

The management accounting and control framework was developed by Anthony in 1965 at the Harvard Business School, and was intended to achieve two aims. First, Anthony wanted to broaden the information to include other information than just financial accounting information. Second, the framework lifted the issues of managerial motivation and behaviour (Otley, 1999). Although management accounting and control has gained a strong position, there has for the last couple of decades been a growing criticism of the applicability. The reason for the criticism is that management accounting and control is perceived to be too narrow compared to the challenges today's organizations face (Busch, in Johnsen et al. (2005)). Otley (1999) stresses that change, insecurity, alliances and increasing service production in contemporary organizations makes it necessary to broaden the scope

of Management Accounting and Control and pay more attention to the elements of strategy and operations.

By studying MAC in contemporary organizations one has to take in to account an open system perspective where organizations not necessarily act as technically rational actors. Therefor the field of study has to be broad and oriented towards management and organizational learning, strategic management, relations between society and the organization, the more utility-like techniques and models as well as views on ethics and philosophy of science.

The theories of MAC goes back to the 1960s, and the focus of traditional MAC can be described as “command and control”, and according to Chenhall the early definitions of management accounting and control focused on “the provision of more formal, quantifiable information to assist managerial decision making” (Chenhall, 2003:129). Simons (1995) developed the framework of diagnostic and interactive control, and early management accounting and control can be associated with diagnostic control with top-down strategy setting, standardization and efficiency, results according to plan, no surprises and keeping things on track (Simons, 1995).

However, Simons (1995) argued that command-and-control techniques have lost their relevance in environments where creativity and employee initiative is critical for success. Given this background he developed an alternative to a diagnostic use of control, an interactive use of control. Interactive use of control requires a continuous dialogue within the organization, and has the function of guiding a bottom-up emergence of strategy. Chenhall (2003) describes the evolvment in management control systems definitions, and argues that the focus in later definitions of management control systems is much broader, and now includes information such as external information related to markets, customers, competitors, non-financial information related to production processes, predictive information and a broad array of decision support mechanisms and informal personal and social controls (Chenhall, 2003: 129).

Old philosophy	New Philosophy
Top-down strategy	Customer/Market-Driven Strategy
Standardization	Customization
According to Plan	Continuous Innovation
Keeping Things on Track	Meeting Customer Needs
No Surprises	Empowerment

*Table 1: Old and new philosophies of management Control (Simons, 1995:4)*

An important motivation for Simons when developing the interactive view on MAC was that an old philosophy of management is not necessarily beneficial for an organization depending on for example creativity. Hence, he acknowledged that different organizations depend on different types of MAC. A universal appropriate MAC which may be applied to all organizations in all circumstances is not realistic.

In this study I will use the classical approach as described by Anthony and Otley with the supplement from Simons in order to understand the role of MAC. This perspective will be extended with other theoretical perspectives.

## **2.2 Management accounting and control within the contingency framework**

Research since 1980 has gained new insights about contextual variables which will implicate the design of an effective MCS (Chenhall 2003). Whereas for example New Public Management (NPM) builds on the presumption that standard management techniques can be implemented in any organization, the contingency framework states *that the appropriate design(s) of MCS will be influenced by the context which they operate* (Chenhall, 2003: 128). Chenhall (2003) has examined and discussed seven contextual variables and made propositions which summarize the research findings on each variable. The contextual variables are: External environment, technology, advanced technologies, organizational structure, size, strategy and culture.

The contingency framework is developed on the basis of studies on private businesses and Chenhall (2003) stresses the need for more research in service and not-for profit organizations.

In this study, the contingency framework is a supplement to the classical approach.

## **2.3 Other relevant theories**

The symphony orchestra is the context of the thesis, a context with certain characteristics, and the contingency framework useful in an analysis of MAC. However, the contingency framework is based on a classical, normative approach, and it may be useful to approach the symphony orchestra using theories that also emphasizes factors other than rational factors. Contingency theory is based on a positivistic view where certain assumptions are made. Several theoretical frameworks may be used to study management accounting and control in symphony orchestra and explore a more hermeneutical view on management accounting and control. For the purpose of this thesis, two of these are considered to be institutional theory and actor network theory, because they may be beneficial in understanding why the contingency framework possibly not covers all aspects of a highly professionalized organization.

### **2.3.1 Institutional theory**

Classical economy is based on an understanding of organizations as rational systems of *“coordinated and controlled activities that arise when work is embedded in complex networks of technical relations and boundary-spanning exchanges”* (Meyer and Rowan, 1977: 340). However, institutional theorists argue that formal structures in organizations are not a result of the demand of the work activities, but rather reflect the myths of their institutional environment. Further Meyer and Rowan (1977) claim that decoupling exist between MAC-activities and the performance of the organization. Still, organizations which incorporate institutionalized myths, even if activity and structure in reality is decoupled are more legitimate, successful and likely to survive.

### **2.3.2 Actor Network Theory**

Actor Network theory has evolved from the works of Michel Callon and Bruno Latour, and describes constitution of networks in which both human and non-human actors assume identities according to prevailing strategies of interaction. This leads to a rejection of the view of objects as actors existing in themselves prior to participation in a network of

interactions. The process from being objects to being actors is by Callon (1986) described to be a process of translation.

Consequently different actors play different roles, and in this study I plan to study the different roles of the actors further.

## **2.4 Summary**

The orchestra is a context which has got certain characteristics. These characteristics will have implications for the management accounting and control in these organizations. Simons (1995) claims that in an organization where creativity and employee initiative is critical for success, a “command and control” structure in the management accounting and control will not be beneficial.

The context, and thereby the contingency framework, is by Chenhall (2003) argued to be crucial in designing favourable management accounting and control. The context in which a symphony orchestra operates is different from a manufacturing entity and a consideration and reflection upon the contextual variables suggested by Chenhall (2003) and the other theoretical frameworks mentioned is useful in analysing the management accounting and control in this specific organization.

Further, to get a more detailed understanding, other theoretical perspectives such as institutional theory and actor network theory may be included.

# **3. Context – the symphony orchestra**

## **3.1 Introduction**

The symphony orchestra is used as the major case for this study. Modern symphony orchestras contain 80 – 110 musicians, and the musicians are divided into four groups of instruments: woodwind, brass, percussion and strings. The administration normally contains 12 – 20. The CEO is the administrative leader for the organization, the orchestra and the administration, and is responsible for managing the staff and the financial affairs. The orchestra has finance-, marketing- and HR-departments within the required staff. In addition, the orchestra has some specific positions such as Head of Artistic planning, Concerts Director and producer. In the focal-organization, the symphony orchestra has a conductor, a concert master and principals as leading positions. These are central positions in the organization.

It has to be taken in to account when describing the orchestra, that the orchestra is both organized as an institution from day to day, and as a performing unit in concerts and rehearsals (Kleppe et al., 2010). The undisputed leader in concerts and rehearsals is the conductor, and the leadership is accepted amongst the musicians (Wennes, 2002).

*With open eyes and completely voluntarily, the musicians adapt in a kind of dictatorship when the musicians sits at the desk and the conductor is on the podium, one is literally in his cave or fist. This is a workform which is accepted and is found wherever* (CEO, October 2011).

The unquestionable leadership is necessary because of the peculiar nature of the concert. The orchestra is under enormous pressure to perform, and the performance happens in the moment of truth. Therefore, there cannot be any doubt about where the leadership

happens. In rehearsals, the hierarchy is, to some degree, flattened out. The undisputed leader of the orchestra is still the conductor, but there is more communication upwards in the hierarchy.

When the orchestra is organized as a day to day institution, the structure is quite different. The musicians expect to participate in decision making and to be included in the democracy of the orchestra through the orchestra committees, but also through having the opportunity to say their opinion. Wennes (2002) found that the acceptance for being controlled by the administration is low amongst orchestra musicians, and that musicians mean that the administrations role is to act as a service centre being humble and respectful towards the performing artists.

### **3.2 Symphony orchestras as highly professionalized non-profit organizations**

The aim for this study is to study management control systems in highly professionalized non-profit organizations. In the following section it is argued that a symphony orchestra can be viewed as a professional service or organization. Second, it is argued that a symphony orchestra shares the characteristics of a non-profit organization.

Grønroos (1990, p27, in Modell, 1998) defines a professional service as *an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources or goods and/or systems of the service provider, which are provided as solutions to customer problems.*

The symphony orchestra can be considered to hold the characteristics of a professional service. The concert has simultaneous production and consumption, and the characteristics of simultaneity and intangibility are held. Further, Modell (1998) lists the characteristic of customer-employee interaction in production. The interaction between the orchestra and the audience is total in a concert, and the only reason for the concert is this interaction. The characteristic of heterogeneity and lack of standardization is there because of the quick turnover of projects.

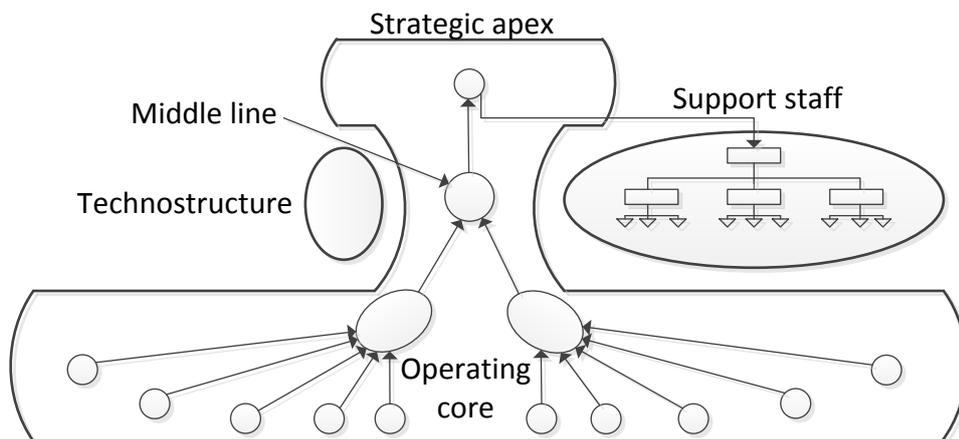
The characteristic of reliance on primarily human resources in production is central. An orchestra needs top professional musicians who are able to perform at their best in concerts.

Baumol and Bowen (1966) argue that standard characteristics of non-profit organizations are also applicable to performing arts organizations, such as symphony orchestras. Non-profit organizations share at least two characteristics: (1) *they earn no pecuniary return on invested capital and (2) they claim to fulfil some social purpose* (Baumol and Bowen, 1966: 497).

Further, Baumol and Bowen (1966) describe the costs of outputs for two sectors in the economy: one in which productivity is rising and one where the productivity is stable. In the progressive productivity economy, technological development will lead to that output per man hour will increase, and wage demands will follow to match the rising productivity. Productivity will remain stable in the non-progressive sector, and increase in wages will result in an increase in labour cost per unit of labour. Performing arts is used as a typical example of the non-progressive sector, and Baumol and Bowen (1966) uses the example of the play Henry IV, Part II: Productivity cannot be increased by reducing the number of actors. This problem is later described as "Baumol`s disease".

A symphony orchestra holds, as argued, the characteristics of a professional organization, and in the terms of (Mintzberg, 1989), the term professional bureaucracy can be utilized. The feature of a professional bureaucracy is that the professionals in the organization are the operative core. In such organizations, two parallel hierarchies may be observed, one for the administration and one for the professional actors. The following figure illustrates the professional organization:

Figure 2: The professional bureaucracy (Mintzberg, 1979)



### 3.3 Summary

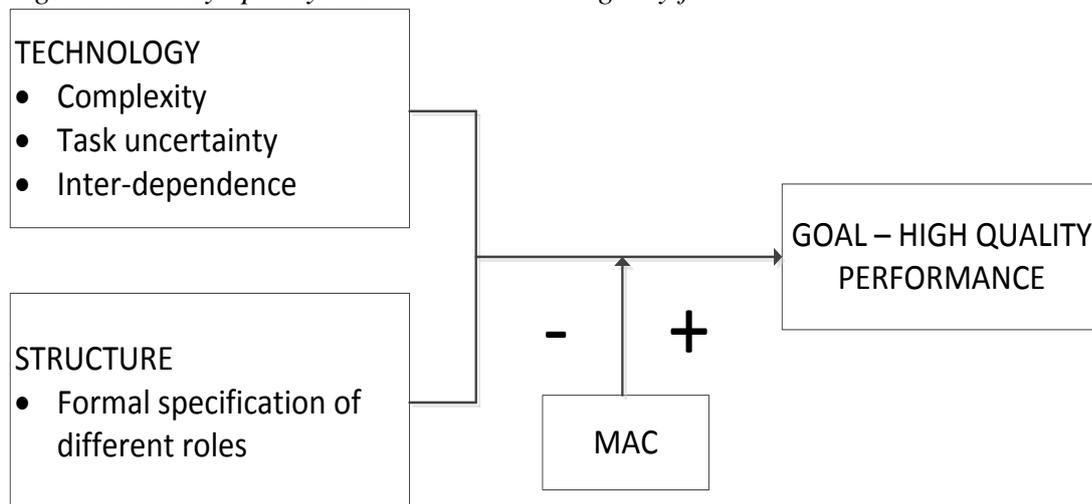
When the characteristics of a professional organization are applied to an organization, this gives rise to a number of challenges, and Løwendahl (2000) categorizes the challenges such as challenges relating to inputs, interaction and output. Whereas a manufacturing business has the opportunity to standardize input, the professionals in a symphony orchestra will have to adapt to the shifting repertoire. Second, Løwendahl (2000) claim that challenges relating to interaction are simultaneity, information asymmetry and double moral hazard. For a symphony orchestra simultaneity and information asymmetry are considered applicable. The simultaneity is described in the above section. The information asymmetry for an orchestra lies in the asymmetry between the expertise which the musicians possess and the knowledge of the audience. Normally, a classical audience is critical and able to evaluate the quality to some extent, but in general, an audience has not got the individual detailed expertise a musician has got on the instrument. Hence, will the evaluation of quality be difficult, and this leads in challenges regarding the characteristics of output. The challenges resulting from the characteristics of the output are according to Løwendahl (2000) that they are intangible, idiosyncratic and innovative. The challenges discussed here are the intangible and the idiosyncratic. An intangible output leads to two major challenges: (1) quality is difficult to guarantee and (2) managing the actual operation is complex because the product cannot be stored. Regarding the quality, quality is difficult to guarantee ex ante the more idiosyncratic the concert is. This is due to the perception of the audience: If a concert is very idiosyncratic, what is perceived to be of high quality depends on the expectation of the audience. The less clear the audience is about their expectations, the more difficult it is to deliver what is expected.

For a non-profit organization, the above discussion suggests that these organizations meet challenges based on the specific characteristics of being a non-profit organization. Baumol

and Bowen (1966) emphasize the characteristics of the lack of return on invested capital and the organizations claim to fulfil some social purpose. These characteristics give rise to some challenges. The lack of return on invested capital is by Baumol and Bowen (1966) argued to be a typical feature for a non-profit organization. Quality of the provided service is an end in itself, and the term fundamental goals is utilized by Baumol and Bowen (1966). A non-profit organization will strive for better research, more adequate hospital facilities or higher artistic quality. This means, according to Baumol and Bowen (1966), that unlimited funds can be used in trying to approach the fundamental goals. The claim to fulfil a social purpose is another typical characteristic stressed by Baumol and Bowen (1966). It is natural for such an organization to seek to distribute its products as widely and equitably as possible, nor providing the products where profit can be maximized. For Norwegian symphony orchestras this is also a specific goal which is annually measured, the orchestras are supposed to reach for a wide audience. In addition, a non-profit organization will meet the challenges of Baumols` disease.

Chenhalls (2003) contingency framework can be applied in making a preliminary understanding about the contextual factors influencing the goal for the symphony orchestra.

*Figure 3: The symphony orchestra in a contingency framework*



Technology and structure are considered to be the most relevant contextual variables for an orchestra in the short term. The external environment, the government, is relatively stable. The orchestras receive funding each year, and this is increased by an index every year. The size is rather stable, and contextual variables such as national culture and strategy are in the short term considered to be stable. As figure 3 illustrates, the contextual variables influence the ultimate goal for the orchestra, high quality performance. The discussion in chapter 3 shows, the orchestra as a professional organization has got some important specific characteristics, and the thesis has the aim of exploring the role of management accounting and control in an organization like this. Management accounting and control may be a moderating or reinforcing factor in producing high quality performances in the moment of truth.

To understand more about MAC in highly professionalized organizations it is interesting to view the symphony orchestra in contrast to another highly professionalized organization, a hospital. Symphony orchestras and hospitals have got some similarities such as the ultimate goal of high quality performances in the moment of truth for musicians and surgeons. It is

on this background interesting to explore differences and similarities in the role of MAC in these organizations.

## 4. The articles

The thesis will be a collection of four papers, and the structure of the papers will be:

### 4.1 State of the art

The aim of this paper is to assess relevant literature. In particular, literature within key-concepts such as management control, management control systems, contingency theory and performance measurement will be identified and evaluated for this purpose.

### 4.2 Performance measurement and performance management in highly professionalized organizations

In highly professionalized organizations, the term performance is essential. The actors in such an organization will have to perform at a high level for the organization to work at its purpose. For an arts organization such as a symphony orchestra performance is crucial. The audience expect a certain level on the concert performance, and it is the performance on stage we normally associate with the term performance when it comes to orchestras. However, the concept performance is relevant for the organization also when the orchestra is off stage and the organization has its everyday life. Will there be other understandings of the concept performance throughout the organization, and how is performance managed throughout the organization? For this paper, the following research question is suggested: *What is the relation between performance measurement and performance management in highly professionalized organizations?*

Around the millennium, arts management was created as a discipline, and there has been a growing debate about performance measurement and performance management in arts organizations. Chiaravalloti and Piber (2011) discuss a number of contributions to the measurement of performance that has been suggested the last ten years. Through this discussion it emerges that the concept performance has got a number of layers, ranging from financial performance to artistic performance. The concept performance will hence be filled with a variety of meanings, and this paper aims to discuss the concept performance and how this is measured and managed in highly professionalized organizations.

### 4.3 Characteristics of management accounting and control in practice

This study is a descriptive case study, and three orchestras are chosen, two Norwegian orchestras and one from the UK. The research question for this paper is: *What characterizes the management accounting and control systems in highly professionalized organizations in practice?*

The two Norwegian orchestras are amongst the five large Norwegian orchestras and are both primarily funded by the Norwegian government. The UK orchestra is also among the largest orchestras in the country, and the funding structure is not fundamentally different

from the Norwegian. The orchestras are per now anonymous, but the on-going dialogue with the orchestras may give the opportunity to publish their identities.

All three orchestras are within the frames of a symphony orchestra as described above. In 2010 (the UK orchestra reports annually from 1. April – 31. March), the Norwegian orchestras played a total of respectively 121 and 128 concerts. The UK orchestra played 106 concerts. The Norwegian orchestras released 0 and 3 CD-recordings, while the UK orchestra recorded 15 CDs. The Norwegian orchestras had total incoming resources in 2010 on respectively TNOK 100 798 and 94 500. The UK orchestra had incoming resources of TNOK 66 000 (exchange rate by 3.7.2012). The ticket revenues amounted to 7 % and 3,9 % for the Norwegian orchestras and the public income was respectively 93 % and 91, 5 %. For the UK orchestra, the ticket revenues were amounted to 13, 9 % and the public funding were 65, 4 % of the incoming resources.

MAC in this context will be explored through a classical theoretical perspective as outlined by e.g. Anthony (1965), Otley (1999) and Simons (1995). However, as proposed in section 2, other relevant theoretical frameworks such as institutional theory and actor network theory may be useful in identifying actors and how the actors understand the use of MAC.

#### **4.4 Differences in the use of management accounting and control in highly professionalized organizations.**

In this thesis it is argued that symphony orchestras hold the characteristics of highly professionalized organizations. Other organizations, such as e.g. hospitals may also hold the characteristics of highly professionalized organizations. It is interesting to compare the use of management accounting and control systems in symphony orchestras to other highly professionalized organizations and the research question for this paper is:

*What are the differences in the use of management accounting and control systems in highly professionalized organizations?*

The study uses of data from the second paper and make comparisons to other highly professionalized organization, such as hospitals. The hospital sector in Norway has for several years been reformed on the basis of an international trend from the 1980s, new public management. An element of these reforms is the delegation of budget authority, combined with goal- and performance management (Pettersen et al., 2008). The aim of the study will therefore be to examine whether there are significant similarities and/or differences in the use of management accounting and control systems between orchestras and other highly professionalized organizations.

## **5. Research methodology**

### **5.1 Philosophy of science**

#### **5.1.1 Research paradigm**

The debate about how the world really looks like and how anything can be known about reality, has caused different schools of thought in social sciences, where business

administration is included. Kuhn (1970) used the term paradigm, and by working within a certain paradigm, new theories are constructed in certain ways within the frames of the actual paradigm.

The main distinction between the different paradigms in social sciences is between an ontological conviction of nominalism or realism (Burrell and Morgan, 1979). Following the ontological paradigm of realism, this is followed by a positivistic epistemological view, and according to Ryan et al. (2002) research within finance and economics has followed the positivistic tradition. However, Deetz and Alvesson (2000) claims that in newer social science research, the hermeneutic perspective has become more prominent.

This study aims to explore the role of management accounting and control within a certain context. In chapter 2 I outlined some of the classical theories in management accounting and control, but other theories such as institutional theory and actor network theories are also relevant in analysing the different dimension in the research. Consequently, the thesis will move in the intersection of hermeneutics and positivism, which I consider to be strength for this type of research.

### **5.1.2 Quality of the study**

A central issue in research is whether the researcher is able to capture reality, and assuring credibility and reliability must be done as part of the scientific process in any study.

According to Yin (2009), four criteria needs to be discussed when judging the quality of research designs: construct validity, internal validity, external validity and reliability.

Construct validity is achieved when the correct operational measures for the concepts being studied are identified. Second, internal validity is about whether causal relationships can be established, if certain conditions are believed to lead to other conditions. Third, external validity is about defining to which extent the study's` findings can be generalized. Last, reliability considers to which extent the study will give the same results if a later researcher is to follow the same procedures and conduct the same study all over again.

The issues concerning validity and reliability will be further discussed for each study when these are further planned and started.

## **5.2 Research method**

### **1. State of the art-paper**

The aim for the state of the art-paper is to consider relevant literature, and the study will contain literature within fields such as management control, management control systems, contingency theory and performance measurement.

The study is a document study, and different sources of literature have to be considered.

Primary literature such as original studies is of course an important source of information.

Reviews contain overviews often over large amounts of data and must be included. In addition data such as books, reports, PhD-theses and journals has to be taken into account. Central key words will be used in the research process, and one way of making a systematic search is to identify a general keyword and search for links to this. A number of databases such as Science Direct and Business Source Complete will be used in the search for relevant literature.

## **2. Performance measurement and performance management in highly professionalized organizations**

This paper will have the design of a survey where participants in the different organizations will be asked questions relating to performance measurement and performance management.

Groves et al. (2009) describes a survey as a systematic method for information gathering. The information will be gathered from a sample with the purpose of constructing a quantitative description of the attributes of a larger population. In survey research, both descriptive and analytical statistics are used. Descriptive statistics describes the size and distributions of the various dimensions. Analytical statistics measures how two or more variables are related through e.g. a regression coefficient (Groves et al., 2009).

There are a number of opportunities for collecting survey data such as telephone, post, personal surveys and online surveys through for example Questback. For the majority of data in this paper, Questback will be utilized. However, interesting data may also be collected in other ways. A short reply form containing only 3-6 questions may be handed out to a concert audience on the way out from the concert hall after the concert. This information may be interesting in scrutinizing the term performance measurement in a symphony orchestra.

A survey has got several advantages, such as that data may be relatively easy to administer, particularly if a tool as Questback is used. However, there are disadvantages as well.

Respondents may for example not give accurate answers, respondents may answer in a way that put them in a favorable light or they may not be fully aware of the reasons for the given action.

### **3. Characteristics of management accounting and control in practice**

It is appropriate to study MAC in highly professionalized non-profit organizations through case studies. Eisenhardt (1989) argues that the case study approach is suitable in new topic areas. This is because of the focus of the case, which is to understand the present dynamics in a single setting. One of the advantages in a case study is the base of evidence, which may be both qualitative and quantitative. Typically, case studies combine evidence such as documents, observations and interviews. The understanding of a case is therefore potentially both broad and deep.

The case study is one of many ways of doing research, and the aim is, as in all research, to collect, present and analyse data fairly (Yin, 2009). As every research method, the case study has got advantages and disadvantages. (Eisenhardt, 1989) stress that a case study is a suitable research strategy when the focus is on understanding “the dynamics present within a single setting” (Eisenhardt, 1989:534). Yin (2009) claims that case studies are preferred when (1) “how” and “why” questions are asked, (2) the researcher has little control over events and (3) the focus is on a contemporary phenomenon within a real-life context.

Thomas` (2011) typology reviews the literature on case studies over the past 40 years, and based on the discussion in the typology, he suggests that a case study must comprise two elements:

1. A «practical, historical» unity – the subject of the case study, and
2. An analytical or theoretical frame – the object of the study.

Based on these elements, Thomas (2011: 513) has developed the following definition:

*Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more methods. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame — an object — within which the study is conducted and which the case illuminates and explicates.*

The case studies are planned to be conducted during the autumn 2012 and winter 2013 and in addition to observations and document studies, a number of interviews will be conducted. The interview objects will be within both the administrative and the artistic parts of the organizations.

#### **4. Differences in the use of management accounting and control in highly professionalized organizations**

The fourth paper in my thesis will be based on the findings from the descriptive case study (article number two) and make comparisons between management accounting and control in symphony orchestras and hospitals.

Symphony orchestras and hospitals can both be characterized as professional organizations and has in many ways several similar features. A feature of the symphony orchestra is, as discussed, that the ultimate goal is high quality performance in the moment of truth, the concert. This can be compared to what surgeons may experience when they operate; they need to perform a high quality operation, and they only have one chance. However, large parts of the hospital sector works in longer and more elective processes and thereby differs from symphony orchestras.

To explore the essential differences and similarities, a comparative case study will be conducted. Observations and document studies will be a part of the documentation, but the main data will be interviews and if possible focus groups where a discussion between surgeons and musicians is staged.

## **6. Ethical considerations**

In this section, ethical considerations concerning the research strategies will be discussed. An explanation of the structure of the thesis and a schedule for the work will also be provided in this section.

A major part of the thesis will use case studies or other research strategies which implies social science research. In such research processes, the researcher will constantly be interacting within a complex socio-political environment, and research decisions are influenced, both formally and informally (Frankfort-Nachmias and Nachmias, 1996) Symphony orchestras will be the cases for the thesis in the first three papers, and both the community of the orchestras and individuals within the community will be subjects of the study. Because the scientific interaction is social, it is important to ensure that the rights and

welfare of the persons involved is properly provided. Frankfort-Nachmias and Nachmias (1996) points to the challenge of the conflicts of the rights to the scientist to conduct research and the right of the individual to self-determination, privacy and dignity. Kvale (1997) discusses three ethical rules for research in social sciences, informed consent, confidentiality and consequences.

Informed consent is a necessity when participants' personal rights are challenged in research. Informed consent must be fully guaranteed, and Frankfort-Nachmias and Nachmias (1996) stresses that participants should always be aware that involvement is voluntary at all times and that they should receive an explanation before the research concerning benefits, rights, risks and dangers involved in the research.

By confidentiality, Kvale (1997) means that personal data is not revealed publicly. If a study leads to the necessity to reveal personal information, the respondent needs to consent to this. Although researchers are strict in keeping the promise of confidentiality, there may be circumstances which it may be difficult, this is when information is subpoenaed by judicial authorities or legislative committees (Frankfort-Nachmias and Nachmias, 1996).

The project will be registered in the Norwegian Social Science Data Services (NSD) and the required approvals for storing and processing data will be obtained.

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## Mikael Cäker

### Belöningsystem i svenskt arbetsliv – möte eller krock mellan amerikanska och svenska ledningspraktiker?

Trondheim Business School & Handelshögskolan i Göteborg  
Thomas Andersson, Mikael Wickelgren  
Högskolan i Skövde

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Thomas Andersson, Mikael Cäker och Mikael Wickelgren  
Högskolan i Skövde/Handelshögskolan Göteborg

0107

## BAKGRUND TILL PROJEKTET

- Belöningsystem sprider sig snabbt i svenskt arbetsliv
- Vi vet egentligen inte särskilt mycket om effekterna, trots det görs tvärsäkra utspel både från regering och näringsliv
- Belöningsystem är en amerikansk företeelse som kan ha helt andra effekter när det införs i svenskt arbetsliv
- Belöningsystem bygger på misstro medan svenskt arbetsliv präglas av förtroendefulla relationer

0102

## VAD ÄR BELÖNINGSSYSTEM?

- Definition: ersättning/erkännande till chef/medarbetare baserat på en bedömning av prestation
- Med ett formellt belöningsystem försöker man styra vad som värdesätts och premieras för att på det sättet styra "rätt handlingar"
- Detta är komplext vilket alltid varit belöningssystemens stötesten – vi kanske påverkade visst beteende positivt, men tappade annat fokus som var viktigt
- Även organisationer utan ett formellt belöningsystem har någon form av incitamentsystem

0103

## VAD KÄNNETECKNAR SVENSKT LEDARSKAP OCH ARBETSLIV?

- Oprecist och otydligt
  - Otydlighet skapar utrymme för initiativ
  - "Svenskar chefer skapar chefer, tyska chefer skapar assistenter"
- Delegering av ansvar bygger på förtroende
  - Den svenska ordern: "Se vad du kan göra åt saken"
- Konsensus
  - Ibland går förankringsarbetet för långt
- Konfliktundvikande
  - Förhandlar in i det längsta
- Bättre på verbal utvärdering än sifferanalys
- Kontentan är ett arbetsliv präglad av förtroendefulla, samarbetsorienterade relationer

0104

## TEORETISKA PERSPEKTIV

1. Principal-/Agentteori: Betonar vikten av incitament för att förhindra att människor agerar egennyttigt. Belöningsystem blir ett effektivt styrverktyg som får chefer och medarbetare att i högre grad prioritera organisationens mål än sina egna och därmed ökar både produktivitet och effektivitet i svenskt arbetsliv
2. Stewardship theory: Tar fasta på det som präglar svenskt arbetsliv idag. Belöningsystem integreras i (hotar inte) de befintliga incitamentsstrukturerna
3. Institutionell teori: Lös koppling mellan belöningsystem och vad som verkligen görs i organisationerna, dvs effekt enbart på ytan
4. Kritiskt perspektiv: Risken för undanträngning av inre motivation samt Ostroms "allmänningarnas tragik"

0105

## NÄR FORMELLA BELÖNINGSSYSTEM GER SVENSKT ARBETSLIV STRUKTUR

- Prestationsbaserad ersättning är sedan länge etablerad
- Bevarad syn på ersättningsfrågor som hygienfaktor
- Hierarkiska nivåer tydligare kopplat till olika ersättningsystem och – nivåer
  - Ökad transparens och därmed förutsägbarhet
- Den kvalitativa utvärderingen i väsentlig grad bevarad
  - Dock baserad på kända ingångsvärden samt formella processer
- Det formella belöningsystemet tar sig in och påverkar, men tillåts inte tränga undan synen på prestation

0106

### NÅR PAY-FOR-PERFORMANCE TANKEN ADDERAS TILL VINSTDELNING

- Svenskt företag: Ett sedan länge ett etablerat vinstdelningssystem
- Britiskt företag: Ett tydligare inslag av pay-for-performance
- Resultat av sammanslagning: Ett sammanslaget system
  - En matematisk sammanvägning av:
    - Prestation (Räntabilitet samt kvalitativa mål) på koncern och affärsenhetnivå
    - Individuell prestationsbedömning på förbestämda faktorer
- Effekt: "Det är ju trevligt att det kommer pengar, men jag vet ju inte varifrån"
  - Ett mer komplicerat system med begränsad styreffekt?

117

### DET "SVENSKA" BELÖNINGSSYSTEMET

- Uppmärksamhet: Tid att prata, chefer erfarna av verksamheten, tydlig värdegrund, struktur för återkoppling
  - Med en förväntan om att alla skall utvecklas
- Karriär: Intern rekrytering, "bred" karriär premieras, ansvar att driva sin egen utveckling
  - Att förese organisationen med chefer är uppskattat
- Tävlning: Benchmarking mellan enheter
  - "Rörligt mål", där jämförelsegrunder och lämpliga jämförelseobjekt är i organisk rörelse
- Vinstdelning
  - Baserat på benchmarking inom branschen
  - Belöning i form av pensionssparande...
  - ... som återinvesteras som ägande i organisationen fram tills utbetalning

118

### UTVECKLINGSLINJER, SÅ LÅNGT ...

- Frågan är av intresse!
- De multipla teoretiska inspelen en nödvändigt för att beskriva situationen
- De i debatten "stensäkra" åsikterna behöver nyanseras
- Det "svenska" managementtänket har tydlig betydelse för belöningssystemens utformning
- Belöningssystemets strukturer har mycket att tillföra
- Risken för att det formella belöningssystemet läggs ovanpå våra befintliga strukturer och ger en oklar bild
  - Att våga ta bort!

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## Gudrun Baldvinsdottir:

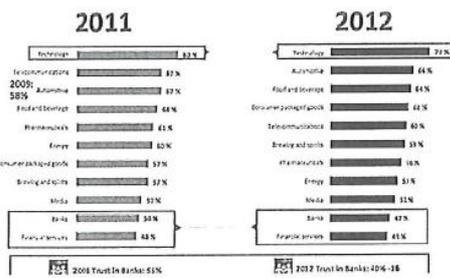
To trust is good...

Mortgage and the trust between a loan officer and a house buyer

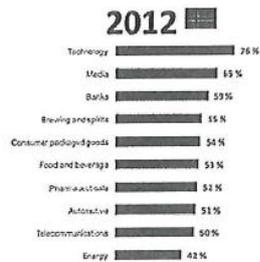
## Why trust?

- Trust is economically beneficiary for the parties engaging in a relation
  - Crucial for achieving economic growth (e.g. North, 1990)
  - Important for the functioning of societies (e.g. Putnam, 2002)
  - Facilitates effective organizational relations (e.g. Mayer et al, 1995, 2002)

## Trust in banks



## Norwegian banks

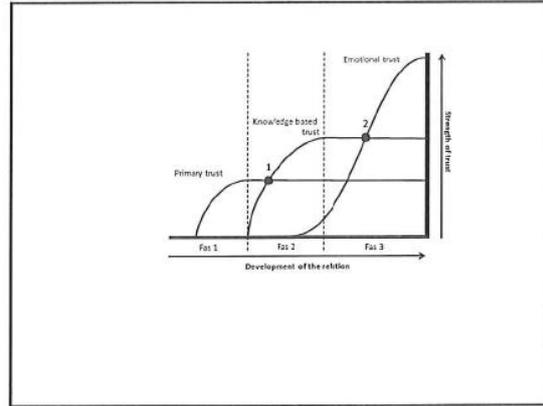
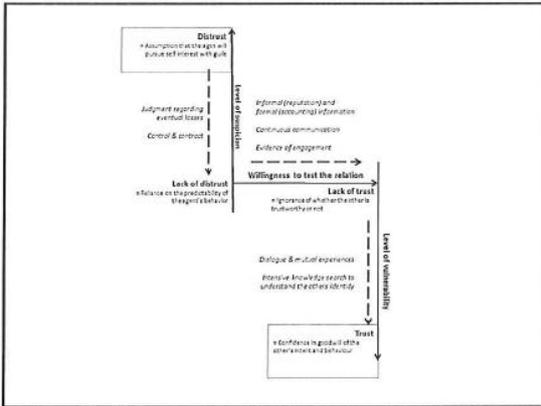


## Swedish banks

Institution	2007-2011														
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
tsfret hfgskolor	-	-	-	78	77	76	81	74	72	75	62	62	64	65	62
arden	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60
auken	-	-	-	-	-	-	-	-	61	-	58	56	63	55	-
ingen	23	-	-	-	38	-	34	-	-	-	41	47	62	51	-
lmsgoutldning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51
uTV	61	60	55	52	48	44	45	47	51	52	48	52	41	48	47
agga	27	37	36	35	43	39	47	38	31	35	43	42	40	55	46
shuset	-	-	-	-	-	-	-	-	-	-	-	-	-	50	35
la kyrkan	-	-	-	-	-	-	43	41	46	-	34	33	32	34	-
d	-	-	-	-	32	34	29	32	32	32	29	28	29	32	-
iretagen	-	38	37	35	26	22	25	28	37	38	26	39	27	31	24
ressen	32	26	39	41	35	33	32	29	24	35	34	26	29	26	26
rena	-	-	-	-	-	-	-	-	-	-	33	31	37	26	-
ommissionen	-	-	-	12	20	15	14	18	17	21	29	23	22	26	19
sa parterna	-	18	15	14	20	18	18	-	17	16	20	21	16	22	17

## Trust research in Management Accounting

- Growing interest in MA and trust because of its impact on long-term relationships
  - Strict use of budget has negative effect on trust (Otley, 1978)
  - Mistrust between professions (e.g. Llewellyn, 1998)
  - Reduce bureaucracy and improve co-operation (e.g. Van der Meer-Kooistra and Vosselman, 2000)
  - Accounting information can both create and destroy trust (e.g. Johansson & Baldvinsdottir, 2003)
  - Fair performance appraisals improve trust between superior and subordinate (e.g. Sholihin & Pike, 2009)



### Trust & Confidence

- Trust is social and relational
  - The willingness, in the expectation of beneficial outcomes, to make oneself vulnerable to another based on a judgment of similarity of intention or values.
- Confidence is instrumental and calculative
  - The belief, based on experience or evidence, that certain future events will occur as expected.

### The banks mention...

	Customer	Trust	Confidence	Employee
Handelsbanken	56	6	8	43
Sparebanken	81	5	7	44
Nordea	69	5	1	41
Swedbank	48	2	7	45

### Handelsbanken, customers' trust

**Meeting customers**  
The Bank forms, maintains and develops strong, long-term customer relationships in successful meetings with customers. The customer's trust is built up over the long term, but is won and nurtured at every meeting.

By winning its customers' trust, Handelsbanken becomes their natural choice as a provider of financial services. Therefore, meeting customers is key to Handelsbanken's operations.

In everything it does, the Bank aims, directly or indirectly, to create the best possible conditions for successful meetings with customers.

### Handelsbanken, employees

**Skilled staff**  
Handelsbanken's decentralised method of working means that we give our staff greater responsibility and greater authority to conduct customers' business. This high degree of trust is based on a belief in people's willingness and ability to constantly become more skilled in their work and in their efforts to seek and overcome new challenges.

Thus, decentralization creates independent decision-makers. This ability to make – and experience of making – decisions, coupled with the freedom to approach tasks in one's own way, leads not only to more satisfied customers, but also to more satisfied, more engaged, more responsible and – in particular – more skilled staff.

## Swedbank, employees

Swedbank employees uphold the bank's values of being simple, open and caring. On a daily basis this means, among other things, that our services and advice must be understandable to everyone and that we keep our promises.

## Creditworthiness

- Old times: lenders personally scrutinized potential borrowers
- Now: Mechanized means of assessing
  - Agency relationships' substituted for actual information
  - Confidence is replaced by trust

## Mortgage - banks

- Little has been done
  - Risk for banks is low
  - Amounts of lending is low
  - High earnings
  - Not interesting?

## Mortgage - customer

- Little has been done
  - Risk for customer is high
  - Amounts of lending is high
  - Substantial effects on the individual
  - Not interesting?

## Trust in the loan officer

...the only regret is that I trusted this guy  
...I thought that [...] he was on my side, that he was looking out for my best interest and that the lenders were reliable.  
I'm nervous all the time, I'm always worried...  
I made a commitment to pay my loan and I want to pay my loan.

## Loan amount

Contact	Number	Average	Standard deviation
Personal	1650	1584938,66	1289187,742

## Nordea, customers

How do you pick up on what your customers need? In Nordea we use a tool called 360 degree meetings. This is a meeting following a certain agenda set out to cover all eventual customer financial needs. Following this agenda also encourages the customer to talk about their entire financial situation. This is trust building and deepens the relation. The next step is to set up meetings with appropriate specialists within the bank to tailor the right solutions for the customer.

## Nordea, customer

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## Nordea, employee

**Relationship banking strategy**  
Since 2007, Nordea has had the relationships with customers as its main focus. The reason is simple. Relationship customers are more satisfied since we can make tailored and individual solutions to the customers we know. Therefore, both household and corporate customers are more loyal and do more business with us. We can also assess risks and take proactive measures to mitigate them when we work close to the customers. Finally, it adds engagement and motivation to work closely with the customers and see them grow and realise their ambitions. Both for employees and customers, the strategy has brought higher satisfaction since it was introduced.

## Sparebanken, employee

Staff at SpareBank 1 SMN must be recognised for their high ethical standards. To this end they must display a conduct that is perceived to be confidence inspiring, honest and trustworthy and in compliance with the norms, rules and statutes by which the society is governed in contexts where the staff are identified with the Group. SpareBank 1 SMN's ethical rules deal inter alia with legal (in)capacity, relationships to customers, suppliers and competitors, securities trading, insider rules and relevant finances of the individual. This body of rules applies to all employees and elected officers in governing bodies.

## Sparebanken, customer relationship

In order to assure well-being and development of both professional competence and the individual staff member's ability to foster customer relationships in a first-class manner, we will foster continuous improvement, healthful activities through the 'Better Shape' programme and training of authorised financial and insurance advisers.

## Swedbank, customer

### Focus on the customer

To remain competitive and profitable in the long term, Swedbank must diversify its offering and provide competitive services for each customer segment. In Sweden, our service concepts have been well received and by year-end 2011 more than a half million new customers had been added. Customers who have selected a service concept on average buy more products, report higher customer satisfaction and are slightly more profitable for the bank. In the Baltic countries, the new customer service model has led to greater confidence in the bank, which we expect will enable us to win a larger share of our customers' overall banking business. In 2011 we received several local and international awards in the Baltic countries, including for the most respected company in the financial sector in Estonia, Latvia and Lithuania.

To meet customer demand for advice, extensive training was conducted during the year in both Baltic Banking and Retail in order to strengthen customer service competence, in customer meetings.

## Interest

Contact	Number	Average	Standard deviation
Personal	1650	0,043345	0,0071237

## Trust vs. confidence

- Trust is concerned with solidarity
- Confidence with accuracy

## Trust is good....

- ...and we would all be better of if we were all more trusting (Uslander, 2002)
- But:
  - But maybe those who are more trusting have good reason to be because they deal primarily with people who recognize the benefits of being trustworthy. It is not trust per se, but trusting the right people that makes for successful relationships and happiness (Hardin, 2006, p.61).