



VAASAN YLIOPISTO

ANNUKKA JOKIPII
JOHANNA MIETTINEN
(Editors)

Contributions to Accounting, Auditing and Internal Control

Essays in Honour of Professor Teija Laitinen

ACTA WASAENSIA NO 234

BUSINESS ADMINISTRATION 97
ACCOUNTING AND FINANCE

UNIVERSITAS WASAENSIS 2011

Reviewers

Professor Jaana Sandström
Lappeenranta University of Technology
School of Business
P.O. Box 20
FI-53851 LAPPEENRANTA
Finland

Professor Marko Järvenpää
Jyväskylä University
School of Business and Economics
P.O. Box 35
(MaE)
FI-40014 UNIVERSITY OF JYVÄSKYLÄ
Finland



TEIJA LAITINEN

Alkusanat

Tämä kirja muodostuu kymmenestä artikkelista, joiden kirjoittamiseen on osallistunut yhteensä viisitoista naistutkijaa laskentatoimen, tilintarkastuksen ja sisäisen valvonnan osa-alueilta. Nämä artikkelit on omistettu Teija Laitiselle hänen 50-vuotispäivänsä kunniaksi. Teija Laitisella on monipuolinen ura tutkijana, opettajana ja asiantuntijana niin yliopistossa kuin liike-elämässä. Tällä artikkelikokoelmalla haluamme onnitella päiväsankaria.

Haluamme kiittää artikkelien kirjoittajia siitä, että he ovat olleet mukana tässä ainutlaatuisessa naisten kirjoittamassa kirjahankkeessa omistamassa tutkimuksensa ystävällemme ja kollegallemme. Haluamme kiittää myös artikkelien arvioitsijoita professori Jaana Sandströmiä ja professori Marko Järvenpäää erinomaisesta työstä. Tarja Salolle kiitokset kirjan viimeistelystä.

Vaasa, tammikuu 2011

Annukka Jokipii

Johanna Miettinen

Forewords

This volume consists of 10 papers written by 15 female authors in accounting, auditing and internal control. These articles are dedicated to Teija Laitinen on the occasion of her 50th birthday. Teija Laitinen has had an outstanding career as a researcher, teacher, university administrator and as an active member of the business and the wider community. This collection gives us an opportunity to express our gratitude to her.

We would like to extend our gratitude to the contributors of this volume for joining us in honoring our friend and colleague. We would also like to thank Professor Jaana Sandström and Professor Marko Järvenpää for acting as referees for the volume. We would also like to thank Tarja Salo for her skillful editorial work.

Vaasa, January 2011

Annukka Jokipii

Johanna Miettinen

Teija Laitinen 50 vuotta

Teija Laitinen (o.s. Puustinen) syntyi tammikuun 27. päivänä 1961 Kuopiossa. Hän valmistui ylioppilaaksi 1980 Kuopion Yhteiskoulusta ja suoritti kauppatieteiden maisterin tutkinnon 1986 Jyväskylän yliopistossa pääaineena laskentatoimi. Vaasan korkeakoulussa hän suoritti vuonna 1990 kauppatieteiden lisensiaatin tutkinnon ja väitteli Vaasan yliopistossa kauppatieteiden tohtoriksi vuonna 1993 pääaineenaan liiketaloustiede, laskentatoimi.

Teija Laitinen aloitti akateemisen uransa Vaasan korkeakoulussa 1987 tutkimusassistenttina Suomen Akatemian tutkimusprojektissa. Vuosina 1987–1989 Teija Laitinen hoiti liiketaloustieteen, erityisesti laskentatoimen lehtoraattia ja toimi vuoden 1990 laskentatoimen assistenttina. Hän oli nimitettyä Liiketaloustieteen, erityisesti laskentatoimen lehtoraattiin Vaasan yliopistossa 1991–2001. Laskentatoimen vs. yliassistenttina hän toimi 1990–1991, jonka jälkeen hän siirtyi apurahatutkijaksi vuosiksi 1992–1993. Suomen Akatemian nuorempana tutkijana Teija Laitinen toimi vuosina 1993–1997 sekä tutkijatohtorina 1997–1999. Liiketaloustieteen, erityisesti laskentatoimen vs. professorina Teija Laitinen toimi Vaasan yliopistossa 1999–2001 välisen ajan, jonka jälkeen hänet nimitettiin Liiketaloustieteen, erityisesti laskentatoimen professorin virkaan vuonna 2001.

Teija Laitisen julkaisuluettelo sisältää lähes sata julkaisua. Tutkimustyön painopistealueet ovat Laitisella olleet yrityksen tuloslaskenta, tilinpäätösanalyysi ja konkurssin ennustaminen. Tieteellisen uransa alkuaikana Teija Laitinen keskittyi yrityksen tuloslaskentaan, johon liittyen hän laati väitöskirjansa. Sitten hän keskittyi konkurssin ennustamiseen, tilinpäätösanalyysiin ja corporate governanceen. Viimeaikaisena kiinnostuksen kohteena hänellä on ollut erityisesti tilintarkastus.

Laitisen tutkimustyölle on luonteenomaista laaja yhteistyö tutkijoiden kanssa. Uransa alkuaikoina hänen yhteistyökumppaneinaan toimivat Barbro Back Turun kauppakorkeakoulusta ja Kaisa Sere Kuopion yliopistosta, joiden kanssa Teija Laitinen julkaisi tutkimuksia konkurssin ennustamisesta eri menetelmillä. Vaasan yliopistossa Laitinen on julkaissut Erkki K. Laitisen kanssa useita konkurssin ennustamiseen, tilintarkastukseen ja tilinpäätösalaan liittyviä yhteisartikkeleita. Suuressa arvossa pitämänsä väitöskirjaohjaajansa Reijo Ruuhelan kanssa Teija Laitinen julkaisi Corporate Governance -aihepiiriin liittyvän artikkelin jo 1990-luvun loppupuolella. Laitinen on myös julkaissut useita yhteisartikkeleita tohtoriopiskelijoiden kanssa kannustaen nuoria tutkijoita uransa alkuvaiheissa. Lisäksi vuodesta 2005 lähtien kauppatieteitä opiskelemaan pyrkiville Teija Laitinen on tullut tutuksi Suomen kauppatieteellisen alan yhteisvalinnan valtakunnallisen pääsykoekirjan yhtenä kirjoittajista.

VIII

Tieteellisten julkaisujen lisäksi Teija Laitinen on myös tuonut tieteellisiä tuloksia myös ammatissa toimivien tietoisuuteen julkaisemalla useita ammattilehtiartikkeleita muun muassa seuraavissa lehdissä: Tilintarkastus-Revision, Velkakierre, Lakimies, Luottolista, Kuntalehti ja Yrittäjä. Lisäksi hänen julkaisuluettelossaan on lukuisia sanomalehtiartikkeleita.

Teija Laitinen tunnetaan myös aktiivisena jatko-opintojen ohjaajana. Hän on osallistunut laskentatoimen ja rahoituksen jatko-opintoseminaareihin antaen lisensiaattityötä ja väitöskirjaa valmistelevalle opiskelijalle rakentavia ohjeita töiden edistymiseksi. Lisäksi hän on ennakkoluulottomasti ottanut väitöskirjan tekijöitä ohjattavakseen ja palkannut nuoria tutkijoita johtamiinsa projekteihin. Hänen ohjauksessa onkin valmistunut useita väitöskirjoja ja lisensiaattitöitä. Väitöskirjaohjauksen lisäksi Teija Laitinen on toiminut väitöskirjojen esitarkastajana ja vastaväittäjänä. Lisäksi hän on toiminut asiantuntijana virantäytöissä niin suomalaisissa kuin ulkomaisissa yliopistoissa.

Teija Laitinen on toiminut useissa suurissa tutkimusprojekteissa innovaattorina ja johtajana. Näistä mainittakoon Tekesin rahoittamat ”Sisäinen valvonta pienissä ja keskisuurissa teknologiayrityksissä” vuosina 1998–2000 ja “Solvency and Strategic Management of the Firm” vuosina 2009–2010 sekä Suomen Akatemian rahoittama “The Role of Finnish Business Characteristics in an International Auditing and Internal Control Framework” vuosina 2009–2012.

Teija Laitinen on toiminut myös vaikuttajana Vaasan yliopiston toimielimissä. Hän toimi Vaasan yliopiston assistentti- ja tutkijayhdistyksen puheenjohtajana 1994–1996, Vaasan yliopiston hallituksen jäsenenä 1995–1998, Vaasan yliopiston julkaisutoimikunnan jäsenenä 1995–1997, Vaasan yliopiston kaupallis-tekni- sen tiedekunnan tiedekuntaneuvoston jäsenenä 1995–1998 ja varajäsenenä 1991–1994, Kauppatieteellisen tiedekunnan jäsenenä 2002–2004 sekä varajäsenenä 1999–2001 ja 2005–2007. Laitinen toimi kauppatieteellisen tiedekunnan vara- dekaanina vuosina 2002–2005.

Teija Laitinen on aktiivisesti kehittänyt tilintarkastusalaa. Hän on toiminut julki- sen hallinnon tilintarkastustutkinnon (JHTT) tentaattorina vuodesta 2007 lähtien ja Julkishallinnon ja -talouden tilintarkastuslautakunnan varapuheenjohtajana syk- systä 2010 alkaen. Laitinen on myös panostanut Vaasan yliopiston tilintarkastuk- sen opetuksen kehittämiseen ja sen tuloksena Vaasan yliopistosta valmistui vuonna 2006 eniten tilintarkastusalan pro gradu -tutkielmia Suomessa.

Teija Laitiselle on kertynyt myös useita yhteiskunnallisia luottamustehtäviä. Näistä mainittakoon muutama: Kronvikin kyläyhdistyksen rahastonhoitaja ja varapuheenjohtaja 1990–1992, Sundomin ala-asteen vanhempainyhdistyksen

varapuheenjohtaja 1998–2000, Vaasan ortodoksisen seurakunnan seurakuntaneuvoston jäsen 1994–1996 ja Vaasan ortodoksisen seurakunnan seurakuntavaltuuston jäsen 1995–1997.

Vaikka Teija Laitinen on toiminut monipuolisesti yliopisto- ja yhteiskuntaelämässä, niin hänet tunnetaan myös hevosharrastajien piirissä. Vaasan Ratsastuskeskuksen parikymmentä hevosta ja ponia pitävät Teija Laitisen myös vapaa-aikana liikkeellä. Harrastuksen intensiivisyydestä kertoo Laitisen suorittama ratsastuksenohjaajatutkinto vuonna 2007.

Teija Laitisen laaja panos tieteen, yliopiston, yhteiskunnan ja talouselämän alueilla on mahdotonta sisällyttää vain yhden teoksen puitteisiin, joten tässä kirjassa on keskitytty tieteelliseen lähtökohtaan. Näiden artikkeleiden kautta väitelleet naistutkijat ja heidän tutkimusryhmänsä haluavat onnitella Teija Laitista hänen juhlapäivänään.

On the occasion of Professor Teija Laitinen's fiftieth birthday

Teija Laitinen (née Puustinen) was born in Kuopio on January 27th 1961. Laitinen completed her Matriculation Examination in the Kuopio Upper Secondary School in 1980, and graduated from the University of Jyväskylä in 1986 with a Master's degree in Science in Economics and Business Administration with Accounting as her major. In the Vaasa School of Economics (later the University of Vaasa) in 1990 Laitinen obtained a Licentiate in Economic Sciences, and in the University of Vaasa in 1993 Laitinen defended her dissertation for Doctor of Science in Economics with Business Economics, Accounting as her subject.

Teija Laitinen began her academic career at the Vaasa School of Economics in 1987 as a Research Assistant in a research project with the Academy of Finland. From 1987 to 1989 Laitinen held the position of University Lecturer in Business Economics, particularly in accounting, and acted as Assistant in accounting throughout the year 1990. Laitinen was appointed as University Lecturer in Business Economics, particularly in accounting, in the University of Vaasa from 1991 to 2001. From 1990 to 1991 Teija Laitinen held the position of Assistant Professor in accounting after which she proceeded to work as a Research Associate from 1992 to 1993. Laitinen was a Postdoctoral researcher in the Academy of Finland from 1993 to 1997 and a Postdoctoral Research Fellow from 1997 to 1999. In Business Economics, as a acting Professor in Accounting in the University of Vaasa, Teija Laitinen worked from 1999 to 2001 after which she was appointed as the Professor of Accounting and Business Finance in 2001.

Teija Laitinen's publications list covers nearly a hundred publications. The main focus in Laitinen's research has been on business income concepts, financial statements analysis and bankruptcy prediction. At the beginning of her academic career Teija Laitinen concentrated on the information content of alternative income concepts in predicting corporate failure on which she wrote her doctoral thesis. Afterwards Laitinen proceeded to research bankruptcy prediction, financial statements analysis and corporate governance. Laitinen's most recent research interest has been particularly in auditing.

Characteristic for Teija Laitinen's academic research is the extensive cooperation with other researchers. At the beginning of her career Laitinen collaborated with Barbro Back from the Turku School of Economics and Kaisa Sere from the University of Kuopio, both with whom Laitinen published researches on different methods for bankruptcy prediction. With Erkki K. Laitinen in the University of

Vaasa Teija Laitinen has published several articles discussing bankruptcy prediction, auditing and financial statements.

Together with her highly valued and respected dissertation director Reijo Ruuhela, Teija Laitinen published an article related to the subject matter of Corporate Governance already in the late 1990s. Laitinen has published also various collaborative articles together with doctoral students thus encouraging and motivating young scholars at the beginning of their career. Additionally, from the year 2005 onwards for the students applying to study Economic Science, Teija Laitinen is known as one of the authors of the nationwide entrance exam book vital for those aspiring to study the science of commerce.

In addition to her many scientific publications, Teija Laitinen has brought scientific findings and results also to practitioners by making her articles public, for example, in journals like *Tilintarkastus-Revision*, *Velkakierre*, *Lakimies*, *Luottolista*, *Kuntalehti* and *Yrittäjä*. Laitinen's publications list includes several newspaper articles as well.

Teija Laitinen is popularly known also for her active role as a supervisor for postgraduate students. Laitinen has taken part in postgraduate seminars in Accounting and Finance providing licentiate and doctoral students with constructive instruction and helped students proceed in their studies. Furthermore, Professor Teija Laitinen has given guidance to students writing their dissertations and without prejudice employed young researchers in the projects she has managed. Not surprisingly, under Laitinen's guidance a great many students have completed their licentiate and doctoral theses. In addition to dissertation supervision, Teija Laitinen has also acted as pre-examiner and opponent, and worked as a specialist in appointing experts to offices both in Finnish and foreign universities.

Professor Laitinen has managed and acted as an innovator in several major research projects. Among many others, these include projects "Internal Control in Small and Middle Sized Technology Companies" in 1998–2000 and "Solvency and Strategic Management of the Firm" in 2009–2010 funded by Tekes (the Finnish Funding Agency for Technology and Innovation) as well as the research project "The Role of Finnish Business Characteristics in an International Auditing and Internal Control Framework" in 2009–2012 funded by Suomen Akatemia (the Academy of Finland).

Teija Laitinen has contributed greatly also to the vision of the University of Vaasa. Laitinen acted as the Chairperson in the staff association “VYTY” in the University of Vaasa from 1994 to 1996, as member of the Board of the University of Vaasa from 1995 to 1998, member of the Publications Committee of the University of Vaasa from 1995–1997, member of the Faculty Council of Economics and Technology in the University of Vaasa from 1995-1998 and as the council’s deputy member from 1991 to 1994, member of the Faculty Council of Business Studies from 2002 to 2004 and as the council’s deputy member from 1999 to 2001 and from 2005 to 2007. As the Vice Dean of the Faculty of Business Studies Teija Laitinen worked from 2002 to 2005.

Professor Teija Laitinen has been actively developing the profession of Auditing. From 2007 onwards, Laitinen has worked as one of the Examiners of chartered public finance auditor (CPFA) examination selected by The Finnish Board for Chartered Public Finance Auditors, and from autumn 2010 onwards, as Deputy Chairman in The Finnish Board for Chartered Public Finance Auditors. Laitinen has also invested her energy into improving the teaching of Auditing, which contributed to the fact that in the year 2006 the University of Vaasa produced more master’s theses on auditing than any other university in all of Finland.

Teija Laitinen has been entrusted with many other commissions of trust as well. To name a few, these include: Treasurer and Vice Chairperson in Kronvik Village Community Association from 1990 to 1992, Vice Chairperson in Sundom elementary school’s Parent-Teacher Association from 1998 to 2000, member of the Vaasa Orthodox Church Parish Board from 1994 to 1996, and a member of the Vaasa Orthodox Parish Council from 1995–1997.

Although Teija Laitinen is an extremely versatile both in university and community life, she is also familiar to those in the local equestrian circles. Vaasa Riding Center and its nearly twenty horses keep Teija Laitinen active yet in her free time. Laitinen attained riding instructor qualifications in 2007, which truly depicts the intensity of her enthusiasm for horses and equestrian activities.

It is quite impossible to try to fit all of Teija Laitinen’s contributions to science, academia, society and economic life in merely one volume and thus, in this volume the focus is on the scientific basis of Professor Laitinen’s contributions. With this Jubilee Publication and through these articles, PhD female researchers and their research groups would like to congratulate Professor Teija Laitinen on the occasion of her fiftieth birthday.

Contents

<i>Alkusanat</i>	V
<i>Forewords</i>	V
<i>Teija Laitinen 50 vuotta</i>	VII
<i>On the occasion of Professor Teija Laitinen's fiftieth birthday</i>	XI
<i>Sirle Bürkland</i>	
The Effect of Management Control on Organizational Learning: The Case of Excess Knowledge Exploration	1
<i>Benita Gullkvist</i>	
Drivers of Diffusion of Digital Accounting Practice	25
<i>Minna Kallio & Barbro Back</i>	
The Self-Organizing Map in Selecting Companies for Tax Audit.....	45
<i>Lili Kihn & Salme Näsi</i>	
Tilintarkastusta käsittelevien väitöskirjojen tutkimusstrategiset valinnat – Ainepiiri ja tutkimusote.....	61
<i>Merja Koskela & Nina Pilke</i>	
Tilintarkastukseen ennakoidaan ihmisen johtamisen analyysiä: Ammattikieli yhteiskunnallisen todellisuuden heijastajana ja muovaajana.....	89
<i>Pirjo Laaksonen & Henna Jyrinki</i>	
Vapaa-ajan kulutus – Kokemukselliset aikakäsitykset hevosharrastuksessa.....	105
<i>Anja Morton</i>	
Research-Led Teaching in Accounting Education.....	119
<i>Emma-Riikka Myllymäki & Annukka Jokipii</i>	
The Relationship between Internal Control Effectiveness and Operating Performance	131
<i>Mervi Niskanen</i>	
The Ownership Effects of Cash Holdings in Finnish SMEs.....	149
<i>Aila Virtanen</i>	
Corporate Governance and Accountability: Does Gender Matter?.....	163

THE EFFECT OF MANAGEMENT CONTROL ON ORGANIZATIONAL LEARNING

The Case of Excess Knowledge Exploration

Sirle Bürkland
HEC School of Management, France

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Bürkland, Sirle (2011). The effect of management control on organizational learning: The case of excess knowledge exploration. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 1–24. Eds Annukka Jokipii & Johanna Miettinen.

The general assumption of studies of knowledge management and organizational learning is that management control should always encourage learning and knowledge sharing in the organization. The present study shows how interactive management controls and decentralized structure of the organization may lead to the excess knowledge exploration in the firm. The story of a company is presented to show how organizational practices can lead to the situation when there is too much knowledge in the firm, and additional knowledge exploration and sharing activities may become a burden on productivity. The study shows that there are limits of learning and exploring new things, constraining the organization to take productive actions. Change from decentralized organization and interactive management control to a more centralized and diagnostic types of controls may become necessary to reduce knowledge exploration and increase knowledge exploitation activities of the firm.

Keywords: Management control, Organizational learning, Knowledge exploration and exploitation, Interactive and diagnostic control

Acknowledgements

The author wishes to thank the participants of the 2nd Workshop on Visualising, Measuring and Managing Intangibles and Intellectual Capital, and the anonymous reviewers for their valuable comments on previous drafts of this paper.

1 Introduction

Organizational learning and the growth of knowledge is usually something which is highly encouraged in organization. Studies of knowledge management suggest that managerial care is highly necessary to develop knowledge and capabilities of the firm (see e.g. Barney & Spender 1994; Davenport & Prusak 1998; Grant 1996a; Nonaka & Takeuchi 1995; Teece, Pisano & Shuen 1997). Similarly, the literature of intellectual capital outlines the importance of management nurturing the source of competitive advantage and reaching higher levels of organizational performance (Edvinsson & Malone 1997; Edvinsson & Sullivan 1996; e.g. Hudson 1993; Roos & Roos 1997; Stewart 1997; Sullivan 1998; Sveiby 1997).

Scholars have suggested that management control plays an important role in affecting the processes of organizational learning. For instance, input control is an important means of acquiring the necessary combination of expertise and skills for the organization (Dewar & Dutton 1986; Snell 1992). Human resource accounting (Flamholtz 1974) has been suggested as the means to intervene in the creation of organizational knowledge. Kloot (1997) has shown in the case study how management control affects the processes of organizational learning. Ditulo (2004) explains the role of management control in processes of knowledge integration. Henri (2006) has pointed out the effects of diagnostic and interactive controls on organizational capabilities. In addition, various managerial frameworks have been proposed to introduce a knowledge-based perspective into management control systems (e.g. Hartmann & Vaassen 2003; Leitner & Warden 2004) and integrate measuring and reporting techniques that would encourage the growth of intellectual capital of the firm (Bontis, Keow & Richardson 2000; Edvinsson & Malone 1997; see e.g. Edvinsson & Sullivan 1996; Lev 2001; Roos, Roos, Dragonetti & Edvinsson 1997; Sullivan 1998; Sveiby 1997; Viedma 2001).

The general assumption of these studies is that knowledge and learning is something good and desirable and the role of management control is mainly to encourage the growth of knowledge that would lead to competitive advantages. At the same time, Alvesson and Karreman (2001: 999) argue that “knowledge is not necessary functional, useful, and a generally good thing”. March (1991) has explained that the excessive efforts of the firm in learning new things may not always be desirable. There are limits of learning and exploring new things, since the excess knowledge exploration may take all the resources, constraining the organization to take productive actions (Weiping 2006). This is very much discussed in theory (see e.g. Gupta, Smith & Shalley 2006; March 1991; Weiping 2006), but we do not know how the balance of knowledge exploration and exploitation is maintained in practice. What does it take to keep this balance in the or-

ganization? What does it mean in practice when there is too much exploration of new opportunities and knowledge in the organization?

Existing studies have mostly directed the attention to the increase of knowledge and intellectual capital of the firm, while the possible situations, where there might be too much knowledge, are not investigated. The present study investigates the management control practices of the firm in managing learning and balancing knowledge exploration and exploitation. The story of a biotech company is presented to show how organizational practices can lead to the situation when there is too much knowledge in the firm. This paper discusses the efforts of the firm in coping with too much knowledge, showing the difficulties and constraints that this situation brings to the firm. It is explained how the decentralized organization structure and interactive management control, along the management of databases, may lead the organization to excess knowledge exploration and pose difficulties to decision-making and productive action.

The rest of the paper is organized as follows. The next section provides the theoretical background of the study. It discusses organizational learning and the role of management control in existing literature. The third section introduces the research approach and empirical setting. The fourth section gives the story of how interactive use of management control and encouragement of knowledge sharing lead to the excess knowledge exploration in the firm. It shows how managers realized they need to change the system in order to be able to maintain the competitiveness in the market. The final sections of the study provide discussion, draw conclusions and suggest future avenues for research.

2 Theoretical background

Organizational learning means exploring new things and being able to apply it in the actions (Argyris 1978). Organizational learning starts as individual level learning with recognizing and intuiting relevant information (Cohen & Levinthal 1990; Crossan, Lane & White 1999). After the step of recognition and intuition of new and relevant information, the processes of acquisition, assimilation, transformation, and exploitation allow organization to build organizational capabilities (Cohen & Levinthal 1990; Zahra & George 2002).

Scholars outline that it is important that the new information acquired would be shared among the organizational members, collectively interpreted and transformed into organizational knowledge (Grant 1996a; Sanchez 2001; Zahra & George 2002). Knowledge that is shared and embedded in organizational routines

is most valuable for the competitive advantage, since it cannot be imitated by competitors (Amit & Schoemaker 1993; Barney 1991; Prahalad & Hamel 1990; Teece, Pisano & Shuen 1997). Therefore interorganizational communication and knowledge sharing is particularly encouraged to better integrate knowledge in the firm (Grant 1996a, b).

It is possible, however, that the firm may only be able to explore new things but not apply these in the practice. Zahra and Georg (2002) have suggested that knowledge can only remain as potential capacity, when it is not applied in practice. In Penrosian terms, knowledge of potential capacity stays as a mere resource of the firm without generating services that it can potentially render (Penrose, 1959: 25). Knowledge that is turned into action becomes a realized capacity of the firm (Zahra & George 2002). Some of the knowledge processes, such as knowledge exploration, increase only potential capacities, whereas knowledge exploitation builds realized capacities of the firm. Exploitation of knowledge, represents the process in which knowledge is applied in organizational actions. March (1991: 71) describes these processes in the following way,

“Exploration includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution.”

A firm should maintain some kind of balance between these two in a way that it would be able to react to the environmental changes (Daft & Weick 1984; March 1991). It is important that organization should be able to turn new knowledge into action. A mere increase in potential capacities without turning new capacities into actions does not keep the firm competitive in the market. Unbalanced knowledge exploration and exploitation activities may lead the firm into competency traps (Weiping 2006: 149). There are two types of competency traps that may occur. Competency trap I occurs in the case of excessive engagement in exploitation of knowledge, whereas competency trap II occurs in the case of excessive exploration of knowledge, which means the main focus is on exploration of knowledge without its application in productive activities (Weiping 2006: 149). Excess knowledge exploration may hinder organizational learning, since organizational learning requires not only an increase of knowledge but the transfer of knowledge into action (Argyris 1978).

Management control can play an important role here affecting the ways organization directs knowledge exploration and exploitation activities. The processes of organizational learning and management controls are highly intertwined. Management controls affect and are affected by organizational learning (Gray 1990;

Kloot 1997). On the one hand, shared knowledge increases the probability that the individuals act according to the expectations of the organization, enhancing the congruency of activities and strengthening the control of the organization (Sunder 2002). On the other hand, management control is generally considered to enhance communication structures (Simons 1995). The appropriate structures of internal communication make individuals aware of other capabilities of an organization (Cohen & Levinthal 1990) increasing the likelihood of creating more shared knowledge in the organization. Overlapping knowledge and an expectation of behavior also form the basis for organizational culture (Sunder 2002). Further organizational culture and shared knowledge facilitate knowledge integration and support knowledge assimilation and transformation processes (Grant 1996a).

Despite the complexity and the indirect nature of the effects that management control may bring to knowledge, several studies have shed more light on the role of management control in affecting organizational learning. Kloot (1997) has studied the relationships between organizational learning and management control in two municipalities in Australia. The case studies show that differences in management control systems influence organizational learning and the success of an organization in implementing organizational change.

The role of management control in organizational learning is also suggested to rely in knowledge codification. Codification tools as a part of management control system make knowledge appropriable and store past experiences to inform future actions (Chang & Birkett 2004; Leitner & Warden 2004; Morris & Empson 1998). Management control systems produce various kinds of information, not only to provide a basis for managerial decision-making but in the form of instructions available across the organization, policies and relevant information on technologies stored in databases. Levitt and March (1988) suggest that this kind of information supports organizational learning.

Different effects of management control on organizational learning might emerge when using outcome, clan or behavioral controls in the organization (Eisenhardt 1985; Merchant & Van der Stede 2003; Ouchi 1977; Ouchi & Maguire 1975; Snell 1992; Turner & Makhija 2006). Nevertheless, the effects of controls on learning depend on the ways they are applied in the organization. Scholars have studied the effects of diagnostic and interactive use of management controls (Simons 1990; 1991; 1995) on organizational learning (e.g. Henri 2006). Through the involvement of top management, an interactive dialogue is stimulated throughout the organization integrating different levels of managers and specialists into a collective communication and decision-making process. It increases variations in behavior and nurtures learning, especially encouraging knowledge

exploration and integration throughout the organization. It affects the structure of communication processes, encouraging knowledge integration in two ways. Firstly, communication between different managerial levels induces common understandings and interpretations across the organizational hierarchy. Secondly, improved communication enhances the awareness of the capabilities of other employees and departments of the firm, further improving knowledge integration mechanisms (Cohen & Levinthal 1990). At the same time, the common understandings of organizational goals ensure that new knowledge is congruent with organizational strategies.

Empirical studies have also shown the positive effect of interactive control systems on organizational capabilities by encouraging dialogue and directing organizational attention onto strategically important domains (see e.g., Henri 2006; Tuomela 2005). Thus, interactive use of management controls can increase and widen organizational level potential capacities by encouraging mechanisms of knowledge integration and the creativity of organizational members.

Whereas interactive controls encourage knowledge exploration, the diagnostic types of controls would place more emphasis on exploitation of existing knowledge of the organization. The diagnostic use of management controls involves performance measures that are monitored through management-by-exception, correcting the deviations emerging from the performance measures as mistakes in actors' behavior (Simons 1990; 1991; 1995). In this way, the actors' behavior is more restricted. It leaves less space for experimenting and exploration, but is focused more on applying the existing capacities of the organization in the best possible way. Especially when the results are defined in the short-term, it minimizes opportunity-seeking and creativity. For instance, Hoskisson, Hitt and Hill (1993) found that an over-emphasis on short-term results of the managers decreases the intensity of R&D investments.

Scholar have shown encouraging effect of management control on organizational learning (see e.g. Ditillo 2004; Hartmann & Vaassen 2003; Kloot 1997; Leitner & Warden 2004; Mouritsen & Larsen 2005), but it has not been studied yet, how does the firm maintain the balance of knowledge exploration and exploitation. What does it take to keep this balance in the organization? Therefore, the next section of this paper investigates the management control practices of the firm in managing learning and balancing knowledge exploration and exploitation in the organization. The story of a biotech company is presented to show how the interactive management control practices can lead to the situation when there is too much knowledge in the firm.

3 Research approach and empirical setting

Single case study is conducted in the biotechnology company to investigate management control and organizational learning in practice. The case study is a part of a larger doctoral research project that investigated intellectual capital management in biotechnology companies (see Bürkland 2009). This case study differs from the analysis of doctoral research project by focusing more on the effects of interactive and diagnostic controls on the balance of knowledge exploration and exploitation in the organization.

The data collection and analysis are conducted using interpretive research method. The method of the present study is important to the existing literature, since there is a general lack of qualitative case studies about the issues of knowledge and learning in the organization (Marr, Gray & Neely 2003). There are only a few studies that seek to interpret the effects of working practices on knowledge and organizational learning (e.g., Johanson, Mårtensson & Skoog 2001; Kloot 1997; McNamara, Baxter & Chua 2004). Qualitative field research helps to take a deeper look into the management control methods and procedures in practice and better contribute to the theory development (Ahrens & Chapman 2006; Ahrens & Dent 1998; Vaivio 2008).

The data was collected during 2005–2006. 26 interviews with 13 individuals were conducted, amounting to 22 hours of discussions, from which 18 hours were recorded. In addition to the interviews, various sources of documentary material, such as company reports, internal memos and records, reporting instructions, e-mails and a history of electronic correspondence were gathered (see Table 1).

The 10-months time frame of the case study gave a reasonably long period of contact that allowed the researcher to investigate the ongoing processes in the firms. McKinnon (1988: 40) has suggested that “the longer the period of interaction, the larger will be the number of events that form the data set for analysis”, significantly affecting the validity of the study. In this case study the researcher had an opportunity to discuss several issues from their emergence through to their solution.

Several discussions were also held informally without the tape recorder running. The researcher had several lunches and casual talks with the members of the case firms, covering a range of topics from family and educational background of the respondents, through to areas of conflict in the firms, which shed light on the ways in which people work in these organizations. Also knowing the backgrounds, beliefs and concerns of the respondents increased the understanding of the way people work and communicate in the workplace. These discussions

helped the researcher to better connect with respondents, facilitating openness, honesty and spontaneous reactions during the interviews.

Data were organized and analyzed along the processes of interviewing. After each case visit the interviews were played back and transcribed. Coding was conducted by carefully reading and analyzing the meaning of the text. The codes were not predetermined but they emerged during the data collection and analysis (Corbin & Strauss 1990: 12; Miles & Huberman 1994: 61–62). Atlas.ti software (Muhr 2004) was applied in organizing and analyzing the case data. The codes were organized into families and networks according to the development of the concepts. The hypertext analysis of Atlas.ti was used to organize the original transcripts around the emerging patterns of the study and support the story telling in writing-up procedures. It was also helpful in discovering some inconsistencies in the statements of the interviewees. The conceptual maps were further drawn in Network Editor of Atlas.ti (Muhr 2004) to analyze the patterns of themes of the study, and integrate them into the theory.

Table 1. Interviews

Respondents	Number of interviews	Interviews total (hours)	Tape-recorded (hours)
CEO	2	1,95	1,81
Director of R&D	1	1,08	0,99
Director of Product Development	2	1,75	1,53
Director of Material Research	1	0,67	0,43
Division Manager	1	1	0,87
Controller	2	1,42	1,24
IPR Manager	6	7,38	5,01
Marketing Manager	1	1	0,8
Project Manager	3	2,45	2,26
Legal and Human Resource Manager	2	0,84	0,6
Quality Control Manager	2	2	1,69
Scientist of Material Research	1	0,5	0,4
Executive Assistant	2	0,54	0,47
Total:	26	22,58	18,11

4 Case study

4.1 *Overview of the firm*

InSpineTech Ltd¹ was founded in the late 1990s. It is developing and producing biodegradable medical implants, such as biodegradable plates, screws, pins and membranes that surgeons and other physicians can use in their practices. It employs about 100 employees. In addition to Finland, the company has corporate offices in the United States and Central Europe, and also several research centres and sales forces in other countries around the world.

The sector of biomaterials is a very fast-growing segment of the global orthopedics market (Bergeron & Chan 2004). Therefore, InSpineTech has especially been focused on strategy of growth and innovation. Many of its products are still in research and development stage, and many of them already distributed in the market. The firm has developed and launched 10 different product lines in over 40 countries in the fields of surgery, sports medicine and orthopedic traumas. It more than doubled its sales in few years (2004–2007) as a result of new product releases and an increasing demand for its products.

4.2 *Management of the firm*

At the time of the first half of the field visits in the winter of 2005/2006, the company had a flat functional management structure. The seven departments of the company were organized around the main functions of the firm, such as R&D, operations, new business development, finance and administration, marketing and sales, and quality.

The management of the organization considers largely the three competing discourses that the firm has to cope with – the economic, legal and regulatory. In order to effectively manage organizational actions in considering these discourses, various formal structures are built covering the areas from R&D, manufacturing processes to distribution and marketing. To cope with the economic discourse, a system of strategic and operating planning has been built with budgeting and outcome indicators. Nevertheless, the targets are very flexible and include a great deal of variation which is discussed and monitored each year through the organization.

¹ Pseudonym is used when referring to the firm.

Legal and regulatory discourses force the firm to adapt its activities to a number of regulatory restrictions. It is important to combine technological and scientific knowledge with the knowledge of quality systems and approval procedures of regulatory affairs. Therefore, the comprehensive quality system provides a significant part of the formal structures that determine the rules of action in most of the departments, especially in the production and R&D departments. The quality system has proved to be effective in gathering professional knowledge and analysis of issues from different fields, such as biology, engineering, marketing and production. It has allowed the firm to bring many products to market (including the regulatory clearances).

4.3 Interactive management controls

The management control is highly interactive, comprising numerous monthly meetings and informal every-day communication thorough the organization. Top managers pay special attention to creating an encouraging and motivational environment. There is a highly informal information flow across all managerial levels of the organization. A “human touch” is visible in the form of continuous reflection and feedback that top managers provide to the organizational members at all levels. There is an open dialogue through the different levels of management and across the functions of the organization. The CEO reveals:

“People know very well what has been done in the organization and by the top-managers. That is the signal towards the employees that there is a culture of trust and a culture of belief.”

Interviewees enthusiastically tell how important are the CEO’s and other top-level managers’ comments and advice that they receive face-to-face in brief discussions, through e-mail or just in the form of a short comment in some team-room. For instance, such short comments as “Great!” and “Good job!” provided by the CEO give organizational members the motivation and confidence to make their own decisions.

At the same time the outcome control is applied and metrics used to monitor the performance. Within the targets that are set, organizational members have a large degree of autonomy in choosing their ways of doing things. There is a significant amount of self-regulation and informal lines of communication and action. Managers grant high degrees of autonomy to the employees of research, development, marketing, legal affairs and other departments (the production department being an exception). There is a lot of freedom for people to choose the most appropriate actions.

Managers explain the autonomy by the need to maintain a motivational environment. As one division managers says, “My philosophy has always been – if I do not hear anything, then it is running OK!” If there is a problem, then middle level managers do not usually load their subordinates with written reports about these bottlenecks, but encourage them to present their problems in a meeting or notify them by e-mail. If there is a problem, then information about it is disseminated informally mainly via phone-call, e-mail or face-to-face discussion. The Director of R&D explains:

“The company is still small enough that you can manage it by walking around and it does not take that much time per day to understand. A half an hour just walking and try to keep the finger on the pulse of what is happening.”

The senior managers are confident that they are always informed about the critical issues. As the director of R&D says: “... they [indicating his subordinates] will come to me, if there is anything that needs to be resolved”.

The combination of a high degree of autonomy, encouraging leadership and clear definitions of desired outcomes plays a significant role in building enthusiasm and motivation among staff. A significant goal of management has been to nourish an organizational culture of innovation. It can be seen at all levels of management and in the different functions of the organization that people are very proud of the innovative products of the firm, and happy to provide their skills and capabilities for the success of the firm. People like their organization very much and everybody wants to make a contribution. They are highly inspired and proud of their work, constantly aiming for better outcomes and improvements to organizational processes. This encourages them to explore new information and pursue opportunities. Every member of the organization is eager to find new ways of doing things and communicating ideas to the others. Many interviewees excitedly tell how they have provided new ideas and solutions for the firm and how the motivational environment and good leadership has encouraged them to do so.

4.4 *High degree of communication and knowledge sharing*

Since the desired outcome is often defined for the team not for a single person, people need to communicate a lot. Group level responsibilities and the development of products that span the organizational units force the firm to maintain a large number of meetings to integrate relevant knowledge. In addition, since the results of each department were often dependent on the activities of other depart-

ments, it required even more communication and coordination of activities across different functions of the firm.

The organization has a strong culture of communication and knowledge sharing. There are many meetings on a wide array of topics and involving participants with varied backgrounds. In addition to the structured meetings, ad hoc meetings are very common in everyday practice. Each problem will be discussed with others and often a meeting scheduled for wider discussion. In addition, in order to nourish the innovativeness of the firm, there are also meetings that do not aim to solve concrete triggers but which may “create” new ones. One project manager describes the meetings thus:

“So, necessarily we do not make any big decisions in that kind of meeting, but rather ... it is kind of brainstorming environment when we get new questions more than answers, I would say. And all the people might throw in some new ideas and then you need to start solving those problems.”

Thus, in addition to discussing the existing problems they find more problems in these brainstorming sessions. Thus, there are a number of such meetings that increase the amount of knowledge exploration activities in the firm.

To facilitate all that communication and to store important information, special electronic team-rooms have been developed. Team-rooms are integrated groupware environments for electronic communication and information-sharing. These enable the firm to gather and share considerable amount of formal and informal information. All kinds of plans and reports, full accounts of discussions and arguments occurring during decision-making are all saved in the files of the team-room system.

Team-rooms are also used for the kind of decision-making that requires a large amount of information and acceptance from many managers and specialists in the firm. During the discussions, different specialists add their opinion and relevant information to the topic in the form of additional text and attached files. The electronic discussion is open as long as everybody has agreed and approved the documents. In this way, the team-room enables the firm to gather necessary information and knowledge from people to build a package of knowledge about a specific topic. Since managers cannot always be physically around due to the geographical location of the headquarters team-rooms become more and more valuable for communication. The opening of clinical centres in Europe and North America (16–17 centres altogether) has increased the significance of team-rooms in sharing relevant information and coordinating activities.

Across the organization, strong knowledge codification culture is nurtured. All kinds of databases are built for information storing. All the documents in these databases are signed and shared in electronic form. The structure and application of these databases, as well as application of teamrooms, is flexible, however. Most of information in the databases and teamrooms is in form of narrative. Each department has created its own ways of communicating, restoring and structuring the information. Top managers have left the middle managers to run the databases and team-rooms in the way that is most convenient for them. Therefore, much of the information is stored and structured not according to the detailed content, but following the chronological order of its storage.

4.5 *Limits of knowledge exploration and integration*

At a point in time, however, organization members found that there is too much information and knowledge everywhere. Electronic team-rooms and databases started to become overwhelmed with information. As one of the managers said:

“... databases, team-rooms, there is so much information that I do not think anybody knows in the company, all that is stored there. It is a very safe statement to say that ‘it is in a quality system or it is in a database’, because it is most probably there, but whether you can find it, is a different story.”

Thus, much of information existed in the system but its potential remained unused in building the capacities of the firm. People started to have difficulties finding necessary information.

People also started to feel that the growing level of collaboration in the organization starts to hinder the productivity of the firm. Often weekly calendars of organizational members are full of all kinds of meetings to conduct numerous discussions within or across different departments of the firm. During the period of the interviews, the firm was growing rapidly, new people were continuously being hired and new projects started. At the same time the management of the company was still based on a flat organizational structure, and having a culture of sharing and open communication. It seemed that the organization reached a point of having too much knowledge exploration activities, especially activities of knowledge integration that generated enormous amounts of potential capacities at lower management levels.

People recognized that there are limits to knowledge exploration and integration activities. There is a limit to the amount of communication in team-rooms, e-mails and meetings that one is able to read and respond to. Most of the interviewees described at least three formal meetings that they regularly attended in addi-

tion to the large number of *ad hoc* meetings that filled their diaries. The number of meetings eventually reached a maximum, taking a lot of management time. At that point many managers started to feel that they needed fewer meetings but with better focus. As Divisional Manager reports:

“I try to stay away from meetings that are not clearly focused on something that needs to be clearly resolved. Because there is a meeting mania in this building!”

Managers began to suggest that instead of scheduling meetings, five-minute talks over a coffee might be preferable, since the number of meetings was starting to take people away from their real productive activities; the activities through which the things that had been discussed in the meetings should finally be turned into actions (see also Figure 1).

People who used to be close to decision-making and had usually provided their opinion suddenly realized that they were not able to follow any more. Many people admitted that they did not understand the ongoing issues any more, since there was too much to read and discuss all the time. Interactive management control became more and more exhaustive for the top managers. CEO explains:

“I used to be very close to the R&D and know exactly what was going on there but I would say that now I would not be able to keep up anymore.”

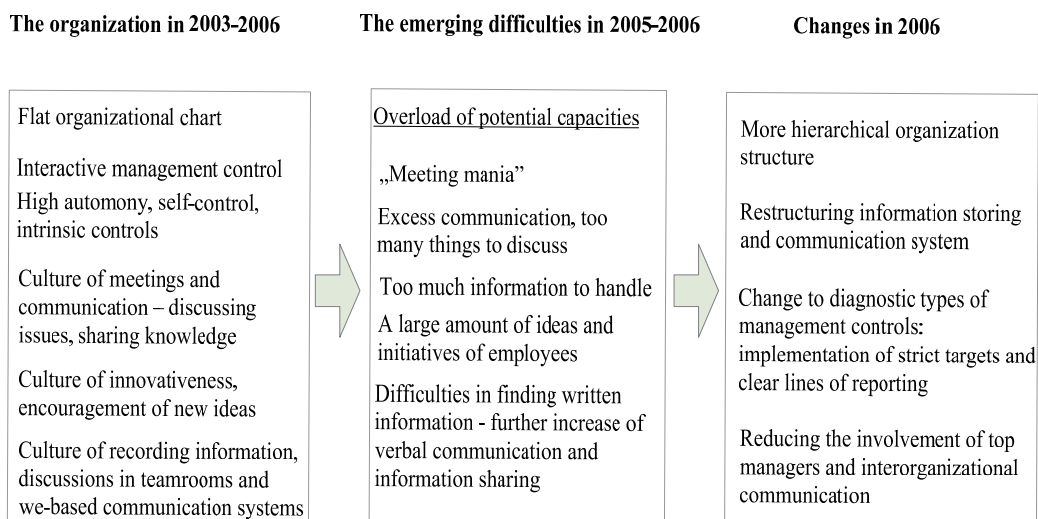


Figure 1. Dynamics of the organization

An overload of written information in team-rooms (often semi-structured) and databases created a need to have even more face-to-face communication, because it was easier to ask the right person than do the information search on your own

from the team-rooms. People increased the direct communication by asking for all kinds of technical, as well as sales and marketing information, directly from people who held such information. So the amount of short informal discussions and e-mails increased even more. Often it became difficult to reach people since they were already very busy communicating with other colleagues.

Consequently, people were overly busy with knowledge exploration activities in the firm. Since a large amount of data, information, thoughts and ideas was created at lower levels of the organization, for all kinds of matters in the firm, there was lots of information and knowledge that people could not assimilate anymore. It became more and more time-consuming to filter valuable knowledge and transfer it into the realized capacities of the firm. At the same time new strategies of the firm were developed at higher levels of the organization, to enhance organizational growth and to extend the organizational capabilities to new therapeutic fields and markets. However, top-level managers started to realize that new business strategies could not be executed while retaining the existing structures and interactive management controls. They recognized that there was too much knowledge to handle at lower levels of management. They realized that in order to manage the growth of the firm and develop organizational capabilities, they needed to change something in the management systems.

4.6 Changes in management system

First, it was necessary to reduce the knowledge integration and sharing activities. Top managers found that it is necessary to reduce the amount of interactive control and moving towards more diagnostic type of controls along with the restructuring of the organization. They found that more hierarchical management structure would help to manage the themes of knowledge better in different functional units of the firm and reduce the excess communication that they used to have across the decentralized units of the organization. Therefore, the organizational chart of the firm was restructured from the previously flat structure to more hierarchical lines of reporting and communication. The CEO explains the necessary changes in the structure:

“We have had quite a bit of discussion about these things now. There is a limit to how much an organization can swallow at any particular time. [...] We cannot afford to keep everybody informed in the organization as we used to in the early days. Otherwise we would be all sitting in meetings, just hearing what somebody else is doing. We cannot share all the information and knowledge any more. So, you have to focus on your area, remain informed about that and trust that other people are competent at doing what they are supposed to be doing.”

The idea of restructuring was to make business units more independent of each other, being able to make decisions in each business unit without constantly having face-to-face meetings with other functions of the firm. Some interaction was left but was no longer on a daily basis.

Second, in order to still stay innovative and maintain the level of learning in the organization, it was necessary to develop management procedures for that. Top managers felt that in order to become more productive (i.e. to turn potential capacities into realized capacities) they need to manage new ideas better. During the rapid growth of the firm a significant amount of individual or group level potential capacities had been generated in the form of new ideas. A large number of ideas, however, made the firm unable to effectively select those ideas that were worth further consideration. Too many ideas compared to the limited resources, required more careful analysis before a decision could be made. The Technical Director of Marketing explains:

“When we were a smaller company, it was easier to communicate and information was floating around everywhere and everybody was aware of what was going on and decision-making was much easier. Now, we are a bigger company, not very big yet, just a hundred people, but we are present in different places, the UK, the United Arab Emirates, the USA, the Far East and Finland. Communication has become more difficult. We realized that we need to have a more structured way to handle these ideas. We saw that decision-making is difficult. Even, if we wanted to make some new products to get the idea evaluated and make a decision to start this process it was sometimes difficult and took a very long time.”

These difficulties were caused by a large number of ideas and too much unstructured information and knowledge about these ideas. In addition, necessary knowledge was sometimes located in geographically distinct places. Therefore, managers thought that a central system to screen and select ideas would improve the situation. The idea evaluation system project was initiated in cooperation with a university to develop a system that would systematically select the ideas and control these ideas that the firm would invest in – to have a control over the themes and performance of the ideas and to be able to select the ideas with best potential to engage people and finances to these ideas.

The purpose of the idea evaluation system was to efficiently gather, process and prioritize existing data related to the strategies of the firm. It was necessary to analyze the opportunities presented by single idea against the organizational resources and strategies, analyze its suitability for existing products and processes, as well as the possible allocation of financial resources. Further, it was necessary to organize the soft issues related to each idea to have a more structured overview

of what the organization actually knows about each idea. Therefore, the information about markets, customers, competitors, technologies and legislation had to be systematized in order to get the whole picture of each idea. The system was expected to ensure a more structured search of data and analysis before decision-making.

To support the above-mentioned changes, focus was also directed to improving the electronic team-rooms and structuring the topics of the discussions in file systems. More careful planning of the general structure of the team-room system and access of the team-rooms was conducted. In addition, managers found that training of the employees is necessary to make the application of the team-rooms more consistent across the organization.

The general move towards more diagnostic types of controls and hierarchy brought more structure in monitoring activities of the firm. The accounting department with several accountants and controllers managed a thorough system of budgetary control in which the budgets of business units and organizational departments are monitored on a quarterly basis. Having more hierarchy in the firm and applying more strict performance metrics in each function of the organization, worked well, reducing the amount of inter-organizational communication at lower levels of management. The Director of R&D explains:

“There are different geographical units that generate their own systems. I mean, it is similar, it is parallel, but there is less and less interaction. As I see it, there would perhaps in the future be a third and perhaps a fourth group and the internal groups here would be divided into smaller sub-groups. We will have a number of parallel systems.”

These parallel systems (i.e. departments and business units) got their defined targets and started to work in their own space of knowledge and information sharing without having to explore knowledge across different organizational units before each decision. This helped to reduce the amount of knowledge exploration in the organization.

5 Discussion and conclusions

Case study demonstrates that the balance of knowledge exploration and exploitation in the organization is a consequence of different management practices, organizational structure, culture and database structures. It shows the efforts of the firm in coping with too much knowledge, showing the difficulties and constraints that this situation brings to the firm. The formal and informal structures of the

firm, as well as technological tools, influence the ways in which knowledge is acquired, communicated and stored in the firm. Literature has also shown that less bureaucratic organizational structures facilitate better knowledge integration (Serenko, Bontis & Hardie 2007). Flat and decentralized management structures especially support knowledge integration mechanisms (Nonaka & Takeuchi 1995). Serenko, Bontis and Hardie (2007) suggest that internal compensation structures and rewards are necessary to motivate people to communicate and share their knowledge. In this case study knowledge sharing was motivated without particular rewards for such behavior, but induced by interactive management controls, an organizational culture of innovation, sharing and open communication, as well as the high level of autonomy of the employees.

Existing studies have usually outlined the role of interactive management controls as communicating the strategies of the firm vertically thorough the organization and increasing the continuous attention to the critical matters of the firm (e.g. Henri 2006; Simons 1994). In this case study the combination of the interactive management control, decentralized management system and the innovative culture induced the communication across the vertical as well as horizontal lines of organization, that consequently lead to excess knowledge exploration and integration activities. The case study shows that such an encouraging environment and structures of the organization may induce too much sharing and knowledge integration at lower levels of the organization. Consequently, the staff becomes entirely occupied with knowledge exploration activities, having less time on productive actions.

Weiping (2006) connects knowledge exploration with an excessive acquisition of external knowledge. This case study shows that excessive knowledge exploration may also happen internally. In this situation a firm builds potential capacities but risks lacking the time necessary for productive action. This leads to a risk of inhibiting the development of realized capacities, or constraining the smooth development of organizational capabilities. Especially when the number of personnel is growing, potential capacities start to rapidly increase at lower levels of the organization. It becomes difficult to filter these potential capacities and make them available to people in other departments who could turn the capacities into productive action (i.e. realized capacities).

Without changes in management and information processing, InSpineTech would have finally fallen into competency trap II – the increase of potential capacities without an increase in the firm's overall performance. In order to avoid the possible competency trap, changes in organizational structure became necessary to cope with the increased scale of knowledge. The basis for larger scale of know-

ledge becomes difficult to integrate into the firm's capabilities, requiring a better infrastructure and more structured information sharing. With the increase of formal structures and hierarchies, intra-organizational knowledge integration can be reduced (Serenko et al. 2007). In a more hierarchical management structure knowledge integration mainly takes place along the vertical lines of the organization, and less along its horizontal lines. Consequently capabilities become integrated at higher levels of the organization (Grant 1996a).

Existing studies have mostly directed the attention to the increase of knowledge and intellectual capital of the firm, while the possible situations, where there might be too much knowledge exploration and learning in the firm, have not been investigated. It has not been investigated, what it means in practice when there is too much exploration of new opportunities and communication across the organization. The present study fills this gap and shows the circumstances in which excess knowledge exploration may emerge in the firm. It shows how managers are forced to make changes in the structure and management of the organization to maintain the productive decision-making in the firm. This study is, however, limited in showing the particular effect of interactive controls on knowledge exploration, since the learning processes of an organization are affected by a combination of multiple factors. For future research it would be necessary to investigate more deeply how different internal and external factors of the organization induce and facilitate the management of knowledge exploration and exploitation in the firm.

References

- Ahrens, T. & Chapman, C. S. (2006). Doing qualitative field research in management accounting: Positioning data to contribute to theory. *Accounting, Organizations and Society* 31:8, 819–841.
- Ahrens, T. & Dent, J. F. (1998). Accounting and organizations: realizing the richness of field research. *Journal of Management Accounting Research* 10: 1–40.
- Alvesson, M. & Karreman, D. (2001). Odd couple: Making sense of the curious concept of knowledge management. *Journal of Management Studies* 38:7, 995–1018.
- Amit, R. & Schoemaker, P. J. H. (1993). Strategic assets and organizational rent. *Strategic Management Journal* 14:1, 33–46.
- Argyris, C. (1978). *Organizational Learning: A Theory of Action Perspective*. Reading, Massachusetts: Addison Wesley Publishing Company.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management* 17:1, 99–120.
- Bergeron, B. & Chan, P. (2004). *Biotech Industry. A Global, Economic, and Financing Overview*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Bontis, N., Keow, W. C. C., & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital* 1:1, 85–100.
- Bürkland, S. (2009). *Managing the Development of Valuable Intellectual Capital. Ph.D Thesis*. Acta Wasaensia 207. University of Vaasa, Vaasa.
- Chang, L. & Birkett, B. (2004). Managing intellectual capital in a professional service firm: exploring the creativity–productivity paradox. *Management Accounting Research* 15:1, 7–31.
- Cohen, W. M. & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* 35, 128–152.
- Corbin, J. & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology* 13:1, 3–21.
- Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: from intuition to institution. *Academy of Management Review* 24:3, 522–537.

Daft, R. L. & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review* 9:2, 284–295.

Dewar, R. D. & Dutton, J. E. (1986). The adoption of radical and incremental innovations: An empirical analysis. *Management Science* 32:11, 1422–1433.

Ditillo, A. (2004). Dealing with uncertainty in knowledge-intensive firms: The role of management control systems as knowledge integration mechanisms. *Accounting, Organizations and Society* 29, 401–421.

Edvinsson, L. & Malone, M. S. (1997). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*. New York: Harper Business.

Edvinsson, L. & Sullivan, P. (1996). Developing a model for managing intellectual capital. *European Management Journal* 14:4, 456–364.

Eisenhardt, K. M. (1985). Control: Organizational and economic approaches. *Management Science* 31:2, 134–149.

Flamholtz, E. (1974). *Human Resource Accounting*. Encino, California: Dickenson Publishing Company.

Grant, R. M. (1996a). Prospering in dynamically-competitive environments: Organizational capability as knowledge integration. *Organization Science* 7:4, 375–387.

Grant, R. M. (1996b). Toward a knowledge-based theory of the firm. *Strategic Management Journal* 17 (Winter Special Issue), 109–122.

Gray, B. (1990). The enactment of management control systems: A critique of Simons. *Accounting, Organizations and Society* 15:1/2, 145–148.

Gupta, A., Smith, K., & Shalley, C. (2006). The interplay between exploration and exploitation. *Academy of Management Journal* 49:4, 693.

Hartmann, F. G. H. & Vaassen, E. H. J. (2003). The changing role of management accounting and control systems. Accounting for knowledge across control domains. In A. Bhimani (Ed.), *Management Accounting in the Digital Economy*, 112–132. New York: Oxford University Press.

Henri, J.-F. (2006). Management control systems and strategy: A resource-based perspective. *Accounting, Organizations and Society* 31:6, 529–558.

Hoskisson, R. E., Hitt, M. A. & Hill, C. W. L. (1993). Managerial incentives and investment in R & D in large multiproduct firms. *Organization Science* 4, 325–325.

Hudson, W. (1993). *Intellectual Capital: How to Build It, Enhance It, Use It*. New York: John Wiley & Sons.

Johanson, U., Mårtensson, M. & Skoog, M. (2001). Mobilizing change through the management control of intangibles. *Accounting, Organizations and Society* 26:7–8, 715–733.

Kloot, L. (1997). Organizational learning and management control systems: responding to environmental change. *Management Accounting Research* 8:1, 47–73.

Leitner, K.-H. & Warden, C. (2004). Managing and reporting knowledge-based resources and processes in research organisations: specifics, lessons learned and perspectives. *Management Accounting Research* 15, 33–51.

Lev, B. (2001). *Intangibles: Management, Measurement, and Reporting*. Washington: Brookings Institution Press.

Levitt, B. & March, J. G. (1988). Organizational learning. *Annual Review of Sociology* 14: 319-340.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science* 2:1, 71–87.

Marr, B., Gray, D. & Neely, A. (2003). Why do firms measure their intellectual capital? *Journal of Intellectual Capital* 4:4, 441–464.

McKinnon, J. (1988). Reliability and validity in field research: Some strategies and tactics. *Accounting, Auditing & Accountability Journal* 1:1, 34–54.

McNamara, C., Baxter, J. & Chua, W. F. (2004). Making and managing organisational knowledge(s). *Management Accounting Research* 15:1, 53–76.

Merchant, K. A. & Van der Stede, W. A. (2003). *Management Control Systems. Performance Measurement, Evaluation and Incentives*. New York: Pearson Education Limited, Prentice Hall.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Thousand Oaks, California: Sage Publications.

Morris, T. & Empson, L. (1998). Organisation and expertise: An exploration of knowledge bases and the management of accounting and consulting firms. *Accounting, Organizations and Society* 23:5/6, 609–624.

Mouritsen, J. & Larsen, H. T. (2005). The 2nd wave of knowledge management: The management control of knowledge resources through intellectual capital information. *Management Accounting Research* 16:3, 371–394.

- Muhr, T. (2004). *User's Manual for ATLAS.ti 5.0*. Berlin: ATLAS.ti Scientific Software Development GmbH.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge-Creating Company. How Japanese Companies Create the Dynamics of Innovation*. New York: Oxford University Press.
- Ouchi, W. G. (1977). The relationship between organizational structure and organizational control. *Administrative Science Quarterly*, 22:1, 95-113.
- Ouchi, W. G. & Maguire, M. A. (1975). Organizational control: two functions. *Administrative Science Quarterly* 20:4, 559–569.
- Penrose, E. (1959). *The Theory of the Growth of the Firm* (3 ed.). New York: Oxford University Press Inc.
- Prahalad, C. K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review* (May–June), 79–91.
- Roos, G. & Roos, J. (1997). Measuring your company's intellectual performance. *Long Range Planning* 30:3, 413–426.
- Roos, G., Roos, J., Dragonetti, N. & Edvinsson, L. (1997). *Intellectual Capital: Navigating in the New Business Landscape*. New York: New York University Press.
- Sanchez, R. (2001). Managing knowledge into competence: The five learning cycles of the competent organization. In R. Sanchez (Ed.), *Knowledge Management and Organizational Competence*, 1–3. New York: Oxford University Press.
- Serenko, A., Bontis, N. & Hardie, T. (2007). Organizational size and knowledge flow: a proposed theoretical link. *Journal of Intellectual Capital* 8:4, 610–627.
- Simons, R. (1990). The role of management control systems in creating competitive advantage: New perspectives. *Accounting, Organizations and Society* 15:1/2, 127–143.
- Simons, R. (1991). Strategic orientation and top management attention to control. *Strategic Management Journal* 12: 49–62.
- Simons, R. (1994). How new top managers use control systems as levers of strategic renewal. *Strategic Management Journal* 15:3, 169–189.
- Simons, R. (1995). *Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal*. Boston, Massachusetts: Harvard Business School Press.

- Snell, S. A. (1992). Control theory in strategic human resource management: The mediating effect of administrative information. *Academy of Management Journal* 35:2, 292–327.
- Stewart, T. A. (1997). *Intellectual Capital: The New Wealth of Organisations*. New York: Doubleday/Currency.
- Sullivan, P. H. (1998). *Profiting from Intellectual Capital. Extracting Value from Innovation*. New York: John Wiley & Sons.
- Sunder, S. (2002). Management control, expectations, common knowledge, and culture. *Journal of Management Accounting Research* 14, 173–187.
- Sveiby, K.-E. (1997). *The New Organizational Wealth – Managing and Measuring Knowledge-based Assets*. San Francisco: Berrett-Koehler.
- Zahra, S. A. & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review* 27:2, 185–203.
- Teece, D. J., Pisano, G. P. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal* 18:7, 509–533.
- Tuomela, T. (2005). The interplay of different levers of control: A case study of introducing a new performance measurement system. *Management Accounting Research* 16:3, 293–320.
- Turner, K. L. & Makhija, M. V. (2006). The role of organizational controls in managing knowledge. *Academy of Management Review* 31:1, 197–217.
- Vaivio, J. (2008). Qualitative management accounting research: rationale, pitfalls and potential. *Qualitative Research in Accounting & Management* 5:1, 64–86.
- Weiping, L. (2006). Knowledge exploitation, knowledge exploration, and competency trap. *Knowledge and Process Management* 13:3, 144–161.
- Viedma, J. M. (2001). ICBS intellectual capital benchmarking system. *Journal of Intellectual Capital* 2:2, 148–164.

DRIVERS OF DIFFUSION OF DIGITAL ACCOUNTING PRACTICE

Benita Gullkvist
*Department of Accounting and Commercial Law
Hanken School of Economics*

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Gullkvist, Benita (2011). Drivers of diffusion of digital accounting practice. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 25–43. Eds Annukka Jokipii & Johanna Miettinen.

Digital accounting is an emerging alternative to paper-based accounting. Grounded in two streams of institutional theory, this article aims to provide an analysis and review of the factors explaining the diffusion of digital accounting technologies in Finland over the past ten years. The article draws on multiple research methods and data sources collected over many years. It is argued that a lack of driving forces, strong focus on existing institutional practices and economic pressures dominated in the early years of development. In more recent years, institutional pressures from business partners and authorities as well as an increasing focus on operational efficiency and effectiveness appear to have influenced existing institutions. However, as the transformation to digital accounting practices appears to have been rather slow, it would seem as if the effect of the preventing forces insofar have been greater than those promoting adoption and diffusion of digital accounting technology. Further, prevailing gaps in regulations, cultures and practices between different countries may also be seen as preventing the diffusion of digital accounting practices on an international level.

Keywords: Digital accounting, Institutional theory, Accounting practice, Change, Finland

1 Introduction

Accounting has evolved with developments in business and information technology (IT). The digitization of economic phenomena across the globe has fundamentally and permanently changed also the accounting profession (Hunton 2002), and computerization of accounting has moved into a new stage, the digitalization of accounting. Digital accounting does not as yet have a standard definition but is usually referred to as changes in accounting due to computing and networking technologies. Deshmukh (2006) defines digital accounting, or e-accounting, as the

representation of accounting information in the digital format, which can then be electronically manipulated and transmitted. Emerging technologies developed for further automating procedures, developing more appropriate information technology-based processes, or replacing analogue with digital information are for example electronic bank statements, electronic reporting to tax authorities, electronic invoicing and web-based accounting software. Technological innovations in this article thus cover a number of various information technologies and systems, however all with the purpose of digitalizing the financial accounting process and practice.

As it is now just over ten years since the revised Accounting Act (1336/1997), which made it possible to use machine-readable data records when setting up and archiving bookkeeping entries, was passed in Finland, it is a reasonable time to assess the progress. Drawing on prior research and institutional theories, the purpose of this study is to provide an analysis and review of the factors explaining the diffusion of digital accounting technologies in Finland over the past ten years. Technologies enabling digital accounting are regarded an innovation, in line with Rogers (1962), as an idea, thing, procedure, or system is regarded an innovation when it is perceived to be new by whomever is adopting it. Rogers regards the diffusion of innovations as a social process that communicates perceived information about a new idea; it produces an alteration in the structure and function of a social system, thus producing social consequences (Rogers 1995). According to Rogers (1995), the diffusion effect is the increasing, cumulative pressure from interpersonal networks to adopt or reject an innovation. The working definition of diffusion of innovation in this article is the adoption or rejection of new information technology, processes and routines with particular emphasis on managing corporate financial accounting practice within and/or across organizations.

It was expected that the legal consent to use machine-readable data records, e.g. revised Accounting Act effective from year 1998, would radically change accounting practices in Finland. Although scarce prior research¹ exists on the advances of digital accounting, the available evidence is, however, that the change to digital accounting practice has been slower than expected, and has not yet reached a critical mass. Prior research on innovations has concluded that innovations often take years, if not decades, to spread into wide use (Premkumar and Ramamurthy, 1994; Van de Ven et al. 1989). Further, accounting researchers argue that accounting practice is rather slow to change (Scapens 1994: 317). The slow rate of change has also been found in prior studies of management accounting change in Finland (for example Granlund and Malmi 2002). Yet, the automation of financial accounting processes was one of the first applications of early computer technology. Although prior diffusion research mainly has focused on

the demand side, this study also explores the supply side. The supply side, e.g. the promoters of digital accounting such as accounting academics, software producers, consultants and early adopters, are regarded important because they may have a major effect on the diffusion.

Data was collected over a ten-year period, from 1998 to 2008, using various sources and with various research methods. Primary data was collected through tape-recorded semi-structured interviews and surveys among Finnish accounting professionals, software vendors and accounting services firms at different intervals, in 2002, 2004, 2005 and 2008. Secondary data, such as documentary evidence from the accounting service providers, was also used.

The findings show a lack of very importantly perceived drivers of diffusion in the early years, and old institutional practices and economic pressures were the dominating drivers of the development. In more recent years, the increasing adoption rate of digital accounting technology in SMEs may be due to institutional pressures from business partners and authorities, but also regarded as a means of gaining operational efficiency and effectiveness, maybe even competitive advantage. As the transformation to digital accounting practices appears to have been slow, it would seem as if the effect of the preventing forces insofar has been greater than those promoting diffusion.

This article is organized as follows. The next section outlines the conceptual basis. Section 3 explains the research method and data used, whilst Section 4 summarizes the results. This is followed by Section 5 which discusses the results and suggests further research avenues.

2 Theoretical underpinnings

The move towards digital accounting will affect how accounting is performed as digital accounting technology and systems change the ways and needs of data gathering and information processing. As the accounting environment has been described as a heavily institutionalized one (Scapens 1994), it seems likely that institutional factors might influence the diffusion of digital accounting practice. Therefore, this article draws upon two streams of institutional theory, e.g. old institutional economics (OIE) and new institutional sociology (NIS), to analyse and structure the institutional environment surrounding the diffusion of digital accounting practices in accounting service firms. The choice of institutional theories as the lens for understanding the transformation of accounting practices in this study is justified by the fact that financial accounting may be said to represent a routine that partly includes institutionalised practice performed by professionals

and partly the use of advanced technology in the form of software applications. Accounting practice, routines and work methods are seen as constituting informal institutions to which digital accounting poses a challenge in the form of change.

The main premise of institutional theory is that organizations and individual behaviour are influenced by the institutions in which they exist. A precise definition of an institution was provided by Hamilton (1932, cited in Scapens 1994:306) as “a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of people”. Institutional theorists suggest that an organisation’s or profession’s survival requires it as much to conform to societal norms of an acceptable behaviour as to achieve high levels of production efficiency (Meyer and Rowan 1997; DiMaggio and Powell 1983). Further, the institutional environment has been said to comprise the social, political, and legal aspects of the environment in which an organisation is established (Scott and Meyer 1994; DiMaggio and Powell 1983). Although it does not directly affect the technical tasks that an organisation performs, the institutional environment is powerful in shaping organisational actions by formulating and imposing government policies, cultural norms, behavioural standards, and social expectations (Aldrich 1990).

Various trends of institutional theory emphasize environmental influence differently. Old institutional economics (OIE) seeks to explain the behaviour of economic agents within the organization (Burns and Scapens 2000) (here referred to as internal institutions), whereas new institutional sociology (NIS) is more concerned with the institutions and agents in the external environment (DiMaggio and Powell 1983) (here referred to as external institutions). Thus, by combining the two theoretical research avenues, this study aims at understanding the intra-organizational institutionalization processes as well as the external pressures that drives the transformation of accounting practices.

The basic premise of NIS (DiMaggio and Powell 1983) suggests that an organisation’s tendency toward conformity with predominant norms, traditions and social influence in their internal and external environments will lead to homogeneity among organisations in their structures and practices. Further, it is suggested that successful organisations are those that gain support and legitimacy by conforming to social pressures. Based on this, it could be argued that there will be a tendency for all accounting firms to eventually adopt digital accounting technologies. A second major characteristic of the institutional environment is a high degree of professionalization among decision participants. DiMaggio and Powell (1983) argued that “normative isomorphism” arising from strong professional norms in an organisational field will create a tendency for organisations to resemble one

another in their structure and process. With respect to digital accounting, a critical factor is that virtually all participants, such as owners, managers and accountants of accounting services firms, auditors as well as accounting law makers are accounting professionals, e.g. trained and/or certified accountants and auditors. Therefore, participants in accounting policymaking might exhibit high levels of shared knowledge and beliefs, and this professionalization may contribute to a more orderly, consensual process in the adoption decision and diffusion process. Institutional theory also centres its attention on organizations such as professional associations and regulatory bodies that are situated outside the profession or industry per se, but which still exist within a particular sector or field. These agencies may influence and/or constrain the service-producing organizations within the profession (Siegel and Rigsby 1998: 82). Within an institutional field, certain institutions, i.e. values and regulations that are taken for granted by the organisations, are created (DiMaggio and Powell 1983; Powell and DiMaggio 1991).

Finally, an important issue according to the new institutionalism is how and why organisations follow institutionalised myths and beliefs in society. DiMaggio and Powell (1983) distinguish two main “polar” pressures, e.g. competitive (rational) and institutional, which affect organizational developments, but which also may co-operate. Further, DiMaggio and Powell (1983) identify three types of institutional pressures resulting in organisational isomorphism: coercive, mimetic and normative. Coercive pressures stem from political influence and problems of legitimacy. Mimetic pressures cause organizations when experiencing uncertainty to “model themselves after similar organizations in their field that they perceive to be more legitimate or successful” (DiMaggio and Powell 1983). Normative pressures are associated with professionalization.

OIE theory supposes that socially learned and acceptable pattern of behaviours determine the actions taken by individuals and organizations (Hodgson 1998). It is suggested that OIE (Scapens 1994; Burns and Scapens 2000) stresses the importance of power, rules and routines when evolving and introducing changes to accounting procedures and practices. The frame of reference of accounting, i.e. the laws, decrees and norms that govern accounting, can be regarded as formal institutions while conventions, behavioural norms, work routines and standardised processes can be seen as informal institutions (Falkman 2000: 148–149). Both individual behaviour and societal norms are mutually reinforcing and driven by habit, but after becoming part of group action, the habits evolve into routines and customs (Hodgson 1998). The OIE perspective is about why and how particular systems and practices emerge, sustain and/or change over time, i.e. the dynamics of the change process rather than the outcomes of a change event (Burns & Scapens 2000). Although the change process as such is not the subject for study in

this paper, the theoretical framework of Burns and Scapens (2000) will be utilized in the interpretation of the findings.

Over the last decade, existing institutional theories have been subject to criticism and development. Granlund and Lukka (1998), in studying global convergence of MAS practices, added economic pressures to the NIS theory of coercive, normative and mimetic institutional behaviour. Dillard et al. (2004) combined old institutional economic (OIE) research with NIS research on external pressures. In more recent years, Lounsbury (2008) points to new directions for institutional analysis, focusing on the rationality of actors and organisational decision-making that would rather lead to divergences in motive and behaviours (e.g. Oliver 1991). Thus, institutional rationality may also provide a foundation for the explanation of organisational heterogeneity and practice variation.

Further, many researchers studying management accounting change have based their research on institutional theories. With regards to Finnish accounting practices, for example Malmi (1999) studied the ABC diffusion and found that efficiency concerns only explained early ABC adoptions. In the early days of adoption, so called fashion-setting organizations were influential, whereas mimetic behaviour and efficiency drove later diffusion. More recently, Rautiainen (2008, 2009), in analyzing the accounting performance measurement change process in the public sector, argued that rational and institutional pressures are opposed also in the Finnish public sector, and that the analysis of both internal and external institutional pressures facilitated the understanding of the case events.

Based on a review of prior studies, potentially relevant institutional factors in the diffusion of digital accounting practice were identified. Figure 1 illustrates this framework. The framework integrates factors from OIE, e.g. internal pressure, and NIS, e.g. external pressure. Further, influenced by Granlund and Lukka (1998), economic pressures were added to the framework. Although institutional theorists emphasize the significance of social factors as drivers of organisational change (Westphal et al. 1997), they do not dispute the importance of economic and political processes in organizational change (Abrahamson 1991). Further, Carruthers (1995) has argued that economic and institutional pressures may get blurred in practice due to their interconnected relationship.

	Institutional pressure			Economic pressure
Internal Perspective	Established routines			Strategic advantages Cost-benefit analysis
External Perspective	Mimetic	Normative	Coercive	Competition Global economy

Figure 1. Potential drivers of diffusion of digital accounting practices

The framework in Figure 1 will be used to structure the analysis and discussion in Section 4 of this article. It is hypothesized that, as a result of any of the above mentioned pressures, either positive, promoting effects or negative, preventing effects may drive the diffusion of digital accounting practices.

3 Research methodology

In Finland, accounting services firms provide approximately 90 percent of book-keeping records, financial and fiscal reporting in all companies (Association of Finnish Accounting Firms, 2008). Further, the most common category of clients of Finnish accounting services firms is micro-entities and small companies (Lith, 2004). The main focus, with regards to the diffusion of digital accounting practices, is therefore in this research on the accounting services providers and their clients, e.g. small and medium-sized entities (SMEs).

Data has been collected over a ten-year period, between 1998 and 2008. Primary data was collected through semi-structured interviews and postal surveys among Finnish accounting professionals in medium-sized and large accounting services and auditing firms, software vendors and SMEs. The surveys included both structured and open questions about the accounting technology and techniques in use, the factors influencing adoption as well as stage of adoption and change. Survey data was collected in the years 2002 and 2005. In year 2002, a total of 177 questionnaires were returned by accounting professionals resulting in a response rate of approximately 26 per cent. In year 2005, a total of 89 responses were received generating a response rate of approximately 25 per cent. Furthermore, results of a survey among members of the professional accounting institute of certified accounting services firms were available for 2008. The empirical data was analysed

with statistical tools. The data collection for the surveys was not based on a random sampling method, but restricted to five major cities. However, since accounting firms follow the same regulations and can adopt and use the same information technologies all over the country, the risk for any major distortion in the results is considered low.

In addition, semi-structured interviews lasting approximately between one and 1.5 hours with 32 professionals were conducted in 2004 with a follow-up with 12 professionals in year 2008. All interviews were tape recorded and later transcribed into written format. One accounting services firm in particular was followed over a three-year period, in years 2004–2007. Moreover, secondary data such as documentary evidence from the accounting service providers were also used together with popular business journals to trace the development. These multiple research methods were deliberately selected as one method can complement others, and triangulation tends to improve the validity of evidence (Scapens, 1990).

4 Findings

4.1 *Development of digital accounting in brief*

Vahtera and Salmi (1998:10) argue that the first steps towards digital accounting in Finland were taken with the development of electronic payment systems based on EDI in the 1990s. The development of payment systems started already in the 1970s with automated invoice payments via an on-line connection, referenced payments and direct debits, followed by automated foreign payments and payment terminals in the 1980s. In 1992 the automation of payments was further brought forward by using bar codes on bank giros. At the same time electronic bank statements without vouchers (called *Tito*) were made legal accounting source documents, e.g. the detailed bank statements hold the required data and no source documents are needed. The emergence of Internet giros and e-Cash in 1996 as well as smart card systems in 1997 further facilitated on-line payments for both individuals and enterprises (Salmi & Vahtera 1997).

The advances in information technology, in particular in the banking sector in Finland in early and mid 1990s, resulted in expectations for further development and utilization of IT within financial accounting in late 1990s. Auditor Pauli Vahtera, one of the champions of digital accounting, published two books on digital accounting in the years 1997 and 1998 as well as wrote numerous of articles in business magazines. Further, the fiscal authorities developed their reporting sys-

tems and launched a system for electronic reporting to the taxation authorities called TYVI.

The revised Accounting Act came into force starting from 1998. This Act was in media regarded as a major "push forward" for digital accounting practices. It was expected to have a promoting effect on the use of new technology in practice and to radically change accounting practices (Vahtera 1998). According to the Act and the subsequent directives issued by the Accounting Board (2000), only the Balance Book would have to be kept in printed paper format. Further, the Finnish government funded a 3-year piloting project among accounting services firms in 1999-2002. In the late 1990s, the use of EDI for ordering and billing became more popular, however mainly in big companies. Investments in new technology went up, promoted by e-business and the Internet as well as the Y2K-problems. New integrated software packages, such as Enterprise Resource Planning Systems (ERP-systems), come on the market.

A content analysis of two popular business journals show indications of media coverage increase with regards to articles related to digital accounting in early 2000. The peak of inflated expectations is considered to have taken place around year 2001. Further, a very high number of seminars and exhibitions on digital accounting were arranged in the years 2000-2002. A survey conducted among professional accountants and auditors in autumn 2002 indicated a positive attitude among accounting professionals to new technology (Gullkvist 2003). The survey also indicated that large companies adopted emerging technology to some extent, whereas SMEs were more sceptical.

The VAT-directive launched by EU in 2002 may be considered an important step towards the development of electronic invoicing. The directive permits the use of electronic invoicing within EU membership states. Standards for electronic invoicing and messages, such as e-Invoice, Finvoice, XML and XBRL have emerged. According to Statistics Finland (2010), an increasing trend in sending and receiving electronic invoices can be seen in years 2006–2008.

Further developments in IT include electronic document management systems and web-based accounting applications. The web-based accounting packages, operated with a browser, an internet connection and a password on a web server, is an alternative to desktop accounting since early 2000. No solid evidence of the adoption rate and use of web-based accounting software exist so far, but case studies on early adopters exist (Gullkvist 2009). Further, ASP-solutions require no initial investment in software and might facilitate a smooth and fast implementation of the system, since the system is already "up and running". Moreover, outsourcing of the administrative and business processes has become a respectable

alternative for many enterprises and a new potential source of income as well as challenge for accounting service firms. In more recent years, mobile applications for accounting use have emerged, and there is evidence of further software development.

As technological innovations related to digital accounting cover a number of various information technologies and systems, it is worth noting that the emergence time of new technological innovations varies. One of the first innovations was electronic bank statements, which has been in use since 1992, whereas electronic invoicing has been available since 1999. Similarly, electronic reporting to the authorities (TYVI) was introduced in 1996. A survey conducted in 2005 (Gullkvist & Ylinen 2005) among accounting services firms give some evidence on the diffusion rate of various digital accounting technologies. TYVI appeared to be the most adopted innovation in 2005 (58 %), although the average time of use was only one year. About half of the firms (47 %) received electronic bank statements and the average time of use was four years. One third of the accounting agencies transmitted electronic reports to their customers using the Internet or e-mails. Electronic storing was used by some 16 per cent of the respondents. Only some 5 per cent used electronic document management systems or e-invoicing technology. The critical mass point in the diffusion process is generally expected to occur approximately between an adoption rate of 10 per cent and 20 per cent (Rogers 1962). The findings indicate that the critical mass had been obtained for e-letters, electronic bank statements and electronic reporting to authorities and customers, whereas electronic invoicing and electronic storing of accounting records were still at the take-off stage in 2005.

4.2 *External perspective*

External pressure – coercive

The legal reform in 1997 could be seen as a means to improve both the operational efficiency and the service quality of accounting service firms by challenging existing accounting work practices and encouraging change. Also previous research has emphasized that changes in information technology and e-business provide challenges and opportunities for a change in accounting practices towards more automated and less manual work processes (IFAC 2002; Olivier 2000; Hunton 2002). The accounting professionals did not, however, perceive the emergence of the Act as a pressure towards having to adopt emerging technology, but rather they perceived the Act clearly as neutral, as permission but no obligation.

On the supply side, the software vendors increased their efforts in developing new applications to support the forecasted increasing demand (Gullkvist 2003).

In the interviews in 2008 the respondents perceived pressure from *taxation authorities* as one of the major driving forces toward digital reporting. Also *governmental efforts* to create a common database for various type of information was to some extent seen as increasing the pressure towards digital accounting technology. Changes in regulations and directives were overall seen as a powerful forced motivation of change by the managers of accounting services firms; even so that pressure from the authorities could enforce the adoption of an inefficient technology on the accounting firms to the taxation authorities' own benefit and their disadvantage. In 2008, some respondents argued that prevailing technology was not perceived very useful and efficient for their operations, which had made them reject it insofar.

Further, in the interviews in 2008 the accounting professionals, software vendors and consultants emphasized the differences in legal regulations and accounting practices between countries. These differences made it difficult to change practices as new practices did not work effectively in the whole organisation and between organisations on an international level. Managing electronic invoices in international business was mentioned as one example. Thus, with regards to international operations, the prevailing *gaps in regulations, culture and practices between countries* made diffusion on digital accounting practices in business operations and on an international level very difficult. Some respondents argued that these problems and differences had slowed down and even prevented the adoption of digital accounting technology.

External pressure – normative

Pressure from professional bodies did not exist, according to the respondents in 2002, 2004 and 2008. No guidelines or recommendations had emerged over the past ten years, except for the earlier mentioned legal regulations and directives. Some early adopters felt that the *Association of Finnish Accounting Firms* could have made more encouraging efforts to support and promote the accounting services industry's transition to digital accounting (Gullkvist 2009). The Association of Finnish Accounting Firms has clearly expressed its beliefs in and preference for digital accounting on its web page, but has not otherwise taken any actions in training or providing guidance for its members. Further, software vendors, consultants and early adopters pointed to the *lack of standards and best practices*, something that was seen as increasing uncertainty and making adoption more

difficult. The lack of standards may thus be seen as a factor that has slowed down or even prevented the diffusion.

The *professional ethics and code of conduct* were also mentioned as one factor that prevented the adoption of digital accounting technology. Further, the risk for technology failure was perceived high, in early 2000 very high. Technology failures might result in failure to carry out professional services or to maintain high quality in services and operations, something that could damage the professional reputation of the firm and accounting profession at large.

External pressure – mimetic

The prevailing uncertainty with regards to new work practices, regulations, cost-benefits and efficiency of technologies can be seen through a process of imitation. In early 2000, only the pioneers and innovators had dared adopt new technology. While others waited for the technology to become more common, the innovators piloted the new technology and the early adopters followed, as they did not want to lose any competitive advantage (Gullkvist 2005). Still, the majority of the firms *did not imitate*, but waited for new best practices to evolve. Further, some managers of accounting services firms stated that they wanted to differentiate from others and stay with the traditional accounting practices, thus having no intention to adopt digital accounting technology at all.

In the interviews conducted in 2008, both software consultants and accounting professionals spoke about digital accounting as an *increasing trend*. Further, both respondent groups emphasized benefits such as enhancing the firm's image as a modern company. Furthermore, the managers of the accounting services firms had noticed a growing interest for digital technology among their business partners and clients. Emerging patterns of imitation could further be seen among both accounting services firms in their development of services and practices as well as software vendors in their design of software applications.

Economic pressure

Change in accounting has also been seen as a result of larger changes in the global economy or competition (for example Granlund & Lukka 1998). With regards to digital accounting practices none of the respondents on the demand side saw changes in global economy as a promoting or preventing force at the time of the interviews. However, the *economic recession* in 2008–2009 has in business journals been said to promote the diffusion of digital accounting practices due to

an increasing corporate focus on efficiency and effectiveness in administrative business processes in recent years.

4.3 *Internal perspective*

Internal pressure

According to Burns and Scapens (2000) it is easier to change accounting practices that are consistent with the *existing routines and institutions* than to make changes in those that do not fit into the existing framework and which thus challenge the familiar settings. With regards to digital accounting practice the respondents in 2004 had made only minor changes to their existing work practices. Burns and Scapens (2000) argue that following rules and routines is often seen as a safe choice because it is easy to make sense of those. The issue of what were the “allowed” and what constituted best practices with regards to emerging technology appeared not to be clear to everybody. The new innovations were not considered compatible with existing work processes, and the adoption and use would thus require considerable changes. Further, the respondents pointed to increased risks of data failure and risks for not detecting material errors in data as transactions were fully automated. New institutional practices with regards to new technology had therefore not emerged to any great extent. This concern was also seen in the interviews conducted in 2008. Thus, also after the innovation has been adopted and is being used in a firm, the further utilization of technology and the change process can be slowed down by internal problems and existing institutions. Therefore, based on Burns and Scapens (2000), existing routines and institutions may be seen as the enemy of diffusion and change, as they bring stability and raise resistance to change.

Three different ways of managing accounting in practice could be identified in the interviews in 2004: the traditional, the modified and the changed way. The traditional work practices implied that accounting tasks were still carried out with paper-based source documents and without making use of new information technology to any great extent. The modified approach involved using electronic data processing methods and tools in a way that had been influenced by existing traditional work routines. An example of this is that the accountant recorded and the auditor checked source documents on the computer screen instead of on paper. A minor change in work routines had occurred, but established routines and old thinking greatly influenced the way the work was carried out. Consequently, computerized methods were not exploited to the full. The changed approach implied completely new work routines and the automation of existing manual routines.

For example, input data were generated automatically in the information system when a transaction took place. In 2004, the great majority of source documents were still in paper form so data input was performed manually (traditionally) or with the aid of scanning (modified). The changed way of working implied, according to the interviewees, a completely new way of thinking as well as the ability to abandon existing routines and reorganise practices. (Gullkvist 2005). In the follow-up interviews in 2008, new routines had emerged. Those implied among other things self-services, e.g. part of the previous accountant's work was managed by the client himself (Gullkvist 2009).

Economic pressure

Among early adopters (Gullkvist 2003, 2005) there were managers of accounting services firms who clearly considered the digital accounting as a means of creating positive pressures for the organisation to improve its processes or services to match or beat the competition. Some of the respondents listed "*strategic advantages*", others spoke of competitive advantage", "a must to stay in business and grow" in the survey in 2002. This was backed up in the interviews in 2004 and 2008 with the managers of more progressive firms citing efficiency, improved profitability and a wider range of services as motives for early adoption, diffusion and change. Quite many of the pioneers (piloting accounting services firms in early 2000) have been able to grow considerably in recent years, due to the capabilities provided by digital technologies to manage financial accounting for larger companies in the boom of outsourcing.

For SMEs, e.g. most Finnish accounting services firms and their clients, the *cost-benefit* issue is mostly a very complex issue. The costs related to adoption of digital accounting technology are usually perceived greater than the benefits. Lack of resources, such as finances, knowledge and time, are usually seen as the major hindering factors for changing prevailing practices. Furthermore, although new technology might be regarded useful in enhancing internal efficiency of the firm, it may not promote inter-organisational business transactions between, for example, the accounting services firm and its small-sized clients who may still lack necessary resources to adopt the technology. (Gullkvist 2005)

5 Discussion and conclusions

The aim of this article was to review and analyze the drivers influencing the diffusion of digital accounting practices in Finland. The Finnish Accounting Act was one of the first legal regulations in the world in allowing and promoting the use of electronic data media in financial accounting. The act permits, but does not obligate this. Thus, at least in theory, it leaves the choice of adoption of emerging accounting technology and practices to the producers of financial information.

The data analysis of this study derived a list of major drivers explaining the diffusion of digital accounting technologies from both the demand- and supply-side perspective. The analysis emphasizes the meaning and importance of certain institutional practices and pressures but also underlying cost-benefit and economic pressures in directing the adoption of digital accounting technology and influencing the change towards digital accounting practice. Based on the findings of this study, it is argued that no strong social pressure toward diffusion of digital accounting technology or practices over the research period appeared to exist. In the early years of development, the findings show a lack of very importantly perceived drivers of diffusion, and existing internal institutional practices and economic pressures as dominating drivers of the development. Prior research has also argued that it is efforts for greater efficiency that drive pioneers and early adopters (Malmi 1999; Westphal et al. 1997). This was thus backed up in this study with the more progressive firms citing efficiency, improved profitability and a wider range of services as motives for diffusion in early 2000, e.g. internal economic pressure.

In more recent years, the increasing adoption rate of digital accounting technology in SMEs may be due to the institutional pressures from business partners and authorities. The emerging requirements by authorities, large companies and organizations with regards to electronic invoicing, reporting and data transmission are important factors, which most likely will have an increasingly significant impact on the future development and adoption rate. Further, evident indications of coercive and mimetic influences, as outlined by DiMaggio & Powell (1983), could be identified. Consistent with prior research (Malmi 1991), external institutional pressures, such as mimetic and coercive behaviour, and efficiency appear to drive later diffusion of digital accounting practices. No indication of tendencies to harmonisation and legitimacy seemed, however, to exist within the period of research.

As the transformation to digital accounting practices appears to have been slow, it would seem as if the effect of the preventing drivers so far has been greater than the effect of those promoting diffusion. One of the difficulties in the utilization of digital accounting technologies is that full benefit of the technology can be reached only if enough critical mass is achieved for data and information transmissions (Rogers 1995). It is therefore argued that digital accounting technologies would, in order to fulfil the criteria of the demand side, have to work as inter-organizational systems with strong network interdependencies. It appears that accounting services firms cannot or will not adopt new technology, if their business partners do not have the technology or are not willing to adopt it. If both the accounting services firms and their business partners are SMEs, their time and financial resources are rather limited and focused on the core business. Further, with regards to international business, prevailing gaps in regulations, cultures and practices between different countries appear to slow down and prevent diffusion of digital accounting practices on the international level.

This article emphasizes the gap between the emergence of technological innovations (supply side) and the actual adoption and implementation of these innovations (demand side). Based on Abrahamson (1991), it may be argued that by educating the demand side, the supply side may also be influenced. Further studies could look closer into these gaps. Overall, more systematic empirical research should be conducted to explore and examine the drivers of digital accounting practice as well as the emerging changes. In respect of the diffusion process, further research is clearly required into the roles of the various professional groups. Further, it would be interesting and useful to compare experiences of Finland to those of other European countries.

Notes

1. See however two doctoral theses, Gullkvist (2005) and Jaatinen (2009).

References

Abrahamson, E. (1991). Managerial fads and fashions: The diffusion and rejection of innovations. *Academy of Management Review* 16, 586–612.

Accounting Act (AA) (1997). No. 1336/30.12.1997.

Accounting Board (2000). *Yleisohje Koneellisessa Kirjanpidossa Käytettävistä Menetelmistä* 22.5.2000.

Aldrich, H. E. (1990). Using an ecological perspective to study organizational founding rates. *Entrepreneurship Theory and Practice* 14:3, 7–24.

Association of Finnish Accounting Firms (2008). Retrieved 12.6.2008 from <http://www.taloushallintoliitto.fi/>.

Burns, J. & Scapens, R. W. (2000). Conceptualising management accounting change: An institutional framework. *Management Accounting Research* 1 (March), 3–25.

Deshmukh, A. (2006). *Digital Accounting: The Effects of the Internet and ERP on Accounting*. The Ideal Group, Hershey PA.

Dillard, J. F., Rigsby, J. T. & Goodman, C. (2004). The making and remaking of organization context – duality and the institutionalization process, *Accounting, Auditing and Accountability Journal* 17:4, 506–542.

DiMaggio, P.J. & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields, *American Sociological Review* 48, 147–160.

Falkman, P. (2000). *Teori för redovisning*. Lund: Studentlitteratur.

Granlund, M. & Lukka, K. (1998). It's a small world of management accounting practices. *Journal of Management Accounting Research* 10, 153–179.

Granlund, M. & Malmi, T. (2002). Moderate impact of ERP on management accounting: A lag or permanent outcome? *Management Accounting Research* 13, 299–321.

Gullkvist, B. (2003). *Mot en papperslös bokföring. En kvantativ studie i bokförare och revisorers attityder till användningen av maskinläsbara datamedier i bokföringen*. Meddelanden från ekonomisk-statesvetenskapliga fakulteten vid Åbo Akademi. Företagsekonomiska institutionen, Ser. A:538. Åbo.

Gullkvist, B. (2005). *Det elektroniska pappret i redovisningen. Studier i förhållningssätt och följder bland redovisningens yrkesmäniskor* [Electronic Paper in Accounting. Studies in Attitudes and Consequences among Accounting Professionals], Doctoral dissertation, Vaasa.

Gullkvist, B. (2009). Emerging e-services in accounting: A longitudinal case study. In A. Scupola (ed.): *Cases on Managing E-services*, Idea Group Inc.

Gullkvist, B. & Ylinen, M. (2006). E-accounting systems use in Finnish accounting agencies. In M. Seppä, M. Hannula, A-M. Järvelin, J. Kujala, M. Ruohonen & T. Tiainen (eds), *Frontiers of e-Business Research 2005*. Tampere.

Hodgson, G. (1998). The approach of institutional economics, *Journal of Economic Literature* XXXVI (March), 166–192.

Hunton, J. E. (2002). Blending information and communication technology with accounting research. *Accounting Horizons* 16:1, 55–67.

IFAC (2002). *E-Business and the Accountant*. March. URL: <http://www.ifac.org/Store/Category.tmpl?CategoryInformation%20Technology>. (Retrieved 05.09.2003).

Jaatinen, P. (2009). *Sähköistyvän taloushallinnon innovaatioiden kehitys ja niitä koskevat merkitykset ja diskurssit alan ammattilehtikirjoittelussa*. [The development of innovations promoting digital accounting and the role and discourses of those innovations in professional business journal writings]. Doctoral dissertation, Tampere.

Lith, P. (2004). Tili- ja tilintarkastustoimistojen liikevaihto kasvu-uralla, *Tilisanomat* 1, 21–25.

Lounsbury, M. (2008). Institutional rationality and practice variation: new directions in the institutional analysis of practice, *Accounting, Organizations and Society* 33:4–5, 349–361.

Malmi, T. (1999). Activity-based costing diffusion across organizations: an exploratory empirical analysis of Finnish firms. *Accounting, Organizations and Society* 24:8, 649–672.

Meyer, J.W. & Rowan, B. (1977). Institutionalised organisations: Formal structure as myth and ceremony. *American Journal of Sociology* 83, 340–363.

Oliver, C. (1991). Strategic responses to institutional processes, *Academy of Management Review* 16, 145–179.

Olivier, H. (2000). Challenges facing the accountancy profession. *The European Accounting Review* 9:4, 603–624.

Powell, W.W. & DiMaggio, P. J. (eds) (1991). *The New Institutionalism in Organizational Analysis*. Chicago: The University of Chicago Press.

Premkumar, G. & Ramamurthy, K. (1994). Implementation of electronic data interchange: An innovation diffusion perspective. *Journal of Management Information Systems* 11:2, 157–187.

- Rautiainen, A. (2008). Distance and coupling: analyzing the pressures of accounting change in a city. *Journal of Accounting & Organizational Change* 4:3, 270–288.
- Rautiainen, A. I. (2009). The interrelations of decision-making rationales around BSC adoptions in Finnish municipalities. *International Journal of Productivity and Performance Management* 58:8, 787–802.
- Rogers, E.M. (1962). *Diffusion of Innovations*. New York, NY: The Free Press.
- Rogers, E. M. (1995). *Diffusion of Innovations*. 4th ed. New York: The Free Press.
- Salmi, H. & Vahtera, P. (1997). *INTERNET and EDI in Effective Accounting*. Jyväskylä: Tilintarkastajien Kustannus Oy.
- Scapens, R. (1990). Researching management accounting practice: the role of case study methods. *British Accounting Review* 20:3, 260–279.
- Scapens, R.W. (1994). Never mind the gap: Towards an institutional perspective of management accounting practices. *Management Accounting Research* 5, 301–321.
- Scott W. R. & Meyer, J. (1994). *Institutional Environments and Organizations: Structural Complexity and Individualism*. Thousand Oaks, CA: Sage.
- Siegel, P.H. & Rigsby, J. T. (1998). Institutionalization and structuring of certified public accountants: An analysis of the development of education and experience requirements for certified public accountants. *Journal of Management History* (Archive) 4:2, 81–93.
- Statistics Finland (2010). *Electronic Invoices*. Retrieved 18.05.2010 at URL: http://www.stat.fi/til/icte/2008/icte_2008_2008-11-20_kat_004_fi.html.
- Vahtera, P. (1998). Paperittoman kirjanpidon tilintarkastus. *Tilintarkastus-Revision* 3, 195–199.
- Vahtera, P. & Salmi, H. (1998). *Paperiton kirjanpito: kirjanpitolain menetelmäsäännökset + euro*. Jyväskylä: Tilintarkastajien Kustannus.
- Van de Ven, A.H., Angle, H. L. & Poole, M. S. (1989). *Research on the Management of Innovation: The Minnesota studies*. New York, NY: Harper & Row, Publishers.
- Westphal, J., Gulati, R. & Shortell, S. (1997). Customization or conformity? An institutional and network perspective on the content and consequences of TQM adoption. *Administrative Science Quarterly* (June), 366–394.

THE SELF-ORGANIZING MAP IN SELECTING COMPANIES FOR TAX AUDIT

Minna Kallio

Department of Information Technologies, Åbo Akademi University

Barbro Back

Department of Information Technologies, Åbo Akademi University

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Kallio, Minna & Back, Barbro (2011). The self-organizing map in selecting companies for tax audit. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 45–59. Eds Annukka Jokipii & Johanna Miettinen.

Today, tax authorities receive the tax reports from companies to a large extent in digital form from the companies in Finland. Most of the tax reports are processed routinely i.e., a computer program checks that the taxes paid in advance are the correct ones and if not, the company either receives a tax return or is asked to pay the difference and there is no need for a tax audit. However, there is a small percentage of companies that need it. Most of these companies – for some reason – have not reported all their income items or have reported cost items that do not belong to their report – it could be unintended or it could be fraud. The problem is to find this percentage from the mass of tax reports. So far, the tax auditors or tax inspectors have used their past experience and posed queries to the data base, where the reports are stored, to find the ones that need a tax audit. This is not necessarily, the most effective way of finding the tax reports that need a tax audit. Different data mining tools might aid in this process and make the selections of companies that need tax audit more effective. Neural networks belong to the family of data mining tools that are used for similar kinds of tasks. There are two main types of neural networks – supervised and unsupervised methods. The aim of this paper is to investigate how well an unsupervised method – the self-organizing map (SOM) – can perform in the task of finding the companies that need to be tax audited. SOM is a data driven approach without a need to have predefined rules or sets of values. A real data set is used and the results are compared to the results that the tax inspectors have received with their methods.

Keywords: Self-Organizing Map, tax audit, fraud detection

1 Introduction

Today, tax authorities receive the tax reports from companies to a large extent in digital form from the companies in Finland. Most of the tax reports are processed

routinely i.e. a computer program checks that the taxes paid in advance are the correct ones and if not, the company either receives a tax return or is asked to pay the difference and there is no need for a tax audit. However, there is a small percentage of companies that need it. Most of these companies – for some reason – have not reported all their income items or have reported cost items that do not belong to their report – it could be unintended or it could be fraud. The problem is to find this percentage from the mass of tax reports. So far, the tax auditors or tax inspectors have used their past experience and posed queries to the data base, where the reports are stored, to find the ones that need tax auditing. Tax officials select companies for a tax audit according to their internal guidelines, which at the moment often is past knowledge and queries to data base that contains the information about companies. The selection process may not be complete due to constraints on time, effort and money. Also, the selection process might not pick the best possible candidates for a tax audit, due to the multitude of indicators for possible fraud.

A fraud, or fraudulent financial reporting, is a widely discussed topic in literature and can be defined for example as “intentional or reckless conduct, acts or omissions that result in materially misleading financial statements” (Lange 2001: 831). Another way is to say that a fraud has happened when the financial statement does not anymore “present the true picture” (Spathis *et al.* 2002: 510). From the point of view in taxation, both intentional and un-intentional errors and frauds should be detected and that is a complicated context, where some data mining methods might be an aid.

In this study, we employ the technique of self-organizing maps (SOM) to cluster the companies in groups. SOM belongs to the family of neural networks. There are two main types of neural networks – supervised and unsupervised methods. SOM is an unsupervised method. Unlike supervised methods, which require that the data contains examples; certain kind of inputs are followed with certain outputs, the SOM learns to cluster the data based on the similarities and differences of the input variables. The main idea of the SOM is to project multi-dimensional data to a two-dimensional map. In the map similar cases are situated close to each others and thus creating clusters. This algorithm has been implemented in several software packages. We have used a software package called Viscovery SOMine¹.

Back *et al.* (2001) have compared numerical data and text information from annual reports using self-organizing maps and found SOM a good tool to compare

¹ www.eudaptics.com

the companies using multidimensional data, which is needed in selection of tax inspection targets. Lämsiluoto and Eklund (2008) have studied the user satisfaction of end users of a self organizing map application and the users rated the application quite high. Tax auditors are mainly professionals of taxation and as end users they need a tool which can acquire high user satisfaction.

The aim of this paper is to investigate how well the SOM – can perform in the task of finding the companies that need to be tax audited. If the model is good it can be used to find the companies that need to be audited and to allocate the working resources better i.e., to give the tax inspectors more time to concentrate on tax audits with larger returns by selecting the right companies to be inspected in depth. An earlier version of this paper has been presented in Kallio and Back (2009).

The rest of the paper is organized as follows. In Section 2, we describe briefly related works both in data mining in taxation and in detecting frauds. In section 3, we introduce the methodology of this research. In section 4, we describe how the model in this study is created. Section 5 presents the results. Section 6 concludes the paper.

2 Related works and relevance of this study

2.1 *Data mining in public administration and taxation*

Our research is similar to research done by Danziger and Andersen (2002) as it deals with the impacts information technology has on public administration.

Danziger and Andersen define four categories on which information technology has impact i.e., *capabilities*, *interactions*, *orientations* and *value distribution* (Danziger & Andersen 2002). They further divide the capabilities into three areas: *information quality*, *efficiency* and *effectiveness*. All these areas are potential outcomes of a data mining application development generally and as well in this research. The target of the research is to improve the information quality, to find out more about the data in use; more than conventional methods can show. The efficiency is expected to improve, as new tools are available for the tax auditing process and data mining applications in this context impact on the effectiveness, as the process is directed based on better decision making and planning.

Data mining might also influence the orientation in taxation. We can see the taxation data also as a model in which the relationships and patterns are found and

shown. This fact offers us a groundbreaking view to see the taxation data as an entity, the characteristics of which, for example the scene over whole business line, can be taken into consideration as one single case is approached during the taxation process. This option emphasizes that the result of the whole yearly taxation process is more important than one single minor detail in one case, although we have to remember that the before mentioned result is literally a sum of its details.

Taxation gathers a mass of information and the taxation process consists of several sub processes and follows a complex set of rules. Thus it offers an excellent field for data mining research. Researchers (Fisher 1997) have studied decision trees to fuse a set of rules to define whether emigrants and immigrants have the residential status to be taxed. Another application has used decision trees in order to find a model that classifies companies, with positive recovery, separate from the ones with negative recovery. Recovery was defined as “the amount of evaded tax ascertained by the audit“ (Bonchi 1999: 370). DeBarr and Eyler-Walker (2006) have studied the problem of using abusive tax shelters by first visualizing all relationships taxpayers and their families have with different partnerships, trustees and corporations and then modeled the tax shelter risk of individuals. Bakin et al. (1999) have had an approach similar to our research. They have found it infeasible to go through all tax returns and developed a model to classify cases after the probability of fraud in them.

2.2 *Data mining in fraud detection*

The research of Spathis (Spathis 2002; Spathis *et al.* 2002) searched for factors that affect the likelihood of falsified financial statement, FFS. The statement was defined to be falsified when assets, sales or profit is overstated or liabilities, expenses or losses are understated. They used ratios as variables in their model. Referring to the literature of published research, Spathis *et al.* (2002) rank some accounts to be manipulated or falsified more likely than the others. Those variables are for example sales, accounts receivables, and inventory. They started with seventeen ratios and examined them using correlation analysis and performed t-tests to find out the statistical significance of them and ended up with ten ratios.

Kotsiantis *et al.* (2006) also had a goal to identify factors, which auditors could use in their work for detecting financial frauds and errors. They used different kinds of machine learning algorithms to test the factors. In their study they collected 23 variables representing profitability, leverage, liquidity, efficiency, cash flow and financial distress.

Self-organizing map, the data mining method, which we have employed in this research, has also been studied in auditing research. Koskivaara (2004) found SOM useful in finding otherwise hidden patterns or as well to be used as a data mining technique in a continuous monitoring and controlling tool. Koskivaara also brought out the possibility to employ unsupervised SOM clustering as a supportive phase before a supervised data mining model is used.

Denny *et al.* (2008) have studied the context of compliance and fraud in taxation. They have visualized taxation data with self-organizing maps. Their main interest was to identify and analyze the changes regarding the clustering. They compared the data from year 2006 to year 2007 and found a change in clusters that was dependant on changes in the politics of the Australian Government.

3 Methodology

3.1 *Self-Organizing Map, SOM*

SOM is a neural network algorithm which maps multidimensional data to a two-dimensional map. SOM is used as a data analysis method in different data mining tasks like clustering, visualization, data organization, characterization and exploration (Kaski *et al.* 1998). It is based on unsupervised learning, which means that the learning process is data driven and no predefined values are provided. The goal of unsupervised learning is to find a novel structure in the data and not to learn to follow rules, which are known to be connected to certain output values.

SOM is a neural network consisting of two layers; an input layer and an output layer, without any hidden layers. The neurons are arranged in a hexagonal or rectangular array, which most commonly is two dimensional. The software package which we use in our research uses the hexagonal array, which is commonly used otherwise as well. For each neuron there is an associated weight vector, the dimensionality of which is equal with the dimensionality of input data, which is also processed as vectors. As the algorithm operates the input data is compared to the weight vectors and the best matching weight vector, the winner neuron, is found based on Euclidian distance between the data vector and the weight vector. The second step is to update the network; the neurons in the neighbourhood of the winner neurons are tuned to the input data vector. These steps are repeated for the each input data vector until a stopping criterion is reached.

The Self-Organizing Map was developed and introduced in 1981 by Teuvo Kohonen (Kohonen 2001). The latest published information on the web site of Hel-

sinki University of Technology had discovered almost 8000 published research papers, where SOM is included. In an earlier published bibliography Oja *et al.* (<http://www.cis.hut.fi/research/som-bibl/>) had divided SOM papers into several categories after the context of them and found only 73 of 3339 (~2%) belonging to category of business applications. The main use of the algorithm had until then been on technical area. Despite of that Smith (2002) in studying neural networks in business argues that SOM is the most common unsupervised method. It has been found to be a robust method with a valuable contribution in applications also in business field. As Vesanto (1999: 111) also has noticed, “SOM has proven to be a valuable tool in data mining and KDD with applications and financial data analysis”. The approach of this preliminary research is emphasized on the application in the context of taxation and introduces SOM as an unchallenged method of data mining in taxation.

SOM has been employed as a clustering and visualising tool to group similar companies as to certain features and to analyze the clusters created by the data driven method. Eklund (2004) has used SOM in financial benchmarking. The research was based on data from the biggest companies in pulp and paper industry. The model showed how the companies performed compared to each others during sequential years.

Tan *et al.* (2002) have employed the SOM to conduct a quantitative analysis of financial statements in credit rating classification. They have combined the quantitative model with qualitative analysis, which is based on facts like company strategy or economic market outlook. In the model, they used 18 different financial ratios as attributes and trained a map in which they were able to find clusters defining the profiles of companies like “healthy, large and stable, average, small, underperformers, unstable”.

Lämsiluoto *et al.* (2004: 279) have compared maps based on variables of industrial level data and data of financial performance of companies of the same industry and concluded that “the SOM provides the opportunity to structure, analyze and visualize multidimensional data on multiple levels (i.e. macro, industry, or firm levels) simultaneously”.

Lämsiluoto and Eklund (2008) have studied the user satisfaction of a SOM based model. They measured factors like accuracy, content, format, timeliness and usability of two different models used as decision support tools by end users. The average, median and mode rates of models were higher than the middle, neutral value.

3.2 *Selecting the companies*

The data in our research is real data from corporate taxation. The research is limited to one business line and includes one form of enterprises i.e., partnerships. The data is from year 2004 and contains only Finnish companies. At that time foreign companies were not operating to a larger extent in Finland – as they do now - and therefore they were not included. The small, one-man companies were also excluded, although they are quite many. A computer-aided tool to compare those could be very useful, but the large group of different cases each having just a minor share for the amount of collected taxes gave a reason to omit them at this stage of the research.

The data in the study consisted of 4355 companies and it was labelled; we knew whether a company had been tax audited that year or not and we also knew the result of each tax audit, whether the taxation had been increased or decreased. 107 companies had been inspected and their tax amount had been corrected. The data did not include very many companies that had been audited and found “clean” and therefore we chose to use as comparison group 207 uninspected companies although we did not know their status according to the need to be inspected for sure.

4 Creating the model

The goal is to develop a model, which uses the Self-Organizing Map and supports in selecting the companies to be inspected. The first phase is to select the variables i.e. the attributes for the map. The next step is to pre process the data and then to train the map. For training of the map we need a sample that contains both companies with an inspection result that differs from zero and ones with a result zero i.e. there is nothing to change in the taxation, here considered also as a clean result. Through the training of the map we want to find a cluster - a key cluster - where all companies that have an inspection result unequal to zero should be found in the best case. Then the rest of the companies could be fed to the final map and we can see which uninspected companies are similar to the ones in the key cluster.

The attributes were first chosen based on discussion with the Tax Authorities, who have the domain knowledge. Based on the discussion, we selected eight variables. They were facts on which the Tax Authorities have concentrated their

inspection choice lately, like salaries, debts and so on². In the model each chosen attribute was divided by the turnover, which is one of the most usual ways to decrease the influence of company size.

We started the modeling of the map with five attributes, and trained the map with a randomly chosen set of instances, companies. Then we enlarged the set of attributes. We added the remaining three ones and used the original training set to be able to see the change created by the new features. We also tested the maps by using the rest of the data, outside the training sample, as a test set.

Next we used again the first set of attributes and tested how much the results of the map change as the control data set changed. We divided randomly all uninspected partnership companies of the whole data set to 20 groups and combined each group with the inspected ones. Thus, we received 20 training sets to compare. As the test results of the first two maps seemed to introduce the “over training” problem we picked still one map with a different result to show that the problem of over training can also be avoided in a model.

5 Results

5.1 *Map 1*

In Figure 1, the feature planes, the final map and the identified clusters A-F are displayed. The characteristics of the different clusters are identified using the eight feature planes in Figure 1 -one feature plane for each attribute. The feature planes show the values of the different attributes as they are distributed across the map. Warm colors (read - yellow) on the feature planes illustrate high values, whereas cool colors illustrate low values (blue -black) on the chosen attributes. Attribute 1 has a high value in the first feature plane in the upper left-hand corner, Clusters F and D. Attribute 2 has high value in Cluster C and so on.

Figure 1 shows that cluster B contains most of the inspected companies 83% i.e. a fairly good result. Attributes 4 and 5 have high values in Cluster B. Cluster D is clearly an outlier because it has only one inspected company that forms the whole result; the 2% shown on the map. Later the feature that led to the cluster was later left away from the attribute list, but at first we were interested to see, whether this feature would correlate with the inspection result or other exceptional values.

² We are not allowed to reveal the attributes

Cluster A has high values on attributes 6 and 7. It is a large cluster and it contains 14% of the inspected companies, but most of the companies are uninspected in this cluster i.e. not captured by the methods Tax Authorities have used. Given that the Tax Authorities methods are correct there was a need to try to improve the performance of Map 1.

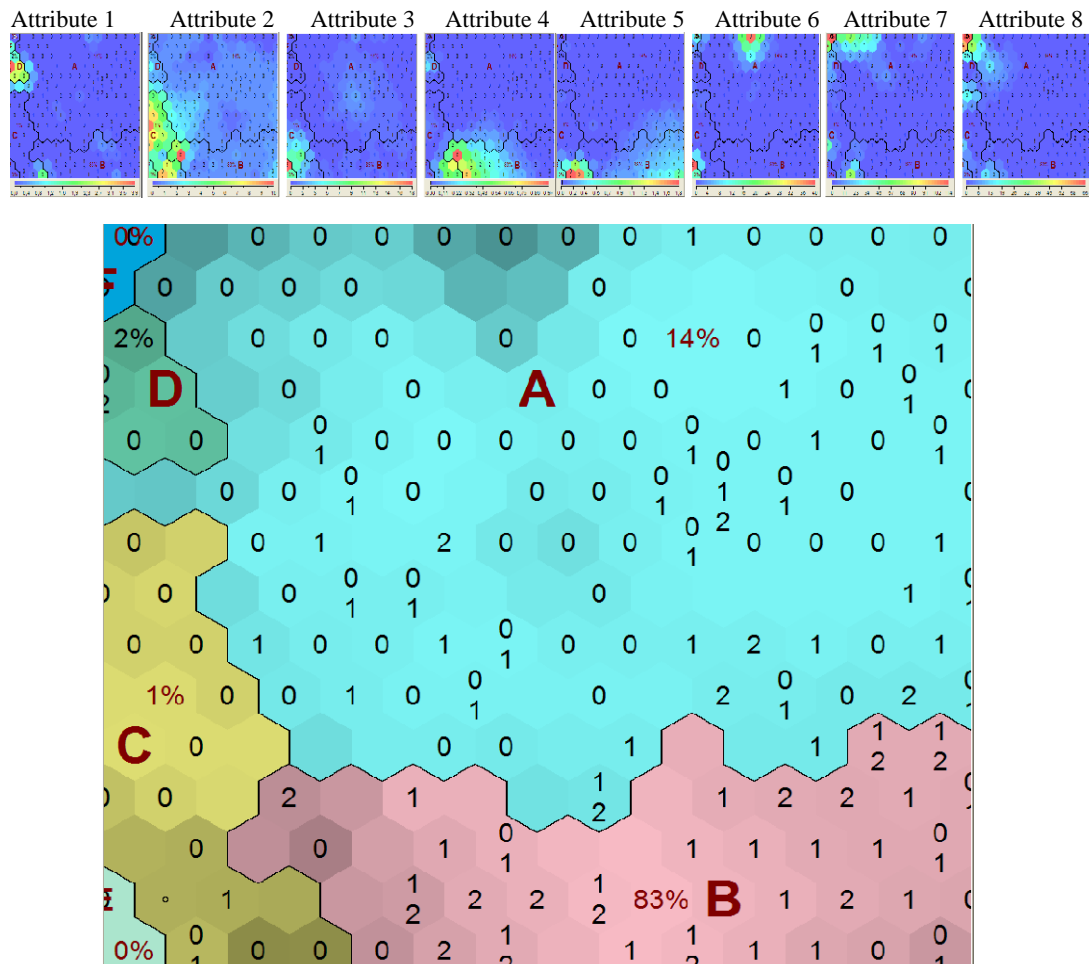


Figure 1. Feature planes connected to Map 1 and Map 1. Companies which are placed to the map are symbolized as follows;

0= not inspected

1=inspection result low

2=inspection result high

The percentage marked in each cluster is the share of inspection results of the sample in each cluster.

5.2 *Map 2*

We enlarged the collection of attributes and selected three new attributes from the before mentioned research, conducted by Spathis *et al.* (2002). The sample size was still 314 companies. As a result of introducing the new attributes the map improved considerable.

Table 1 compares the two maps (Map 1 and Map 2). In Table 1 the inspection result is a perceptual share of the summed inspection results of the sample.

Table 1. The results of Map1 and Map 2, Partnership companies

	<i>Inspection Result</i>		<i>Count of companies</i>		
	<i>Map 1</i>	<i>Map 2</i>	<i>Map 1</i>	<i>Map 2</i>	
<i>Cluster A</i>	14 %	6 %	166	166	not inspected
			43	32	inspection result low
			5	2	inspection result high
<i>Cluster B</i>	83 %	93 %	11	13	not inspected
			39	50	inspection result low
			15	18	inspection result high
<i>Cluster C</i>	2 %	2 %	9	16	not inspected
				3	inspection result low
			1	1	inspection result high
<i>Cluster D</i>	1 %	0 %	16	3	not inspected
			3		inspection result low
<i>Cluster E</i>	0 %	0 %	3	6	not inspected
<i>Cluster F</i>	0 %	0 %	3	4	not inspected
<i>Sum</i>	100 %	100 %	314	314	

The key-cluster is still cluster B for both Maps 1 and 2. Cluster B contains the largest percent of inspected companies. Table 1 shows that the percentage has increased from 83% in Map 1 to 93% in Map 2. The percentage in Cluster A has decreased from 14 to 6%.

The next step was to investigate how well the maps generalize to the whole line of business of partnership companies. We fed the rest of the data consisting of 4041 uninspected companies to the maps. In doing so we received the results: In Map 1 1334 companies are placed to the key-cluster B and in Map 2, the result of which is a somewhat better according to the sample, as many as 2270 companies are placed into the key-cluster B. However this is clearly not a good result. This indicates that a possible over training has taken place.

5.3 Examining the results – Samples 1–20

We evaluated Map 1 by examining the same eight attributes in 20 different samples. Each sample had the same inspected companies, but the comparing, randomly chosen ones were divided to 20 samples which varied in each map. Very small companies, those with a turnover under 10 000 € were excluded. That was partly because the values in proportion to turnover may be quite exceptional when the turnover is so low. Those companies are outliers in the sample. To exclude the outliers is one phase in a knowledge discovery process although of course sometimes also valuable information may be excluded (Pyle, 1999). The companies were sorted by the turnover to avoid samples with only small or big companies, and every twentieth company was chosen. The turnover was here used as an argument also as all attributes are ratios in proportion to turnover. Each sample was then used together with the inspected companies and the data was used as input for training the map.

We examined the maps assuming that companies with a need to be inspected should be organized in the same cluster i.e., the key-cluster. Table 2 lists the results of the key-cluster in each map. The columns in Table 2 are: results; the share of correct results, true positives; the number of inspected companies clustered in the key-cluster and false positives; the number of uninspected companies, true negatives; the number of companies clustered to another cluster and false negatives; the number of inspected companies clustered outside the key cluster. All inspected companies have an inspection result unequal to zero that means that the taxation has always been changed at least somehow, if the company has been inspected. We cannot regard every uninspected company, which has been clustered to the key cluster as a clean company, i.e. the methods that the Tax Authorities use might not be perfect. Thus, the results may be even better than what is shown in the *Table 2*. The samples in *Table 2* are sorted by the results.

The results of the maps are not perfect, but on the other hand if the model clusters about 23 percent of inspected companies, which bring almost 70 percent of the result, we can assume that there might be a useful pattern to be discovered and developing a model will be productive.

Finally, we chose Sample 8, to test the model with the rest of the data. The results of the chosen map were quite in the middle or slightly below the lower half of results as shown in *Table 2*. The rest of the data; that is the pre defined attributes of all partnership companies, with a turnover over 10 000 Euros, was fed to the map. Only 264 of 3815 companies were placed in the key-cluster. As the rest of the data contains only un-inspected cases, the inspection result could not change; it is still the original 64% of the inspection result of the sample.

Table 2. The uninspected partnership companies have been divided to 20 samples. Each sample is combined with the inspected ones and used as an input data in the self-organizing map

Map	Results	True positives	False positives	True negatives	False negatives
Sample3	69 %	25	24	177	76
Sample10	68 %	22	23	178	79
Sample18	68 %	20	12	189	81
Sample2	68 %	19	17	184	82
Sample19	68 %	20	23	178	81
Sample14	68 %	20	14	187	81
Sample1	68 %	19	22	179	82
Sample17	68 %	22	17	184	79
Sample12	68 %	12	30	171	89
Sample11	67 %	21	37	164	80
Sample9	66 %	21	24	177	80
Sample7	65 %	18	22	179	83
Sample6	65 %	14	11	190	87
Sample8	64 %	17	13	188	84
Sample5	63 %	19	20	181	82
Sample15	50 %	20	14	187	81
Sample4	50 %	17	13	188	84
Sample20	48 %	17	23	178	84
Sample13	47 %	20	19	182	81
Sample16	40 %	16	30	171	85

We were here mainly interested in how many companies seem to follow same features as the inspected ones in the key cluster. The next question that arises is, whether they also have a need to be audited and how much this auditing could increase the inspection result. The map based on Sample 8 generalizes much better than Maps 1 and 2. The before mentioned *over training* has not taken place in training the map.

6 Discussion and future research

We have found self organizing map a feasible tool of supporting tax auditing target selection. The key feature of the tool is the data driven method in exploring the data. Although the taxation process is directed, following laws like pre-defined rules, the whole process itself as well as the taxation data is quite complicated, containing a large variety of cases; both so-called routine cases and cases, which can be defined fraudulent. The fraud may be intentional or unintentional.

The results with the samples are good but the model does not generalize well in particular concerning Maps 1 and 2. There could be several reasons for this:

a) We have over trained the map. b) We have chosen the wrong attributes, c) We have used a wrong share of inspected in relation to uninspected companies for training the map, d) There are too many companies in the population that should have been inspected by the tax authorities, but were not and are therefore labeled wrongly in our material as clean companies.

Over training According to Kohonen (2001) 'over training' is possible when the learning of the neural-network continues after the optimum is reached the code book vectors of the map become too tuned for the training data –here the sample– that the ability of the algorithm to generalize for the rest of the data suffers. Our result that about one third or over the half of companies should be inspected by tax authorities differs strongly from information, which is known in practice. However 264 extra that have to be inspected is a much more promising result.

Choice of attributes Our choice of attributes does not seem to fit the smallest companies. There is a need to investigate more regarding them.

The share of inspected companies and uninspected companies needs to be investigated more. There is a great amount on this in the literature concerning bankruptcies that could be researched.

Inspected versus uninspected companies. The problem with whether uninspected companies really are clean needs to be solved. This is not an easy task how this could be done and we are working on it how this could be done in an cost effective way.

We have also started to investigate limited companies and we have promising results from that group.

When the models have the right attributes and are specified to certain groups of companies, we can call them prototypes. The next phase is then to test the prototypes using different data sets, in cooperation with the users. With satisfactory results, a cost-benefit analysis of the use of the model can be made. A final phase would then be turning the model into a software product.

References

- Back, B., Toivonen, J., Vanharanta, H. & Visa, A. (2001). Comparing Numerical Data and Text Information from Annual Reports Using Self- Organizing Maps. *International Journal of Accounting Information Systems*, 2(4),pp. 249-269.
- Bakin, S., Hegland, M. & Williams, G.(1999). Mining Taxation Data with Parallel BMARS in <http://citeseer.ist.psu.edu/cache/papers/cs/28534/http:zSzzSzresearch.cmis.csiro.au/SzgjwzSzpaperszSzatobmars.pdf/bakin99mining.pdf>, 06.06.2006.
- DeBarr, D. & Euler-Walker, Z. (2006). Closing the gap: Automated screening tax returns to identify egregious tax shelters. *SIGKDD Explorations* 8:1, 11–16.
- Bonchi, F., Giannotti, F., Mainetto, G. & Pedreschi, D. (1999). Using data mining techniques in fiscal fraud detection. In M. Mukesh & A Min, T. (Eds), *Da-WaK'99*, LNCS 1676, pp. 369–376, Heidelberg, www.springerlink.com 11.09.2006.
- Bonner, S. E., Palmrose, Z.-V. & Young, S. M. (1998). Fraud type and auditor litigation: An analysis of accounting and auditing enforcement releases. *The Accounting Review* 73:4, 503–532.
- Denny, Williams, G. J. & Christen, P. (2008). Exploratory Hot Spot Profile Analysis Using Interactive Visual Drill-down Self-organizing Maps. *Advances in Knowledge Discovery and Data Mining: 12th Pasific-Asia Conference, PAKDD 2008*, Osaka, Japan.
- Danziger, J. N. & Andersen, K. (2002). The impacts of information technology on public administration: an analysis of empirical research from the “golden age” of transformation. *International Journal of Public Administration* 25:5, 591–627.
- Eilifsen, A., Knivsfå, K. H. & Sættem, F. (1999). Earnings manipulation: cost of capital versus tax. *European Accounting Review* 8:3, 481–491.
- Eklund, T. (2004). *The Self-organizing Map in Financial Benchmarking*. TUCS Ph.D. dissertation No 56, Department of information systems, Åbo Akademi University.
- Fisher, R. (1997). *Determination of Residence Status for Taxation Law: Development of a Rule-based Expert System*. Melbourne, Australia: ACM Press, pp.161–169.
- Kallio, M. & Back, B. (2009). *The Self-Organizing Map in Selecting Companies for Tax Auditing*. 32nd Annual Congress of the European Accounting Association, Tampere, Finland.

- Kohonen, T. (2001). *Self-Organizing Maps*, 3rd ed. Berlin: Springer Verlag.
- Koskivaara, E. (2004). *Artificial Neural Networks for Analytical Review in Auditing*. Ph.D. dissertation, Turku School of Economics and Business Administration. Series A-7:2004.
- Kotsiantis, S., Koumanakos, E., Tzelepis, D. & Tampakas, V. (2006). Forecasting fraudulent financial statements using data mining. *International Journal of Computational Intelligence* 3:2, 104–110.
- Lange G. A. (2001). Fraudulent financial reporting. In B. S. Kaliski (ed.), *Encyclopedia of Business and Finance*, USA.
- Lämsiluoto, A. & Eklund, T. (2008). Comparison of the suitability of the Self Organizing Map for analyzing the macro and firm environment – An empirical field survey. *Benchmarking – An International Journal* 15:4, 402–419.
- Lämsiluoto, A., Eklund, T., Back, B., Vanharanta, H. & Visa, A. (2004). Industry-specific cycles and companies' financial performance comparison using self-organizing maps. *Benchmarking: An International Journal* 11:3, 267–286.
- Oja, M., Kaski, S. & Kohonen, T. (2003). Bibliography of self-organizing map (SOM) papers: 1998–2001 Addendum, *Neural Computing Surveys* 3, 1–156.
- Pyle D. (1999). *Data Preparation for Data Mining*. USA.
- Smith, K. (ed.) (2002). *Neural Networks in Business: Techniques and Applications*, USA.
- Spathis, C. T. (2002). Detecting false financial statements using published data: some evidence from Greece, *Managerial Auditing Journal* 17:4, 179–191.
- Spathis, C., Dumpos, M. and Zopoudinis, C. (2002), Detecting falsified financial statements: a comparative study using multicriteria analysis and multivariate statistical techniques, *The European Accounting Review* 11(3), pp. 509-535.
- Tan, R. P. G. H., van der Berg, J. & van der Berg, M. (2002). In K. Smith (ed.), *Credit Rating Classification Using Self Organizing Maps, in Neural Networks in Business: Techniques and Applications*, USA, 2002, pp. 140–153.
- Vesanto, J. (1999). SOM-based data visualization methods. *Intelligent Data Analysis* 3:2, 111–126.

TILINTARKASTUSTA KÄSITTELEVIEN VÄITÖSKIRJOJEN TUTKIMUSSTRATEGISET VALINNAT – *Aihepiiri ja tutkimusote*

Lili-Anne Kihn
University of Tampere

Salme Näsi
University of Tampere

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Kihn, Lili & Näsi, Salme (2011). Tilintarkastusta käsittelevien väitöskirjojen tutkimusstrategiset valinnat – Aihepiiri ja tutkimusote. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 61–87. Eds Annukka Jokipii & Johanna Miettinen.

This paper presents a research strategic analysis of the doctoral dissertations in auditing published in Finland through the ages (i.e., from 1965 to 2009). The results synthesize the research themes and methodological approaches. Suggestions for future research topics are made based on our findings.

Keywords: Auditing, Doctoral education, Literature analysis, Research methodologies, Research themes

1 Johdanto

Tilintarkastuksen opetus on suomalaisissa yliopistoissa ja niiden kauppatieteellisissä yksiköissä tyypillisesti rajoittunut kahteen kolmeen perus- tai aineopintotasoiseen kurssiin. Parin viime vuosikymmenen aikana tilanne on kuitenkin muuttunut parempaan suuntaan, ja tilintarkastus on valittu eräissä kauppatieteellisissä yksiköissämme yhdeksi koulutuksen painopistealueeksi (vrt. Näsi 2009). Tämä seikka heijastuu myös laskentatoimen jatko-opinnoissa.

Tämän artikkelin tarkoituksena on muodostaa kokonaiskuva meillä Suomessa tilintarkastuksen alalla tehdystä väitöskirjatutkimuksesta. Artikkelissa analysoidaan kaikki kauppatieteellisissä yksiköissä liiketaloustiede, laskentatoimen tai sitä lähellä olevien tieteenalojen piirissä valmistuneet tilintarkastusalaa koskevat väitös-

kirjat. Analysoitavaksi on valikoitunut 15 väitöskirjaa, ja niiden analysointi tapahtuu seuraavan kahden tutkimusstrategisen näkökohdan suhteen: 1) tutkimuksen aihepiiri ja 2) tutkimusotevalinnat.

2 Tilintarkastustutkimuksen luokittelu

2.1 *Aihealueiden luokittelu*

Tilintarkastus on käytännön toimintana, opinalana ja tutkimuksen kohteena monialainen ilmiö. Käytännön toimintana tilintarkastus on lakisääteistä ja normeihin ohjattua toimintaa, ja se kohdistuu keskeisesti yritysten ja muiden talousyksiköiden talouteen, kirjanpitoon ja tilinpäätökseen. Vaikka tilintarkastusta on tutkittu myös esimerkiksi kunnallispolitiikassa, keskeisimmät tilintarkastusta käsittelevät opin- ja tieteenalat ovat talous- ja oikeustieteet, ja niissä lähinnä yrityksen taloustiede, laskentatoimi ja kauppaoikeus/yritysjuridiikka. Tilintarkastustutkimusta tehdään erityisesti näiden tieteenalojen sisällä, mutta itse aihepiirivalinnan suhteen tarvitaan tarkempia luokituksia.

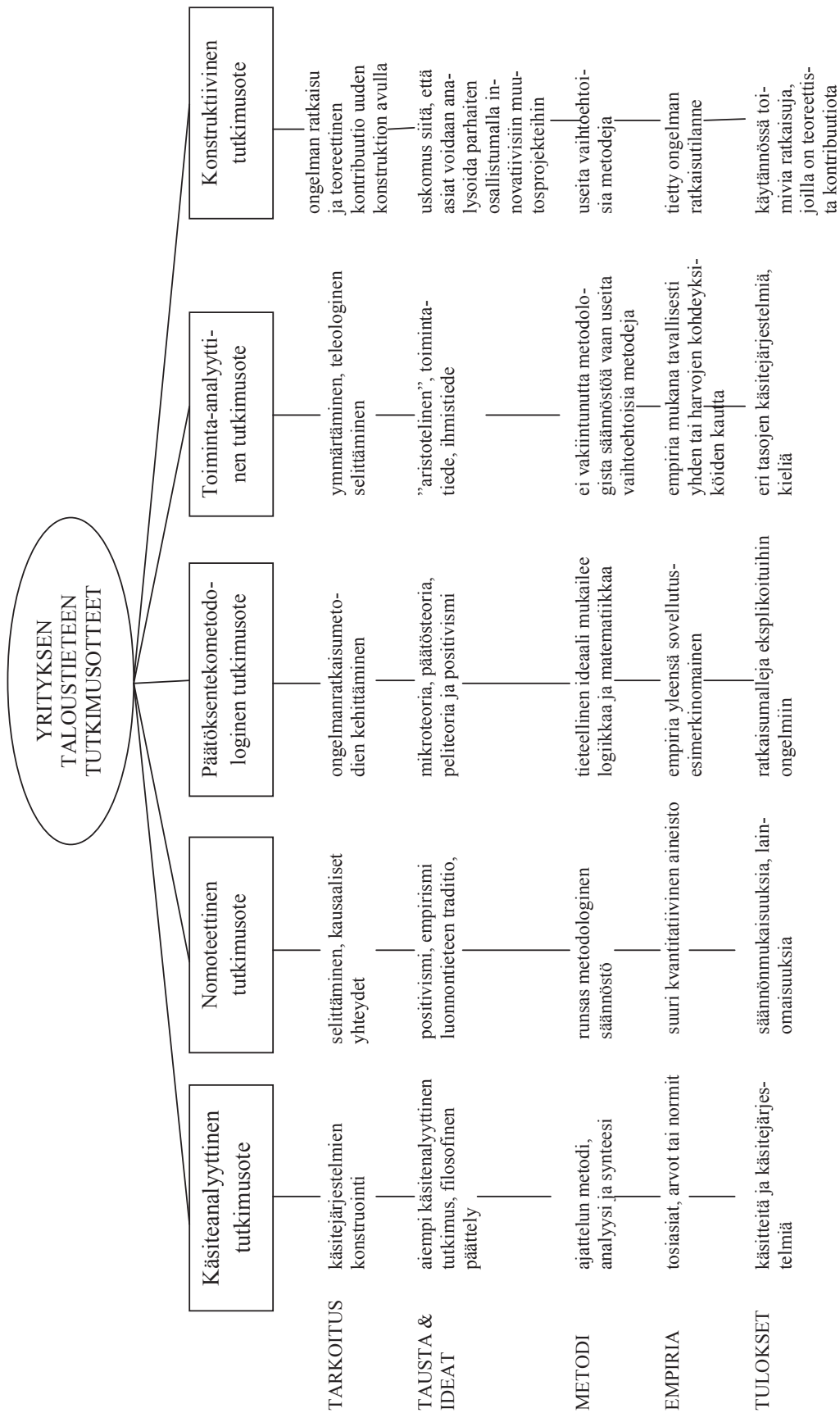
Tilintarkastustutkimuksen aihealueita on eri aikoina luokiteltu eri tavoin (ks. esim. Gwilliam 1987; Koskela 1990; Kärkkäinen 1996; Pirinen 1998; Laitinen & Järvinen 2007). Tässä tutkimuksessa käytämme seuraavaa Niemen vuonna 2010 esittämää hyvin yksityiskohtaista ja ilmeisen kattavaa tilintarkastuksen aihepiirien luokittelua:

- I. Taloustieteen teorioihin ja menetelmiin nojaava valtavirtatutkimus
 - a. Tilintarkastuksen rooli tilinpäätösinformaatiossa
 - i. Tilintarkastuksen arvo ja kysyntä ja niihin vaikuttavat tekijät
 - ii. Tilintarkastuskertomuksen informaatio sisältö ja vaikutukset
 - iii. Tilintarkastus ja tilinpäätösinformaation laatu
 - iv. Tilintarkastajan riippumattomuus, sitä uhkaavat tekijät ja niiden vaikutus tilinpäätösinformaation laatuun
 - b. Tilintarkastusmarkkinoiden toiminta
 - i. Markkinoiden kilpailullisuus ja rakenne
 - ii. Tilintarkastuksen laadun mekanismit yritystasolla
 - iii. Laadun ja hinnan välinen yhteys eri tilanteissa, kun laatua ei voi havaita
 - c. Tilintarkastuksen rooli osana hyvää hallintotapaa (corporate governance)

- i. Lisääkö vai vähentääkö toimiva ”corporate governance” tilintarkastuksen tarvetta?
 - ii. Miksi eri yritykset valitsevat erilaiset corporate governance -paketit?
- II. Vaihtoehtoisia aihealueita ja niiden tutkimusotteet:
- a. Tilintarkastajan päätöksenteon ymmärtäminen käyttäytymistieteellisen (psykologian) tutkimuksen avulla
 - i. Tarkastuskohteen riskiarviointi (→ tilintarkastuksen toteutus)
 - ii. Aikapaineet ja/tai informaation määrä (pätöksenteko: tilintarkastussuunnitelma)
 - iii. Muistin ’valikoivuus’: viimeisin havainto painaa eniten (’recency effect’)
 - b. Analyttinen/teoreettinen tutkimus (peliteoria, matematiikka)
 - i. Tilintarkastuksen (optimi)edellytykset (vahingonkorvausriski, asiakasportfolion laajuus, asiakassuhteen pituus)
 - c. Tilintarkastusmenetelmien ja –lähestymistapojen kehitys, pitkittäis-case-tutkimus, osallistuva havainnointi
 - i. Riskilähestymistavan omaksuminen (→ vaikutukset ’kentällä’)

2.2 Tutkimusoteluokittelu

Tutkimusmetodologioita on luokiteltu monin eri tavoin. Tässä tutkimuksessa analysoimme tilintarkastusalan väitöskirjoja tamperelaisten tutkijoiden vuonna 1980 esittämän luokituksen pohjalta (ks. Näsi 1980a ja 1980b, Neilimo & Näsi 1980). Tämä alun perin neljä tutkimusotetta käsittänyt luokitus, johon Kasanen, Lukka ja Siitonen (1991 ja 1993) sittemmin lisäsivät viidennen, on saanut vahvan jalansijan suomalaisessa liiketaloustiede, laskentatoimen tutkimuksessa (ks. esim. Lukka, Majala, Paasio & Pihlanto 1984; Kasanen, Lukka & Siitonen 1993; Ferm 1994; Näsi, Laine, Mäkinen & Näsi 1993; Näsi & Näsi 1996; Kihn & Näsi 2010a ja 2010b). Kyseinen luokittelu sisältää seuraavat viisi tutkimusotetta: käsiteanalyttinen, nomoteettinen, päätöksentekometodologinen, toiminta-analyttinen ja konstruktiiivinen (kuvio 1).



Kuvio 1. Yrityksen taloustieteen tutkimusotteet (mukaaltona Näsi 1980a ja 1980b; Neilimo & Näsi 1980; Kasanen, Lukka & Siitonen 1993).

Käsiteanalyttistä tutkimusotetta käytetään käsitejärjestelmien konstruointiin. Tutkimuksen taustalla on tällöin aiempi käsiteanalyttinen ja/tai empiirinen tutkimus. Tutkimusmetodina on ajattelun metodi, jossa analyysillä ja synteessillä luodaan uusia käsitteitä ja käsitejärjestelmiä. Tutkimus voi kohdistua paitsi tosiasioihin myös normeihin ja arvoihin. Käsiteanalyttisen tutkimuksen tulokset voivat olla toteavia ja/tai suosittelevia. (Näsi 1980b: 31; Neilimo & Näsi 1980: 67)

Nomoteettisen tutkimusotteen tieteellinen ideaali on luonnontiedelähtöinen, galileininen ja kausaalinen. Nomoteettista tutkimusotetta käytetään tutkittavien asioiden ja ilmiöiden erittelemiseen ja selittämiseen. Tarkoituksena on vastata ”miten on” ja ”miksi on” -kysymyksiin. Empiria on tutkimuksissa mukana laaja-alaisesti. Tiedon hankinnan, käsittelyn, tulkinnan ja testauksen suhteen on laaja metodivarausto. On myös paljon standardeja siitä, miten empiriaa pitäisi tulkita. Tuloksissa pyritään yleistettävyyteen ja intersubjektiivisuuteen. Nomoteettiset tutkimukset kattavat ns. empiristiset ja positivistiset tutkimukset. (Näsi 1980a: 36)

Edellisen tavoin myös toiminta-analyttinen tutkimusote soveltuu empiiriseen tutkimukseen mutta se on ihmistiedelähtöinen, aristotelinen ja finalistinen. Toiminta-analyttisessä tutkimuksessa pyritään paitsi tutkittavien asioiden tai ilmiöiden erittelemiseen, myös niiden ymmärtämiseen ja tulkitsemiseen. Myös toiminta-analyttisissä tutkimuksissa vastataan ”miten on” ja ”miksi on” -kysymyksiin. Empiria on kuitenkin yleensä mukana vain yhden tai muutaman kohdeyksikön tai tapauksen (case) kautta. Aineiston keruu, analysointi ja tulkinta tapahtuvat usein vaihtoehtoisin tavoin ja menetelmin. Aineisto on usein rikas ja laadullinen, ja tutkimuksella pyritään tutkitun ilmiön syvälliseen ymmärtämiseen kohdeyksikössä. Toiminta-analyttiset tutkimukset kattavat ns. kliiniset, hermeneuttiset ja toimintatutkimukset (Näsi 1980a: 36) ja edustavat Chuan (1986) ja Hopperin ja Powelin (1985) luokituksissa lähinnä tulkitsevaa tutkimusta (ks. myös Pihlanto 1994: 377). Tehty case-tutkimus voi olla luonteeltaan kuvailevaa, havainnollistavaa, kokeilevaa, tutkivaa (eksploratiivista) tai selittävää (Scapens 1990). Tutkijan lähestymistapa voi olla ei-interventionistinen tai interventionistinen, ja tuloksena voi olla uuden teorian luominen tai olemassa olevan teorian havainnollistaminen, tarkentaminen tai testaaminen (ks. Lukka 1999).

Päätöksentekometodologista tutkimusotetta sovelletaan ongelmanratkaisumethodien kehittämisessä. Päätöksentekometodologisen tutkimuksen taustalla on mikroteoria, päätösteoria, peliteoria ja positivismi. Tutkimuksen tieteellinen ideaali mukalee logiikkaa ja matematiikkaa. Empiirinen osuus ei yleensä ole kovin laaja vaan sovellutusesimerkinomainen. Tutkimuksen eteneminen noudattaa väljästi aksiomaattista periaatetta – tutkimustulokset ovat ratkaisuja eksplikoituihin ongelmiin. (Näsi 1980b: 31; Neilimo & Näsi 1980: 67)

Konstruktiiivinen tutkimusote (ks. Kasanen ym. 1991 ja 1993) edustaa case-tutkimusta ja mitä suuremmissa määrin interventionistista tutkimusta (Lukka 1999; Jönsson & Lukka 2006). Konstruktiiivinen tutkimusote yhdistää teoreettista ja empiiristä tietoa pyrkien rakentamaan innovatiivisen teoreettisesti perustellut toimivan ratkaisun empiirisen maailman ongelmiin. Tilintarkastus on empiirinen ilmiö, jota lähtökohtaisesti voitaneen tutkia kaikin edellä lyhyesti esitellyin tutkimusottein. Lisäksi muutamat tässä tutkimuksessa analysoiduista väitöskirjoista edustavat oikeustieteellistä tutkimusta tai ovat muutoin oikeusdogmaattisia eli voimassa olevan lainsäädännön sisältöä selvittämään pyrkiviä tutkimuksia.

3 Aineisto ja tutkimusmenetelmät

Kuten edelläkin kuvattu, analysoimme ja luokittelemme tilintarkastusalan väitöskirjoja tässä tutkimuksessa erityisesti seuraavan kahden näkökohdan suhteen: 1) tutkimuksen aihepiiri ja 2) tutkimusotevalinnat. Pyrimme näiltä osin muodostamaan mahdollisimman kokonaisvaltaisen kuvan Suomessa kautta aikojen valmistuneiden tilintarkastusalan väitöskirjojen tutkimusstrategisista valinnoista. Tutkimuksemme on siten luonteeltaan tilintarkastustutkimusta koskeva historian tutkimus.

Tutkimuksemme pohjautuu yhteensä 15 tilintarkastusalan väitöskirjaan. Tutkimuksessa katettu ajanjakso alkaa vuodesta 1965, jolloin alan ensimmäisenä Suomessa valmistui Reginald Jägerhornin väitöskirja ”Informationsvärdet hos finländska aktiebolags revisionberättelser” ja päättyy vuoteen 2009, jolloin Mikko Zernin väitöskirja ”Essays on Audit Quality” julkaistiin. Tutkimuksemme täydentää aiempia suomalaisiin laskentatoimen väitöskirjoihin kohdistuneita historian tutkimuksia. Niissä on analysoitu laskentatoimen väitöskirjojen tutkimusstrategioita eri aikoina (ks. Näsi & Näsi 1985; Näsi, Laine, Mäkinen & Näsi 1993), liiketaloustiede, laskentatoimen kehittämisestä akateemisenä oppiaineena 1900-luvun alusta vuoteen 1996 (ks. Näsi & Näsi 1996), johdon laskentatoimen case- ja field-menetelmällä tehtyjen akateemisten opinnäytteiden teorioita vuosina 1997-2005 (Järvenpää & Pellinen 2005) sekä johdon laskentatoimen väitöskirjojen strategisia valintoja (Kihn & Näsi 2010a) ja innovatiivisia kehityskulkuja (Kihn & Näsi 2010b).

Aineistoa kerätessämme määrittelimme ensin sellaiset kauppatieteelliset yksiköt, joissa on mahdollisesti voitu tehdä laskentatoimen ja/tai oikeustieteen väitöskirjoja tilintarkastuksen alalla. Tutkimme sitten vastaavalla tavalla myös muut oikeustieteelliset ja kunnallistaloudelliset ja -poliittiset yksiköt. Lopuksi tutkimme kyseisiä yksiköjä lähemmin sekä dokumenttilähteiden kuten muun muassa internet-

sivujen että suorien yhteydenottojen avulla. Havaitimme, että tilintarkastusalan väitöskirjoja oli julkaistu kahdeksan eri yliopiston yksiköissä. Nuo 15 väitöskirjaa jakaantuivat seuraavasti:

- Svenska handelshögskolan: neljä väitöskirjaa (Jägerhorn 1965; Fant 1994; Aspholm 2002 & Viitanen 2000)
- Vaasan yliopisto: kolme väitöskirjaa (Jokipii 2006; Miettinen 2008 & Ittonen 2009)
- Helsingin kauppakorkeakoulu (nyk. Aalto yliopisto): kaksi väitöskirjaa (Saarikivi 1999 & Niemi 2003)
- Tampereen yliopisto: kaksi väitöskirjaa (Vuorinen 1995 & Koskinen 1999)
- Jyväskylän yliopisto: yksi väitöskirja (Virtanen 2002)
- Lappeenrannan teknillinen yliopisto: yksi väitöskirja (Kosonen 2005)
- Oulun yliopisto: yksi väitöskirja (Zerni 2009)
- Åbo Akademi: yksi väitöskirja (Samsanova 2006).

Useimmat valituista väitöskirjoista oli helposti luokiteltavissa tilintarkastuksen väitöskirjaksi mutta jotkin väitöskirjat vaativat erityistä harkintaa. Esimerkiksi Aila Virtasen (2002) väitöskirja käsittelee myös kirjanpitoa ja verosuunnittelua mutta koska siinä on tutkittu myös tilintarkastusta, sisällytimme sen tähän tutkimukseen. Annukka Jokipiin (2006) väitöskirja puolestaan käsittelee yritysten sisäisen valvonnan rakennetta ja tehokkuutta mutta liittyy kuitenkin myös tarkastuksen alaan, joten otimme senkin tähän tutkimukseen.

Kun väitöskirja-aineisto oli saatu kokoon, aloitimme aineiston kuvauksen, luokittelun ja analyysin. Käytimme siinä apuna edellä määriteltäviä viitekehyksiä:

- edellä esitettyä tilintarkastuksen aihealueluokittelua (ks. luku 2.1) ja
- Näsin (1980a, 1980b) ja Nelimon ja Näsin (1980) tutkimusmetodologista viitekehystä täydennettynä Kasasen ym. (1991 ja 1993) esittämällä lisäyksellä (ks. luku 2.2).

4 Suomalaiset tilintarkastuksen väitöskirjat 1965–2009

Suomessa ensimmäinen tilintarkastusalan väitöskirja kauppatieteiden parissa julkaistiin vuonna 1965. Tuolloin Reginald Jägerhornin tilintarkastuskertomusten informaatioarvoa tarkastellut väitöskirja jäi ainoaksi 1960-luvulla julkaistuksi tilintarkastusalan väitöskirjaksi, eikä uusia väitöskirjoja ilmestynyt 1970- tai 1980-luvullakaan. Sittenkin tilintarkastuksen väitöskirjatutkimus on kuitenkin vilkastunut huomattavasti. 1990-luvulla julkaistiin jo yhteensä neljä väitöskirjaa. Ne olivat: Fantin (1994), Vuorisen (1995), Saarikiven (1999) ja Koskisen (1999) tut-

kimukset. Kaikkein vilkkainta alan väitöskirjatutkimus on kuitenkin ollut 2000-luvulla. Tuolloin on valmistunut yhteensä 10 tilintarkastusalaan liittyvää väitöskirjaa. Kirjoittajia (eli väittelijöitä) ovat olleet: Viitanen (2000), Aspholm (2002), Virtanen (2002), Niemi (2003), Kosonen (2005), Jokipii (2006), Samsanova (2006), Miettinen (2008), Ittonen (2009) ja Zerni (2009). Seuraavassa on lyhyet tiivistelmät kaikkien näiden väitöskirjojen tutkimusstrategisista valinnoista:

- (1) Reginald Jägerhorn (1965) “Informationsvärdet hos finländska aktiebolags revisionsberättelser”

Reginald Jägerhornin väitöskirjassa tutkittiin suomalaisten osakeyhtiöiden tilintarkastuskertomuksia. Tutkimuksen tarkoituksena oli ensinnäkin kartoittaa tilintarkastuskertomusten sisältöä ja erityisesti niiden informaatioarvoa vastaanottajan näkökulmasta. Toiseksi tutkimuksen tavoitteena oli analysoida niitä tekijöitä ja syitä, jotka vaikuttavat tilintarkastuskertomusten sisällön informatiivisuuteen. Tutkimuksen aiheenvalinnassa on näin ollen sekä tilintarkastusalan lakeihin ja säädöksiin että tilintarkastajan raportointiin ja työhön liittyviä elementtejä. Tutkimus on luonteeltaan poikkitieteellinen sillä siinä on sovellettu kauppaoikeutta, sosiologiaa ja tilastotiedettä.

Tutkimusmetodologialtaan Jägerhornin tutkimus edustaa lähinnä nomoteettista tutkimusta. Laajaa empiiristä aineistoa on analysoitu neljällä eri tavalla. Ensin suoritettiin 274 satunnaisesti valitun tilintarkastusraportin kvantitatiivinen sisällönanalyysi. Seuraavassa vaiheessa tilintarkastuskertomusten sisältöä verrattiin kahtena eri vuonna. Sitten raporttien semanttisia eroja analysoitiin kahdessa raporttien erilaisia käyttäjiä edustavassa kohderyhmässä. Lopuksi kartoitettiin auktorisoitujen tilintarkastajien epävirallisten kommunikointimuotojen tyyppisiä ja tärkeyttä tilintarkastajia haastatteleamalla.

Tulokset osoittivat, että tilintarkastuskertomusten sisältö vaihteli yrityskoon ja tekstintuottajan mukaan – suurempien yritysten ja auktorisoitujen tilintarkastajien tuottamien raporttien havaittiin sisältävän enemmän lausuntoja ja faktoja tilinpäätöksestä kuin keskisuurten ja pienten yritysten tai muiden kuin auktorisoitujen tilintarkastajien tuottamien. Suurimmassa osaa tutkittuja tapauksia kertomukset olivat identtiset molempina perättäisinä vuosina mutta pätevämmillä tilintarkastajilla kertomusten sisältö vaihteli enemmän kuin muilla. Vain hyvin pienen osan tilintarkastuskertomuksista havaittiin olevan kaikilta osin informatiivisia. Tästä tehtiin se johtopäätös, että tilintarkastuskertomuksia voidaan pitää informatiivisina vain poikkeustapauksissa. Epävirallisilla kommunikointikanavilla oli tutkimuksessa keskeistä merkitystä toimijoiden käyttäytymistä selitettäessä. Välitetty tieto ei koostunut ainoastaan taloudellisesta tiedosta vaan sillä pyrittiin vaikuttamaan myös yrityksen politiikkoihin. Merkittäväksi informaatioksi tarkoitettujen lausunnot

eivät kuitenkaan aina johtaneet tavoiteltuihin vaikutuksiin. Tulostensa pohjalta Jägerhorn esitti, että tilintarkastuskertomusten terminologiaa tulisi yhtenäistää ja epäselvien tulkintojen mahdollisuutta pienentää.

- (2) Johan-Erik Fant (1994) "Revisorns roll – en komparativ studie av revisorerers, företagsledares och aktieägares attityder till extern revision i Finland och Sverige"

Johan-Erik Fantin vuonna 1994 valmistuneessa väitöskirjassa vertailtiin tilintarkastukseen liittyviä asenteita suomalaisten ja ruotsalaisten tilintarkastajien, johdon ja osakkeenomistajien keskuudessa. Tutkimuksen teoreettisessa viitekehyksessä määriteltiin ja luokiteltiin sekä agentti- ja sopimusteorioiden pohjalta että Suomen ja Ruotsin osakeyhtiölakien ja tilintarkastusstandardien pohjalta sellaisia muuttujia, joiden avulla tilintarkastuksen kysyntää ja tarkoitusta voitaisiin kuvata.

Tutkimuksen empiirinen aineisto hankittiin postikyselyillä. Puolistrukturoidut kyselylomakkeet lähetettiin usealle sadalle auktorisoidulle tilintarkastajalle, johtajalle ja osakkeenomistajalle sekä Suomessa että Ruotsissa. Koska kyselyiden vastausasteet vaihtelivat 39 ja 60 prosentin välillä, aineisto muodostui suureksi. Kerätty aineisto analysoitiin tilastollisesti muun muassa frekvenssien ja prosenttien avulla. Sovellettu tutkimusote oli siten lähinnä nomoteettinen.

Tulokset viittaavat tiettyihin eroihin tutkittujen ammattiryhmien ja maiden välillä. Esimerkiksi tilintarkastuksen ja raportoinnin toivottiin olevan vähemmän virallista silloin, kun yritys on omistajiensa johtama. Tilintarkastajan vastuuta ja raportointia heijastavissa asenteissa havaittiin niin sanottu odotuskuilu tilintarkastajien ja osakkeenomistajien välillä. Osakkeenomistajat painottivat muun muassa tilintarkastajan vastuuta konkurssien välttämässä sekä tilintarkastuskertomusten riittämättömydestä johtuvia ongelmia. Myös johto koki tilintarkastuskertomukset riittämättömiksi sekä tilintarkastajien tarkastavan ja raportoivan eri asioita. Johdon vastaukset viittasivat myös pyrkimykseen siirtää tilintarkastajille vastuu lakien noudattamisesta. Suomalaisten painottaessa tilintarkastajan ja osakkeenomistajien välistä suhdetta ruotsalaiset painottivat tilintarkastajien riippumattomuutta. Tilintarkastajan pätevyyden osa-alueista suomalaiset vastaajat painottivat ruotsalaisia enemmän tilintarkastajan pätevyyttä johtamistoiminnoissa. Ruotsalaiset tilintarkastajat käyttivät suomalaisia vähemmän aikaa johtamisen tarkastukseen ja huomattavasti enemmän aikaa konsultointiin.

- (3) Erkki Vuorinen (1995) "Tilintarkastus uudessa kunnalliskulttuurissa"

Erkki Vuorisen kunnallispolitiikan alalla tehdyn väitöskirjan kohteena on valvontakokonaisuus, jonka muodostavat vaikuttavuuden arviointi, varsinainen tilintar-

kastus sekä sisäinen tarkkailu ja tarkastus. Tämän kokonaisuuden toteuttamista varten työssä rakennetaan kunnallinen tarkastusjärjestelmä, jonka tavoitteena on vastata seuraavaan kysymykseen: ”Miten nykyisen kunnallisen tilintarkastuksen tehtävät, organisaatio ja toiminta järjestetään uudessa kunnalliskulttuurissa niin, että ne perustuvat tilintarkastuksen teoriaperustalle, ratkaisevat nykyiset ongelmat, vastaavat esitettäviin vaateisiin ja perustuvat kunnallishallinnon ja tilintarkastuksen johtaviin arvoihin?” Tutkimus käsittelee siten tilintarkastuksen roolia osana hyvää hallintotapaa (corporate governancea).

Tutkimuksen perustaksi on selvitetty kunnallisen tilintarkastuksen kehitystä ja normitaustaa sekä tehty vertailuja osakeyhtiöiden ja muutamien ulkomaiden kunnalliseen tilintarkastusjärjestelmään. Ongelmien, haasteiden, teoriaperustan sekä uuden kunnalliskulttuurin kartoituksen pohjalta muodostetaan kriteerit ja esitellään työn lopputulemana kunnallinen tilintarkastusjärjestelmä. Tutkimusotteellisessa luokituksessamme työ edustaa lähinnä konstruktiivista tutkimusotetta.

(4) Maj-Lis Saarikivi (1999) ”Tilintarkastajain riippumattomuus”

Maj-Lis Saarikiven vuonna 1999 valmistuneessa väitöskirjassa tutkimustehtäväksi on asetettu kokonaiskuvan antaminen osakeyhtiön lakisääteiselle tilintarkastajalle tilintarkastuksen suorittamisessa annetusta riippumattomuusvaatimuksesta ja siihen liittyvästä problematiikasta. Tutkimuksen keskeinen tavoite on arvioida, täyttääkö tilintarkastajan riippumattomuutta koskeva sääntely Suomessa riippumattomuusvaatimuksen peruseriaatteet. Noin 500-sivuisessä väitöskirjassa käsitellään laajasti tilintarkastusta ja tilintarkastusjärjestelmää, tilintarkastajan riippumattomuussääntelyä ulkomailla ja Suomessa sekä tilintarkastajan asemaa riippumattomuusvaatimuksen täyttymisen kannalta sekä riippumattomuusvaatimuksen henkällisiä, ajallisia ja toiminnallisia ulottuvuuksia. Tutkimus käsittelee siis tilintarkastuksen roolia tilinpäätösinformaatiossa.

Maj-Lis Saarikiven väitöskirja on laadittu oikeustieteellisestä ja sen sisällä erityisesti yhtiöoikeudellisesta näkökulmasta, joskin tutkimuskohteella tutkijan mukaan on liittymäkohtia myös liiketaloustieteeseen, sosiologiaan ja psykologiaan. Muut tieteenalat kuin oikeustiede ja liiketaloustiede on kuitenkin rajattu tutkimuksen ulkopuolelle. Tutkimuksen lähdeaineistona on käytetty lainsäädäntöä ja sen esitöitä, erityisesti hallituksen esityksiä ja komiteanmietintöjä, Keskuskauppakamarin tilintarkastuslautakunnan ja valtion tilintarkastuslautakunnan ratkaisuja sekä kotimaista ja ulkomaista tilintarkastusalan kirjallisuutta. Liiketaloustieteessä käytetyn tutkimusotemallin vaihtoehtoista Saarikiven tutkimus edustaa ensisijaisesti käsitteanalyttistä tutkimusta.

Tutkimuksen keskeiset lopputoteamukset ovat seuraavat: Tilintarkastajan riippumattomuus on tilintarkastuksen perusolettamia, ja riippumattomuus on keino saavuttaa tilintarkastuksen tarkoitus eli riippumattoman asiantuntijan lausunto tilinpäätöksen luotettavuudesta. Tilintarkastajan riippumattomuus on vaikea konkretisoida ja sen sisältö vaikea täsmentää. Saarikiven tutkimuksessa tilintarkastajan riippumattomuus on operationalisoitu seuraavan kolmen ulottuvuuden avulla: henkilöllinen ulottuvuus, ajallinen ulottuvuus ja toiminnallinen ulottuvuus.

- (5) Hannu E. Koskinen (1999) ”Tilinpäätöksen lainmukaisuus ja tilintarkastuskertomus: oikeudellinen tutkimus osakeyhtiön tilinpäätöksen virheiden ja puutteiden olennaisuudesta sekä niiden vaikutuksesta tilintarkastuskertomuksen sisältöön”

Hannu E. Koskisen väitöskirja on edellisen tapaan oikeustieteellinen tutkimus. Se on tarkastettu Tampereen yliopiston taloudellis-hallinnollisessa tiedekunnassa, sen yksityisoikeuden/yritysjuridiikan oppiaineessa. Tutkimuksessa pyritään löytämään vastausta siihen, milloin tilinpäätöksen virhe tai puute taikka niiden yhteisvaikutus on niin olennainen, että tilinpäätös ei ole enää lainmukainen. Kysymys on ennen kaikkea lakitekstissä esiintyvän ”olennaisuus”-käsitteen tulkinnasta ja edelleen tilinpäätöksen virheiden ja puutteiden vaikutuksesta tilinpäätöskertomuksen sisältöön. Tutkimuksen aihe liittyy siten tilintarkastuksen rooliin tilinpäätösinformaatioissa.

Koskisen väitöskirja on oikeusdogmaattinen eli lainopillinen tutkimus, jossa tutkimusmenetelmänä on käytetty tulkinnallista metodia ja systematisointia. Tutkimuskohteena olevia oikeuskäytäntöjä on tulkittu paitsi lakitekstien, lainvalmistelutöiden, tuomioistuinten ja valvontaelinten ratkaisujen, oikeustieteellisen ja laskentatoimen kirjallisuuden, tilintarkastajien ammatillisen ohje- yms. aineiston ja mielipidekirjoitusten perusteella, niin myös tutkimalla annetuista tilintarkastuskertomuksista, miten tilintarkastajat ovat käytännössä tulkinneet tilinpäätöstä ja tilintarkastuskertomusta koskevia normeja. Liiketaloustieteessä käytetyn tutkimusotemallin mukaan Koskisen tutkimus edustaa sekä käsite- että toiminta-analyttistä tutkimusta.

Tutkimuksen tuloksena Koskinen esittää, että muun muassa laskentatoimen ominaispiirteistä, yhtiöiden toimintaympäristöistä ja tilinpäätöksen laadintatilanteista johtuen ”tilinpäätöksen oikeellisuudesta ei ole mahdollista tilintarkastuksen keinoin saada ehdotonta varmuutta. Tämän rajoitteen vuoksi tilintarkastajia koskevissa oikeudellisissa ratkaisuisa tulisi selkeästi tunnustaa olennaisuuden periaate tilintarkastajien toimintaa arvioidessa”. Toinen tutkimuksen tulosteesi on se, että lakisääteisen tilintarkastuksen tavoitteena on ensisijaisesti antaa vakiomuotoinen tilintarkastuskertomus. Tarkastettavan yhtiön tulisi voida ryhtyä jo tilintarkastajan

tilikauden aikaisen raportoinnin perusteella korjaaviin toimenpiteisiin niin, että tilintarkastuskertomus voidaan antaa vakiomuotoisena. ”Jos kuitenkin tarkastettu tilinpäätös on joko olennaisilta osin tai ainoastaan joiltakin osin lainvastainen, tulee tilintarkastajan mukauttaa vakoimuotoista tilintarkastuskertomusmallia. Mukautettu tilintarkastuskertomus on poikkeustapaus, ja sen sisältö tulisi tarkkaan harkita, jos mukautettu kertomus joudutaan antamaan.” Tutkija tarkastelee lopuksi myös mukautetun tilintarkastuskertomuksen ”standardoinnin” mahdollisuutta, mutta näkee sen muodostuvan mahdollisesti ”pakkopaidaksi”, joka ei palvelisi käytännön hyvinkin erilaisia tilanteita.

- (6) Janne Viitanen (2000) “Auditors’ Professional Ethics and Factors Associated with Disciplinary Cases against Auditors”

Janne Viitanen laskentatoimen alaan kuuluvassa väitöskirjassa tutkittiin tilintarkastajan ammattietiikkaa ja kurinpidollisiin tapauksiin liittyviä tekijöitä. Tutkimuksessa sovellettiin ensisijaisesti talousteoreettista lähestymistapaa mutta siihen yhdistettiin myös sosiologista lähestymistapaa. Tutkimuksen tavoitteenasettelu oli kaksiosainen. Ensimmäisenä tavoitteena oli muodostaa sellainen teoreettinen viitekehys, jonka avulla voidaan selittää tilintarkastajien ammattikoodiston olemassaolon syitä ja kehittymistä sekä tarjota taloudellisia syitä sille, miksi tilintarkastajien yleensä odotetaan pitävän kiinni eettisestä menettelysäännöstöstään. Tältä osin tutkimuksessa nojaututtiin agenttiteoriaan, sopimusteoriaan sekä ammattimaisuuden ja ammattietiikan teorioihin. Tutkimuksen toisena tavoitteena oli kehittää ja testata hypoteeseja siitä, miten tilintarkastajan, asiakkaan ja ympäristön ominaispiirteiden koetaan olevan yhteydessä sellaisten tilintarkastajia vastaan nostettujen kurinpidollisten tapausten todennäköisyyteen, jotka liittyvät syytteisiin ammatillisen menettelysäännösten loukkauksista.

Tutkimuksessa sovellettu tutkimusote oli selvästikin nomoteettinen. Kolmekymmentäkahdeksan hypoteesia tutkittiin erilaisin tilastollisin testeillä vuosilta 1980-1997 hankitun aineiston avulla. Tulokset osoittivat ensinnäkin, että tilintarkastuslautakunta (TILA) ja keskuskauppakamari käsittelivät tutkittuna aikana yhteensä 163 kurinpidollista tapausta ja syytteitä eettisistä loukkauksista oli tehty lähes kaikissa mahdollisissa luokissa. Valtaosa tapauksista (122) johti syyttömäksi julistamiseen mutta 12 muistutuksiin, 23 huomautuksiin, 18 varoituksiin ja yksi tapaus auktorisoinnin peruuttamiseen. Suurimman osan syytteistä havaittiin tulleen nykyisiltä tai aiemmilta asiakkailta mutta osa syytteistä oli tullut myös kolmansilta tahoilta, Keskuskauppakamarin tilintarkastuslautakunnalta tai harvemmissä tapauksissa kollegoilta. Tilastolliset tulokset kuvaavat hyvin yksityiskohtaisesti myös niitä erilaisia tilintarkastajien, asiakkaiden ja ympäristön ominaispiirteitä, jotka vaikuttavat selittävän tilintarkastajia vastaan nostettuja kurinpidollisia tapauksia.

- (7) Ingalill Aspholm (2002) "Rättsekonomisk analys av revisors skadeståndansvar i Norden"

Ingalill Aspholmin väitöskirja kohdistuu tilintarkastajan vahingonkorvausvastuuseen Pohjoismaissa. Tutkimuksen taloustieteellisenä lähtökohtana on positiivinen talousteoriat ja pyrkimyksenä oikeusnormien ja niiden soveltamisen taloudellisen tehokkuuden selvittäminen. Tutkimustehtävänä on analysoida sitä, onko tilintarkastajan vastuuta koskeva oikeudellinen normisto taloudellisesti tehokas. Tilintarkastajan vahingonkorvausvastuu voi syntyä siitä, että hän suorittaa tehtävänsä huolimattomasti ja kolmannelle osapuolelle tai asiakkaalle aiheutuu vahinkoa joko tilintarkastajan antaman informaation tai neuvojen johdosta. Tutkimus on oikeustaloustieteellinen, ja se rakentuu oikeudellisesta, taloustieteellisestä sekä oikeustaloustieteellisestä osasta. Taloustieteen teoriaperusta ja tehokkuuskriteerit muodostavat tutkimuksen keskeisen lähtökohdan, josta käsin työssä tarkastellaan pohjoismaisia oikeustapauksia. Taloudellinen analyysi suoritettiin pohjoismaisiin ennakkotapauksiin nojautuen. Aineistoa kerättiin Suomen, Ruotsin, Norjan ja Tanskan oikeustapauksista. Tutkittava ajanjakso oli 1.1.1990–30.4.2001. Tutkimusmetodologiasta tai menetelmistä tekijä ei sano mitään, mutta työstä löytyy sekä oikeusdogmaattisen, matemaattisia malleja hyödyntävän talousteorian että oikeustapauksiin kohdistuvan tekstianalyysin piirteitä. Luokittelemme tutkimuksen oikeusdogmaattiseksi, tulkitsevaksi tutkimukseksi.

- (8) Aila Virtanen (2002) "Laskentatoimi ja moraali: laskenta-ammattilaisten käsityksiä hyvästä kirjanpitoavasta, hyväksyttävästä verosuunnittelusta ja hyvästä tilintarkastustavasta"

Aila Virtasen väitöskirjassa on kolme itsenäistä osa-aluetta, jotka käsittelevät kirjanpitoa, verosuunnittelua ja tilintarkastusta. Näitä osa-alueita yhdistävänä yhteisenä teemana on laskentatoimi ja moraali. Tutkimuksessa rakennetaan etiikkaan perustuva viitekehys, jota käyttäen tarkastellaan hyvää kirjanpitoa, verosuunnittelua ja hyvää tilintarkastustapaa käytännön tasolla ja laskenta-ammattilaisten näkökulmasta. Aihealue liittyy tilintarkastajan päätöksenteon ymmärtämiseen.

Tutkimuksen teoreettisen viitekehysten muodostavat sidosryhmäteoria ja utilitaristinen etiikka, Rawlsin oikeudenmukaisuusteoria ja Kohlbergin yksilön moraalin kehitystä kuvaava teoria. Näistä rakentuu tutkimuksen eettinen viitekehys, jota käyttäen työssä tarkastellaan kaikkien kolmen laskentatoimen alueen ammattilaisten moraalikäsitteitä. Tilintarkastajien osalta tarkastellaan heidän käsityksiään hyvästä tilintarkastustavasta lähtökohtana tilintarkastuslain säännös, jonka mukaan tilintarkastajan tulee noudattaa hyvää tilintarkastustapaa.

Tutkimus on luonteeltaan tulkitseva tutkimus, jonka empiirinen aineisto on kerätty laskenta-ammattilaisia haastatellen. Tutkimuksessa tutkitaan laskenta-ammattilaisten työtä siten, että tutkija käy dialogia teoreettisen viitekehyksen ja empiirisen aineiston välillä niiden muodostaessa hermeneuttisen kehän, jossa tutkimusta vietään eteenpäin teoretisoiden ja tulkintoja syventäen. Tutkimus on siis luonteeltaan tulkitsevää tutkimusta ja tutkimusote on toiminta-analyttinen.

Tilintarkastusta koskevan tutkimuksen osan tutkimustuloksina esitetään uusia ammattitilintarkastajien työn piirteitä. Näitä ovat luottamus, uskottavuus ja vastuu. Luottamus luonnehtii tilintarkastajan suhdetta tarkastettavaan kohteeseen, uskottavuus suhdetta ulkoisiin sidosryhmiin ja vastuu tilintarkastajan suhdetta omaan työhönsä. Eräs keskeinen tutkimustulos on se, että lainsäädännön merkitys moraalinen rakentajana on laskenta-alalla erittäin suuri. Lakeihin sisältyvät rangaistussäännökset ja viranomaisvalvonta ovat tärkeitä moraalinen rakentajia. Laskenta-ammattilaiset toimivat monien erilaisten säännösten, odotusten ja vaatimusten keskellä, joiden huomioon ottaminen edellyttää korkeata ammattitaitoa, järkevyyttä ja moraalinen periaatteita. Laskenta-ammattilaiset kehittävät itselleen työssään velvollisuusetiikan mukaisia periaatteita, joita kuvaavat käsitteet rehellisyys, avoimuus, tarkkuus, olennaisuus, virheettömyys, moitteettomuus ja vastuu.

(9) Lasse Niemi (2003) "Essays on Audit Pricing"

Lasse Niemen väitöskirja koostuu johdannosta ja kolmesta itsenäisestä tutkimuksesta, joista yksi oli julkaistu artikkelina *International Journal of Auditing* -lehdessä. Niemen väitöskirja keskittyy tilintarkastuksen hinnoitteluun ja erityisesti siihen mikä tilintarkastuksessa maksaa. Tutkimuksessa sovellettiin muun muassa erilaisia tilintarkastuksen hinnoittelun teorioita ja malleja, joissa vaikuttaa olevan agenttiteoreettisia vaikutteita.

Empiirinen tutkimus kohdistuu osin suurten kansainvälisten tilintarkastusyriyten suuriin asiakkaisiin sekä osin HTM-tilintarkastajiin. Aineistoa on kerätty mm. vuoden 1996 sisäisestä laskutuksesta, asiakasyriyten tilinpäätöksistä, tilintarkastusyriyten omistajilta, Suomen Asiakastieto Oy:lta ja HTM-yhdistykseltä. Aineiston tilastollisessa analyysissä sovellettiin kuvailevien tilastojen ohella ristiintaulukointia, korrelaatio- ja regressioanalyysia. Tutkimusote on siten nomoteettinen.

Saadut tulokset viittaavat siihen, että merkittävä osa tilintarkastuspalkkioiden vaihtelusta eri asiakkaiden välillä selittyy tehtävään käytettyjen työtuntien määrän lisäksi asiakkaan tilintarkastajalle aiheuttamalla riskillä. Asiakasyriyten omistustyyppi vaikutti sekin ratkaisevasti tarkastustyötuntien määrään ja siten tilintarkastuksen kokonaishintaan. Pienissä tilintarkastusyriyksissä toimivien tarkastajien

välisiä hintaeroja selittivät seuraavat tilintarkastajien ominaisuudet: ammattimaisuus (toiminnan laajuudella mitattuna), koulutus, auktorisointityyppi ja kokemuksen pituus.

- (10) Leena Kosonen (2005) “Vaarinpidosta virtuaaliaikaan, Sata vuotta suomalaista tilintarkastusta”

Leena Kosonen tarkastelee väitöskirjassaan osakeyhtiöiden tilintarkastuksen historiallista kehitysprosessia Suomessa 1800-luvun lopulta nykypäiviin eli runsaan vuosisadan aikana. Tutkimus kohdistuu erityisesti tilintarkastusta säätelevän normiston kehitykseen, tilintarkastajainstituution kehitykseen sekä tilintarkastuksen sisältöön ja tehtäviin. Tutkimus on luonteeltaan historian tutkimus ja laadittu historian tutkimusmenetelmiä käyttäen. Tutkimusaineistona on käytetty kaikkea mahdollista kirjallista materiaalia, jota Suomessa on kautta vuosikymmenten tilintarkastuksesta kirjoitettu: pääkategorioina lainsäädäntö ja sen valmisteluun liittyvät dokumentit sekä aiemmat tutkimukset, oppikirjat, ohjeet, suositukset, oppaat ja ammattilehtiartikkelit. Teoreettisena viitekehysenä tutkimuksessa on käytetty tilintarkastusinstituution jakoa normeihin, toimijoihin ja tehtäviin, jota jakoa myös tutkimuksen kronologisesti etenevä historian tutkimus noudattaa. Näiden pohjalta tutkija muodostaa kokonaiskuvan tilintarkastusinstituution historiallisesta kehityksestä.

- (11) Annukka Jokipii (2006) “The Structure and Effectiveness of Internal Control: a Contingency approach”

Annukka Jokipiin tutkimus käsittelee yritysten sisäistä valvontaa, sen rakennetta ja vaikuttavuutta kontingenssiteoreettisesta näkökulmasta käsin. Tutkimuksen teoreettisena lähtökohtana on ajatus siitä, että yhteensopivuus (fit) organisaatiokontekstin ja valvontajärjestelmän välillä johtaa valvonnan parempaan vaikuttavuuteen ja tehokkuuteen.

Tutkimusaineisto on koottu internet-kyselyllä suomalaisista yrityksistä. Kyselyyn on vastannut 741 yrityksen toimitusjohtajaa, vastausprosentin ollessa 50,4%. Aineiston analyysi on tehty rakenneyhtälömallia (Structural Equation Modeling, SEM) käyttäen. Tutkimus on luonteeltaan hypoteettis-deduktiivinen, aiempaan tutkimuksen perustuen muodostettuja hypoteeseja testaava, nomoteettinen tutkimus. Tutkimustulokset osoittavat, että erityisesti yrityksen aktiivinen markkinastrategia (prospector strategy) ja koettu epävarmuus ovat sellaisia kontingenssitekijöitä, joilla on vaikutusta sisäisen valvonnan rakenteeseen ja vaikuttavuuteen.

- (12) Anna Samsonova (2006) "Local Responses to International Pressure. A Process of Institutionalisation of Audit Quality in Russia"

Anna Samsonovan tutkimuksen aihealueena on tilintarkastuksen laatu. Tutkimus kohdistuu tilintarkastuksen laatuun Venäjällä, jossa markkinatalouteen siirtyminen ja kansainvälisen liiketoimintayhteistyön monipuolistuminen ovat asettaneet paineita tilintarkastuksen luotettavuuden lisäämiselle ja laadun parantamiselle. Tutkimustehtäväksi on täsmennetty tilintarkastuksen laadun institutionalisoitumisprosessin sekä siinä mukana olleiden toimijoiden ja käytettyjen mekanismien tarkastelu Venäjällä. Kuten edellisestä jo käy ilmi, rakentuu tutkimus institutionaalisen teorian pohjalle ja tarkastelee tilintarkastusta – ei niinkään teknisenä – vaan yhteiskunnallisena ja institutionaalisenä ilmiönä. Institutionalisoitumisprosessin toimijat ovat kolmella tasolla: kansainvälisen tason toimijaverkostot, kansalliset sääntelijät sekä tilintarkastuspalveluja tarjoavat paikalliset toimijat, tilintarkastusyrietykset. Tutkija on pyrkinyt selvittämään, mikä rooli eri tason toimijoilla – ja erityisesti myös paikallisilla tilintarkastajilla itsellään – on ollut tilintarkastuksen laatuprosessissa.

Tutkimusmenetelmien suhteen Samsonova on seurannut abduktiivista ts. induktiivisen ja deduktiivisen strategian yhdistävää strategiaa. Tämä tarkoittaa sitä, että tutkija on rakentanut työnsä yhtäältä sekä teoriaperustalle ja empiirisille tuloksille ja niiden vuoropuhelulle. Pyrkinessään teoretisointiin tutkija liikkuu empiirisen aineiston ja teorian välillä ja korjaa analyttistä viitekehystä empiirisen aineiston pohjalta. Empiirinen aineisto tutkimukseen on kerätty haastattelemalla tilintarkastussektorin toimijoita (31 henkilöä) kolmessa Venäjän kaupungissa (Moskova, Pietari ja Khabarovsk). Tutkimuksensa lähestymistapaa Samsonova (2008, 18-20) on kuvannut termein subjektivistinen, tulkitseva, abduktiivinen ja kvalitatiivinen. Soveltamassamme Neilimon ja Näsin (1980) tutkimusotteiden kentässä Samsonovan väitöskirja voidaan siten luokitella lähinnä toiminta-analyttiseksi.

Tutkimus on monografia, jonka luvut koskien tilintarkastusta ja sen laatua, perestroikan jälkeistä aikaa ja tilintarkastuksen kehitystä Venäjällä, tilintarkastuksen laadun muutosta yhtäältä kansainvälisten toimijoiden vaikutuksesta ja toisaalta Venäjän oman lainsäädännön ja tilintarkastajien ammattimaistumisen seurauksena muodostavat tutkimuskokonaisuuden, sen "leipätekstin". Tutkimuksen institutionaalisen teorian pohjalta rakentuvat teoreettiset, metodologiset ja käytännölliset tulokset ja kontribuutio on esitetty työn viimeisessä luvussa. Tilintarkastuksen laadun institutionalisoitumisprosessiin Venäjällä ovat luonnollisesti vaikuttaneet sekä kansainväliset toimijat (mm. the Big Four, WB, IFAC ja EC) että Venäjän oma ammattikunta ja kansallisen tilintarkastuslainsäädännön kehitys.

- (13) Johanna Miettinen (2008) "The Effect of Audit Quality on the Relationship between Audit Committee Effectiveness and Financial Reporting Quality"

Johanna Miettisen monografia-muotoinen väitöskirjatutkimus kohdistuu kahteen keskeiseen hyvän hallinnointitavan aktoriryhmään: tarkastusvaliokuntaan ja tilintarkastajiin. Tutkimus käsittelee tilintarkastuksen laadun vaikutusta tarkastusvaliokunnan tehokkuuden ja taloudellisen tiedon laadun väliseen suhteeseen. Neljää aiemmista tutkimuksista johdettua hypoteesiä testataan Standard & Poorin 1500 indeksiin kuuluvista yrityksistä kootussa aineistossa Causal Steps -menetelmää ja Sobelin testiä käyttäen. Tutkimusote on siten nomoteettinen.

Tutkimuksen tilastolliset tulokset osoittavat, että tarkastusvaliokunnan kokoukset eivät ole ainoastaan symbolisia vaan ne myös myötävaikuttavat taloudellisen tiedon ja tilintarkastuksen laatuun. Tarkastusvaliokunnan tehokkuuden ja tilintarkastuksen laadun välillä havaittiin myös jatkumo, joka edelleen vaikuttaa taloudellisen tiedon laatuun. Kokonaisuudessaan tutkimuksen tulokset tukevat hypoteesia, jonka mukaan tilintarkastuksen laatu välittää tarkastusvaliokunnan tehokkuuden vaikutusta taloudellisen tiedon laatuun.

- (14) Kim Ittonen (2009) "Audit Reports and Stock Markets"

Kim Ittonen tarkastelee tutkimuksessaan tilintarkastajan toiminnan jatkuvuudesta (going concern) tai sisäisen valvonnan heikkouksista (internal control weakness) huomauttavan, ns. mukautetun kertomuksen aiheuttamia reaktioita osakemarkkinoilla. Tutkimus sijoittuu näin ollen sekä tilintarkastuksen että rahoituksen aihealueille. Tutkimusmenetelmä on nomoteettinen: teorian pohjalta on muodostettu hypoteesit ja niistä tilastollisesti testattava regressiomalli. Empiirinen tutkimusaineisto koostuu Russell 3000 indeksiin sisältyvistä yhdysvaltalaisista listatuista yrityksistä. Otos käsittää 237 toiminnan jatkuvuus -lausunnon saanutta ja 342 sisäisen valvonnan tehottomuus -lausunnon saanutta yritystä. Tutkimuksen tulosten perusteella mukautettujen tilintarkastuskertomusten julkaiseminen ei aiheuta tilastollisesti merkitseviä negatiivisia epänormaaleja tuottoja, mutta volatiliteetissa ja systemaattisessa riskissä on havaittavissa kasvua. Reaktiot osakemarkkinoilla riippuvat myös yritysten johdon valvontaan ja informaatioympäristöön liittyvistä tekijöistä.

- (15) Mikko Zerni (2009) "Essays on Audit Quality"

Mikko Zernin laskentatoimen väitöskirja muodostuu johdannosta ja neljästä esseestä, joista yksi on julkaistu *International Journal of Auditing* -lehdessä. Väitöskirjassa tutkitaan tilintarkastajan työtä ja erityisesti sen laadukkuutta. Tutkimus pohjautuu agenttiteoreettisille, rahoituksen ja tilintarkastuksen teoriolle.

Tutkimusmenetelmä on nomoteettinen. Empiiristä aineistoa on kerätty mm. ruotsalaisista tilintarkastuskertomuksista sekä Compustat Global Vantage -tietokannasta. Tutkimuksen tilastollisten tulosten mukaan yritykset pyrkivät viestittämään markkinoille, että heidän tilintarkastuksensa ja sitä koskeva taloudellinen raportointinsa on informatiivista ja luotettavaa, muun muassa seuraavin keinoin: palkkaamalla kaksi erillistä tilintarkastusyhteisöä suorittamaan tilintarkastusta, rajoittamalla tilintarkastajien tarjoamia konsulttipalveluja ja nimittämällä maineikkaan päävastuullisen tilintarkastajan. Näitä keinoja havaittiin erityisesti sellaisilla yrityksillä, joiden ulkoisen valvonnan tarve on tavallista suurempi. Valitun päävastuullisen tilintarkastajan riippumattomuutta ja ammattitaitoa yritettiin viestittää myös julkaisemalla vuosikertomuksessa tietoja tarkastajan tärkeimmistä muista asiakkaista sekä pitkästä kokemuksesta alalla. Yksittäisten suurista listatuista yrityksistä kokemusta hankkineiden tarkastajien työllä tulkittiin olevan suurempi ”vakuusarvo” ja heidän havaittiin veloittavan työstään suurempia palkkioita kuin muut tilintarkastajat.

5 Synteesi

5.1 Aihepiirit

Taulukossa 1 esitämme tutkittujen tilintarkastuksen väitöskirjojen aihepiirit tiivistetyksi Niemen (2010) luokittelua soveltaen. Kuten tästä taulukostakin on havaittavissa, valtaosa (13 kpl) väitöskirjoista on keskittynyt taloustieteen teorioihin ja menetelmiin nojaavaan valtavirtatutkimukseen. Kaikkein eniten on tutkittu tilintarkastuksen roolia tilinpäätösinformaatiossa. Sitä on tutkittu yhteensä seitsemässä väitöskirjassa. Kolme niistä lisää tietämystämme tilintarkastuskertomuksen sisälöstä (Jägerhorn 1965; Koskinen 1999; Ittonen 2008) ja loput neljä väitöskirjaa ovat keskittyneet seuraaviin aihealueisiin: tilintarkastajan rooli (Fant 1994), riippumattomuus (Saarikivi 1999), ammattieettiset koodit (Viitanen 2000) ja vahingonkorvausvastuu (Aspholm 2002).

Seuraavaksi eniten on tutkittu sekä tilintarkastusmarkkinoiden toimintaa että tilintarkastuksen roolia osana hyvää hallintotapaa. Molempia aihepiirejä on käsitelty kolmessa tutkimuksessa. Tilintarkastusmarkkinoiden toimintaa on kahdessa tutkimuksessa tarkasteltu tilintarkastuksen laadun (Samsonova 2006 ja Zerni 2009) ja kolmannessa hinnoittelun kannalta (ks. Niemi 2003). Niissä tutkimuksissa, joissa tilintarkastuksen roolia on tarkasteltu osana hyvää hallintotapaa, lisätään tietämystämme tilintarkastuksen tehtävistä, organisaatiosta ja toiminnasta (Vuorinen 1994), sisäisen valvonnan rakenteesta ja tehokkuudesta (Jokipii 2006) sekä tilintarkastusvaliokunnan tehokkuudesta ja tilintarkastuksen laadusta (Miettinen 2008).

Taulukko 1. Suomessa julkaistut tilintarkastuksen väitöskirjat aihepiiriin mukaan

Tilintarkastuksen aihepiiri	Väitöskirjan tekijä, vuosi sekä avainsana(t)
I Taloustieteen teorioihin ja menetelmiin nojaava valtavirtatutkimus	
a. Tilintarkastuksen rooli tilinpäätösinformaatiossa	Jägerhorn 1965 – ”tilintarkastuskertomuksen informaation sisältö” Fant 1994 – ”tilintarkastajan rooli” Saarikivi 1999 – tilintarkastajan riippumattomuus” Koskinen 1999 – ”tilinpäätöksen virheet, lainmukaisuus ja tilintarkastuskertomuksen sisältö” Viitanen 2000 – ”tilintarkastajien ammattieettiset koodit” Aspholm 2002 – ”tilintarkastajan vahingonkorvausvastuu” Ittonen 2008 – ”mukautettu tilintarkastuskertomus”
b. Tilintarkastusmarkkinoiden toiminta	Niemi 2003 – ”tilintarkastuksen hinnoittelu” Samsonova 2006 – ”tilintarkastuksen laatu” Zerni 2009 – ”tilintarkastuksen laatu”
c. Tilintarkastuksen rooli osana hyvää hallintotapaa (corporate governancea)	Vuorinen 1994 – ”tilintarkastuksen tehtävät, organisaatio ja toiminta” Jokipii 2006 – ”sisäisen valvonnan rakenne ja tehokkuus” Miettinen 2008 – ”tilintarkastusvaliokunnan tehokkuus ja tilintarkastuksen laatu”
II Vaihtoehtoisia aihealueita ja niiden tutkimusotteet:	
a. Tilintarkastajan päätöksenteon ymmärtäminen käyttäytymistieteellisen (psykologian) tutkimuksen avulla	Virtanen 2002 – ”hyvä tilintarkastustapa”
b. Analyttinen/teoreettinen tutkimus (peliteoria, matematiikka)	
c. Tilintarkastusmenetelmien ja -lähestymistapojen kehitys, pitkittäis- case-tutkimus, osallistuva havainnointi	Kosonen 2005 – ”tilintarkastuksen historiallinen kehitys”

Loput kaksi väitöskirjatutkimusta analysoivat ns. vaihtoehtoisia aihealueita. Virtanen (2002) hyvää tilintarkastustapaa analysoiva väitöskirja on luokiteltavissa tutkimukseksi, joka pyrkii parantamaan ymmärtämystä tilintarkastajan päätöksenteosta käyttäytymistieteellisen tutkimuksen avulla. Kososen (2005) tutkimus liittyy puolestaan tilintarkastuksen historiallisen kehityksen hahmottamiseen.

Edellä mainittujen tutkimusaiheiden ajallinen analyysi paljastaa, että kaikkein varhaisimmassa vaiheessa tilintarkastuksen väitöskirjatutkimus kohdistui meillä Suomessa tilintarkastuskertomuksiin (ks. Jägerhorn 1965). Tilintarkastuskertomusten tutkiminen on sittemmin jatkunut myös 1990- ja 2000- luvuilla (ks. Koskinen 1999; Ittonen 2008). 1990-luvulta lähtien kiinnostusta alkoi herättää myös tilintar-

kastajan rooli (Fant 1994) ja riippumattomuus (Saarikivi 1999) sekä tilintarkastuksen tehtävät, organisointi ja toiminta (Vuorinen 1994). Tilintarkastuksen laatua on monissa väitöskirjoissa analysoitu 2000-luvulta alkaen (ks. Samsonova 2006; Miettinen 2008 ja Zerni 2009). Muita 2000-luvulla käynnistyneitä aiheita ovat olleet: tilintarkastajien ammattieettiset koodit (Viitanen 2000) ja vahingonkorvausvastuu (Ashpholm 2002) sekä hyvä tilintarkastustapa (Virtanen 2002), tilintarkastuksen hinnoittelu (Niemi 2003) ja sisäinen valvonta (Jokipii 2006). Näitä aihepiirejä on kutakin tutkittu yhden väitöskirjan puitteissa. Tilintarkastustutkimuksen lisääntyminen 1990-luvulla on ainakin osaltaan ymmärrettävissä saman vuosikymmenen puolivälissä syntyneen suomalaisen tilintarkastuslainsäädännön innoittamaksi.

5.2 *Tutkimusotteet*

Taulukossa 2 kuvataan ne metodologiset lähestymistavat, joita tutkituissa 15 tilintarkastuksen väitöskirjassa on sovellettu. Lähes puolet (7 kpl) tilintarkastusalan väitöskirjatutkimuksista on tehty laajalla empiirisellä aineistolla ja tilastollisia analyysimenetelmiä käyttäen. Vain juuri näiden seitsemän tutkimuksen osalta tutkimusote on selkeästi määritettävissä, ja se on nomoteettinen. Muiden kahdeksan työn suhteen on tässä tutkimuksessa jouduttu tekemään tulkintaa. Näyttää siltä, että erityisesti oikeusdogmaattisissa tutkimuksissa tutkimusmenetelmistä ei paljon – jos ollenkaan – kerrota. Tutkimusoteasia saattaa olla voimassaolevan lainsäädännön selvittämiseen pyrkivässä tutkimuksessa niin itsestään selvää, että sitä ei ole syytä erikseen mainita.

Myös toiminta-analyyttinen tutkimusote on käytössä ja hyväksytty tilintarkastustutkimuksen parissa. Tällä tutkimusotteella on tulkintamme mukaan tehty neljä väitöskirjaa. Koskisen väitöskirjasta löytyy piirteitä kolmesta eri tutkimusotteesta ja Ashholmin kahdesta eri otteesta. Ilman näitä ”multiple methodologies” -töitä käsiteanalyyttista, päätöksentekometodologista, konstruktivistista ja oikeusdogmaattista tutkimusta edustaisi vain yksi väitöskirja kutakin.

Yhteenvetona voidaan todeta, että kaikki liiketaloustieteen tutkimusotteet ovat olleet tilintarkastustutkimuksen käytössä, mutta koska väitöskirjojen lukumäärä on edelleen melko pieni, on myös useilla tutkimusotteilla minimiedustus. Nomoteettinen tutkimusote tekee tässä poikkeuksen.

Taulukko 2. Suomessa julkaistut tilintarkastuksen väitöskirjat tutkimusotteen mukaan

	Käsite-analyytinen	Nomoteettinen	Toimintanalyytinen	Päätöksentekometodologinen	Konstruktivinen	Oikeusdogmaattinen
1. Jägerhorn (1965)		x				
2. Fant (1994)		x				
3. Vuorinen (1995)					x	
4. Saarikivi (1999)	x					
5. Koskinen (1999)	x		x			x
6. Viitanen (2000)		x				
7. Aspholm (2002)				x		x
8. Virtanen (2002)			x			
9. Niemi (2003)		x				
10. Kosonen (2005)			x			
11. Jokipii (2006)						
12. Samsónova (2006)			x			
13. Miettinen (2008)		x				
14. Ittonen (2008)		x				
15. Zerni (2009)		x				

6 Johtopäätökset

Tämän tutkimuksen tavoitteena oli analysoida Suomessa kautta aikojen julkaistujen tilintarkastusalan väitöskirjojen tutkimusstrategiset valinnat. Tutkittavia väitöskirjoja oli yhteensä 15. Ensimmäinen niistä oli julkaistu vuonna 1965 (eli 45 vuotta sitten) ja loput 1990- ja 2000-luvulla. Tilintarkastusalan väitöskirjatutkimus on siten käynnistynyt huomattavasti myöhemmin kuin esimerkiksi johdon ja rahoituksen laskentatoimen väitöskirjatutkimus (vs. Näsi & Näsi 1985) mutta samoin kuin nekin vauhdittunut parina viimeisenä vuosikymmenenä (vs. Näsi ym. 1993; Kihn & Näsi 2010a ja 2010b).

Jaottelimme väitöskirjojen aihealueet Niemen (2010) ja menetelmävalinnat Näsin (1980a, 1980b), Neilimon ja Näsin (1980) ja Kasasen ym. (1991, 1993) luokittelua soveltaen. Saatujen tulosten pohjalta on nyt nähtävissä, mitä aihealueita ja menetelmiä tilintarkastuksen väitöskirjoissa on valittu. Tutkimuksemme keskeisimmistä tuloksista mainittakoon, että tilintarkastuskertomus on suuressa määrin ollut taloustieteen teorioihin ja menetelmiin nojaavaa valtavirtatutkimusta. Sen puitteissa on tutkittu tilintarkastuksen roolia tilinpäätösinformaatiossa, tilintarkastusmarkkinoiden toimintaa sekä tilintarkastuksen roolia osana hyvää hallintotapaa. Valitut aiheet ovat lisänneet tietämystämme tilintarkastuskertomuksen sisällöstä sekä tilintarkastajan roolista, riippumattomuudesta, ammattieettisistä koodeista ja vahingonkorvausvastuusta. Edelleen tutkimuksissa on valotettu tilintarkastuksen laatua, hinnoittelua, tehtäviä, organisaatiota ja toimintaa sekä sisäisen valvonnan rakennetta ja tilintarkastusvaliokunnan tehokkuutta. Niin sanottuina vaihtoehtoisina aihealueina on tutkittu sekä hyvää tilintarkastustapaa että tilintarkastuksen historiallista kehitystä. Kaikkein suosituimmat aihepiirit ovat olleet tilintarkastuskertomus ja tilintarkastuksen laatu.

Muun muassa laajaan empiiriseen aineistoon ja tilastollisten menetelmien käyttöön nojaava nomoteettinen tutkimusote on selvästikin ollut kaikkein suosituin tutkimusote. Myös käsiteanalyttista, toiminta-analyttista, päätöksentekometodologista ja konstruktivistista tutkimusotetta on käytetty mutta toistaiseksi vain vähäisessä määrin. Näiden viiden liiketaloustieteissä sovelletun tutkimusotteen lisäksi havaitsimme tässä tutkimuksessa myös useamman metodologian yhdistämistä sekä oikeusdogmaattisen lähestymistavan käyttöä.

Tällä tutkimuksella on muun muassa seuraavia rajoituksia: Tutkimusotteiden ja aihepiirien luokittelussa olisi ensinnäkin voitu soveltaa toisenkinlaisia luokitteluja. Tutkimusten luokittelu ei ole myöskään aina yksiselitteistä, vaan aihealueiden ja tutkimusotteiden luokittelu pohjautuu lopulta tutkimuksista tekemiimme tulkintoihin.

Koska tilintarkastusalan väitöskirjoja on vielä melko vähän, hyvin monia aihealueita on jäänyt toistaiseksi kokonaan tutkimattakin. Edellä sanottuja tuloksia Niemen (2010) luokitteluun peilaten mahdollisia jatkotutkimusten aiheita voisivat olla esimerkiksi seuraavat:

- Tilintarkastuksen arvo ja kysyntä ja niihin vaikuttavat tekijät
- Tilintarkastusmarkkinoiden kilpailullisuus ja rakenne
- Lisääkö vai vähentääkö toimiva ”corporate governance” tilintarkastuksen tarvetta?
- Miksi eri yritykset valitsevat erilaiset corporate governance -ratkaisut?
- Tarkastuskohteen riskin arviointi (→ tilintarkastuksen toteutus)

- Tilintarkastajan aikapaineet ja/tai informaation määrä
- Tilintarkastajan muistin 'valikoivuus'
- Tilintarkastuksen (optimi)edellytykset (vahingonkorvausriski, asiakasportfolion laajuus, asiakassuhteen pituus)
- Tilintarkastusmenetelmien ja -lähestymistapojen kehitys, pitkittäis-case-tutkimus, osallistuva havainnointi
- Riskilähestymistavan omaksuminen ja sen vaikutukset kentällä.

Useat edellä sanotuista aihealueista edellyttäisivät tilintarkastajan työn seuraamista ja/tai työpapereiden tai muiden tilintarkastustyön kohteena olleiden tai tuloksena syntyneiden dokumenttien saantia tutkimuksen empiiriseksi aineistoksi. Tämä ei luottamuksellisuussyistä kuitenkaan ole yleensä mahdollista. Tästä syystä tilintarkastuksen toiminta-analyyttinen (case-)tutkimus tuskin koskaan voi tulla kovin yleiseksi.

Tilintarkastajat ovat pitkään olleet ja lainsäädännön uudistusten myötä ovat tulevaisuudessa todennäköisesti entistäkin yhtenäisempi ammattiryhmä. Nomoteettinen tilintarkastajien ammattiryhmälle kohdennettu kyselytutkimus lienee se metodologinen strategia, jolla tutkimusta edelleenkin paljon tullaan tekemään. Toisaalta tilintarkastustutkimus tulee kohdistumaan myös niihin ”käyttäjärühmiin”, joita tilintarkastusinstituution olemassaolo palvelee ja joille tilintarkastuksen oletetaan tuottavan lisäarvoa.

Lähteet

Aspholm, Ingalill (2002). Rättsekonomisk analys av revisors skadeståndsansvar i Norden. <http://openax.shh.fi:8180/dspace/bitstream/10227/77/2/103-951-555-720-8.pdf>.

Burrell, Gibson & Morgan, Gareth (1979). *Sociological Paradigms and Organizational Analysis*. London: Heineman.

Chua, Wai Fong (1986). Radical developments in accounting thought. *The Accounting Review* LXI:4, 601–632.

Fant, Johan-Erik (1994). *Revisorns roll – en komparativ studie av revisorer, företagsledares och aktieägares attityder till extern revision i Finland och Sverige*. Svenska handelshögskolan, Helsinki.

Ferm, Tom (1994). Laskentatoimen tutkielmissa käytettyjen tutkimusotteiden vertailu vuosilta 1982 ja 1992. *Liiketaloudellinen Aikakauskirja* 3, 241–259.

Gwilliam, D. (1987). *A Survey of Auditing Research*. Cambridge.

Hopper, Trevor & Powell, Andrew (1985). Making sense of research into organizational and social aspects of management accounting: a review of its underlying assumptions. *Journal of Management Studies* 22:5, 429–465.

Ittonen, Kim (2009). *Audit Reports and Stock Markets*. Acta Wasaensia No. 200. http://www.uwasa.fi/materiaali/pdf/isbn_978-952-476-256-4.pdf.

Jokipii, Annukka (2006). *The Structure and Effectiveness of Internal Control: A Contingency Approach*. http://www.uwasa.fi/materiaali/pdf/isbn_952-476-161-0.pdf.

Jägerhorn, Reginald (1965). *Informationsvärdet hos finländska aktiebolags revisionsberättelser*. Affärssekonomisk förlagsförening, Helsinki.

Järvenpää, Marko & Pellinen, Jukka (2005). Teoria ja interventio suomalaisissa johdon laskentatoimen case- tai field-menetelmällä tehdyissä akateemisissa opinäytteissä 1997–2005. Teoksessa Erkki K. Laitinen & Teija Laitinen (toim.), *Contributions to Accounting, Finance and Management Science, Essays in Honour of Professor Timo Salmi*. Acta Wasaensia No. 143, Business Administration 59, Accounting and Finance, 65–108.

Jönsson, Sten & Lukka, Kari (2006). There and Back Again: Doing Interventionist Research in Management Accounting. In C.S. Chapman, A.G. Hopwood & M.D. Shields (Eds), *Handbook of Management Accounting Research* 1, 373–397.

Kasanen, Eero, Lukka, Kari & Siitonen, Arto (1991). Konstruktiivinen tutkimusote liiketaloustieteessä. *Liiketaloudellinen Aikakauskirja* 3, 301–325.

Kasanen, Eero, Lukka, Kari & Siitonen, Arto (1993). The constructive approach in management accounting research. *Journal of Management Accounting Research* 5, 243–264.

Kihn, Lili-Anne & Näsi, Salme (2010a). Research strategic analysis of the Finnish doctoral dissertations in management accounting from 1990 to 2009. *Liiketaloudellinen Aikakauskirja* 1, 42–86.

Kihn, Lili-Anne & Näsi, Salme (2010b). *Innovative Developments in Management Accounting Research: Research Strategic Analysis of Finnish Doctoral Dissertations through the Ages*. A paper presented at the 33rd Annual Congress of the European Accounting Association, Istanbul, 19–21.5.2010.

Koskela, Markku (1990). *Tilintarkastus pienissä ja keskisuurissa yrityksissä*. Helsingin kauppakorkeakoulun julkaisuja D-125.

Koskinen, Hannu E. (1999). *Tilinpäätöksen lainmukaisuus ja tilintarkastuskertomus: oikeudellinen tutkimus osakeyhtiön tilinpäätöksen virheiden ja puutteiden olennaisuudesta sekä niiden vaikutuksesta tilintarkastuskertomuksen sisältöön*. Tampere: Finnpublishers.

Kosonen, Leena (2005). *Vaarinpidosta virtuaaliaikaan, Sata vuotta suomalaista tilintarkastusta*. <https://oa.doria.fi/bitstream/handle/10024/31147/TMP.objres.90.pdf?sequence=1>.

Kärkkäinen, Hanna (1996). *Tilintarkastajan uskottavuus sidosryhmien näkökulmasta – käsitteellinen analyysi ja empiirinen koettelu*. Licensiaatin tutkimus, Lapin yliopisto, Rovaniemi.

Laitinen, Teija & Järvinen, Tuukka (2007). Akateemisesta tilintarkastustutkimuksesta Suomessa ja vähän muuallakin – yhdeksän vuotta Pirisen jälkeen, *Tilintarkastus* 3, 33–40.

Lukka, Kari (2005). Approaches to case research in management accounting: the nature of empirical intervention and theory linkage. Teoksessa S. Jönsson & J. Mouritsen (toim.), *Accounting in Scandinavia – The Northern Lights*. Liber & Copenhagen Business School Press, 375–399.

Lukka, Kari, Majala, Reino, Paasio, Antti & Pihlanto, Pekka (1984). Accounting research in Finland. Teoksessa G. Anthony Hopwood & Hein Schreuder (Eds), *European Contributions to Accounting Research, The Achievements of the Last Decade*. Amsterdam: Free University Press.

Miettinen, Johanna (2008). *The Effect of Audit Quality on the Relationship between Audit Committee Effectiveness and Financial Reporting Quality*. http://www.uwasa.fi/materiaali/pdf/isbn_978-952-476-244-1.pdf

Neilimo, Kari & Näsi, Juha (1980). *Nomoteettinen tutkimusote ja suomalainen yrityksen taloustiede. Tutkimus positivismin soveltamisesta*. Yrityksen taloustieteen ja yksityisoikeuden laitoksen julkaisuja, Sarja A 2 Tutkielmia ja raportteja 12, Tampere.

Niemi, Lasse (2003). *Essays on Audit Pricing*. Acta Universitatis Oeconomicae Helsingiensis. A-212.

Niemi, Lasse (2010). *Tilintarkastuksen tutkimus – mitä tutkitaan ja mitä on opittu?* Keskuskauppakamarin tilintarkastuslautakunnan ja Työ- ja elinkeinoministeriön seminaari tilintarkastuksen tieteellisestä tutkimuksesta ja opetuksesta Suomessa – toimintatavat, odotukset ja hyödyt eri toimijoiden kannalta, Helsinki, 25.5.2010.

Näsi, Juha (1980a). *Liiketaloustiede soveltavana tieteenä. Perusongelmien hahmotus ja analyysi*. Yrityksen taloustieteen ja yksityisoikeuden laitoksen julkaisuja, Sarja A 2: Tutkielmia ja raportteja 8, Tampere.

Näsi, Juha (1980b). *Ajatuksia käsiteanalyysistä ja sen käytöstä yrityksen taloustieteessä*. Yrityksen taloustieteen ja yksityisoikeuden laitoksen julkaisuja, Sarja A 2 Tutkielmia ja raportteja 11, Tampere.

Näsi, Salme & Näsi, Juha (1985). *Suomalainen laskentatoimen tutkimus 1940-luvulta nykypäiviin. Väitöskirjatuotannon tutkimusstrateginen analyysi*. Yrityksen taloustieteen ja yksityisoikeuden laitoksen julkaisuja, Sarja A 2 Tutkielmia ja raportteja 3, University of Tampere.

Näsi, Salme & Näsi, Juha (1996). Accounting and business economics traditions in Finland – from a practical discipline into a scientific subject and field of research. *The European Accounting Review* 6:2, 199–229.

Näsi, Salme, Laine, Petri, Mäkinen, Vesa & Näsi, Juha (1993). *A Research Strategic Analysis of the Finnish Doctoral Dissertations in Accounting*. Nordiska Företagsekonomiska Ämneskonferensen i Lund, 18–20.8.1993.

Pihlanto, Pekka (1994). The action-oriented approach and case study method in management studies. *Scandinavian Journal of Management* 10:4, 369–382.

Pirinen, Pekka (1998). Akateemisesta tilintarkastustutkimuksesta Suomessa ja vähän muuallakin. *Tilintarkastus* 7, 508–512.

Saarikivi, Maj-Lis (1999). *Tilintarkastajain riippumattomuus*. Acta Universitatis oeconomicae Helsingiensis, A-155.

Samsonova, Anna (2006). *Local Responses to International Pressure. A Process of Institutionalisation of Audit Quality in Russia*. Åbo Akademi University Press.

Scapens, Robert (1990). Research on management accounting: the role of case studies. *British Accounting Review* 24, 259–281.

Viitanen, Janne (2000). *Auditors' Professional Ethics and Factors Associated with Disciplinary Cases Against Auditors*. Swedish School of Economics and Business Administration, Helsinki.

Virtanen, Aila (2002). *Laskentatoimi ja moraali: laskenta-ammattilaisten käsityksiä hyvästä kirjanpito tavasta, hyväksyttävästä verosuunnittelusta ja hyvästä tilintarkastustavasta*. <https://jyx.jyu.fi/dspace/bitstream/handle/123456789/13208/9513912248.pdf?sequence=1>.

Vuorinen, Erkki (1995). *Tilintarkastus uudessa kunnalliskulttuurissa*. Turku: Vuoricon Oy.

Zerni, Mikko (2009). *Essays on Audit Quality*. Acta Universitatis Ouluensis Oeconomica G39.

TILINTARKASTUKSEEN ENNAKOIDAAN IHMISTEN JOHTAMISEN ANALYYSIÄ

*Ammattikieli yhteiskunnallisen todellisuuden
heijastajana ja muovaajana*

Merja Koskela

Communication Studies, University of Vaasa

Nina Pilke

Scandinavian Languages, University of Vaasa

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Koskela, Merja & Pilke, Nina (2011). Tilintarkastukseen Ennakoidaan Ihmisten Johtamisen Analyysiä: Ammattikieli yhteiskunnallisen todellisuuden heijastajana ja muovaajana. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 89–104. Eds Annukka Jokipii & Johanna Miettinen.

Tässä artikkelissa tarkastelemme ensin yleisellä tasolla uusien termien syntyyn vaikuttavia tekijöitä sekä selvitämme talouden ammattikielen ja erityisesti laskentatoimen käsitteiden ja termien erityispiirteitä. Toiseksi pohdimme monimuotoisuutta yhteiskunnallisena ja tieteellisenä ilmiönä, joka tulee mahdollisesti vaikuttamaan myös suomalaiseen laskentatoimen alan käsitteistöön ja termistöön käytänteiden, tutkimuksen ja ehkä myös lainsäädännön kautta. Yhteiskunnassa tapahtuvat muutokset ovat usein suoraan tai ainakin välillisesti kytköksissä tieteeseen, lainsäädäntöön ja alan käytänteisiin. Laskentatoimen alan ytimen muodostavat peruskäsitteet ovat pysyviä ja myös objektiivisia siten, että niiden avulla yritysten taloudellista tulosta voidaan verrata. Yhteiskunnan muutosvoimat tuovat mukanaan myös muita kuin puhtaasti taloudellisia arvoja, joita voidaan yhdistää talousraportointiin. Suomessakin avautunee mielenkiintoinen uusi tilintarkastuksen tehtävä, jos monimuotoisuus liitetään myös numeerisiin arvoihin. Tilintarkastajan tehtävänähän on ennen kaikkea valvoa, onko tilinpäätös laadittu kirjanpitolain ja tilinpäätöksen laatimista koskevien muiden säännösten ja määräysten mukaisesti. Tässä suhteessa uudet raportit eivät vielä aiheuta toimenpiteitä, koska niistä ei ole määrätty laissa. Sen sijaan tilintarkastajan valvontatehtävä sen suhteen, antaako tilinpäätös kirjanpitolaissa tarkoitettulla tavalla oikeat ja riittävät tiedot yhteisön tai säätiön toiminnan tuloksesta ja taloudellisesta asemasta, saattaa muuttua nopeastikin. Uusien raporttien suhteen tilintarkastajan tehtävänä on todentaa, onko kyse voittoa tuottavasta vai tappiota aiheuttavasta toiminnosta vai ehkä kenties pelkästä tyhjistä retoriikasta. Tilintarkastaja on siis ratkaisevassa asemassa, kun kielen kautta punnitaan, onko yrityksen arvojen ja todellisen toiminnan välillä epäsuhta.

Keywords: ammattikieli, moninaisuus, tasa-arvo, osallisuus, tilintarkastus

1 Johdanto

Kieli muuttuu koko ajan, uusia sanoja syntyy, vanhoja häviää, olemassa olevat sanat saavat uusia merkityksiä, ja vanhoja merkityksiä häviää (Dahl 2000: 103). Tämä koskee sekä ammattikieltä että yleiskieltä. Syitä on erityisesti yleiskielen kohdalla useita. Yleiskielessä painottuu kielen sosiaalinen funktio tietosisältöjen sijaan. Tietosisällöllä on kuitenkin merkitystä myös yleiskielessä, joten kanssakäymisen ja ymmärtämisen edellytys on, että muutos ja normi ovat tasapainossa. (Rapola 1947: 83–84)

Filosofi Fregen tunnettu ajatus siitä, että kielemme rajat ovat maailmamme rajoja, täytyy tulkita laajasti, kun tarkastelee ammattikieltä ja yleiskieltä. Kun maailma muuttuu, myös kieli muuttuu, mutta jokainen kielen muutos ei välttämättä merkitse maailman muuttumista. Jossain määrin kieltä voidaan käyttää tietoisestikin maailman muuttamiseen, erityisesti asenteiden ja arvojen muokkaamiseen. Wittgensteinin kiteytys Fregen ajatuksesta muotoon "siitä mistä ei voi puhua täytyy vaieta" kuvastaa sitä, kuinka syystä tai toisesta muuttuvat todellisuus tai arvot heijastuvat väistämättä myös kieleen. Jos uusista ilmiöistä on tarve puhua, on ne pystyttävä nimeämään.

Tässä artikkelissa tarkastelemme ensin yleisellä tasolla uusien termien syntyyn vaikuttavia tekijöitä sekä selvitämme talouden ammattikielen ja erityisesti laskentatoimen käsitteiden ja termien erityispiirteitä. Toiseksi pohdimme monimuotoisuutta yhteiskunnallisena ja tieteellisenä ilmiönä, joka tulee mahdollisesti vaikuttamaan myös suomalaisen laskentatoimen alan käsitteistöön ja termistöön käytänteiden, tutkimuksen ja ehkä myös lainsäädännön kautta.

2 Uudet erikoisalaviestinnässä käytettävät nimitykset

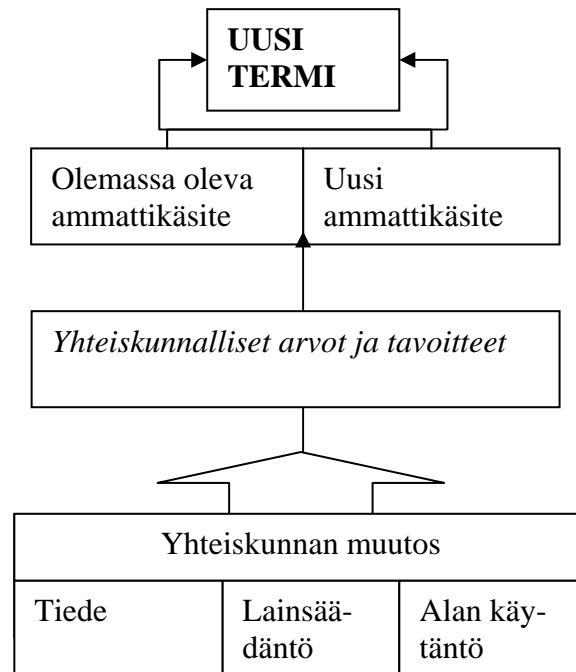
Yhteiskunnan muutos tuo tullessaan uusi ilmiöitä, joka tarvitsevat nimityksiä, termejä. Termit syntyvät kahdenlaisin perustein. Vanha käsite voidaan nimetä uudelleen tai jollakin alalla syntyy aivan uusi käsite, joka tarvitsee nimitykseen termin, jonka sinällään ei tarvitse olla sanana uusi. Kuviossa 1 on esitetty uusien termien synnyn taustalla vaikuttavia keskeisiä seikkoja.

Kuviosta 1 käy ilmi, että tiede voi vaikuttaa uusien termien syntyyn. Kun syntyy uutta tietoa, syntyy myös uusia termejä. Tällaista prosessia, jossa tiede vaikuttaa suoraan ammattikieleen kuvaa seuraava käsitteen 'energia' syntyä käsittelevä sitaatti:

”Ordet *energi* är förvånansvärt nytt och kan i sin moderna betydelse bara spåras tillbaka till mitten av 1800-talet. Det var inte så att människor tidigare inte hade förstått att det fanns olika krafter i naturen – den knastrande och sprakande statiska elektriciteten eller vindpusten som plötsligt fyller ett segel. Det var bara det att man trodde att dessa krafter inte hade något med varandra att göra, det fanns ingen övergripande föreställning om ”energi” som omfattade dessa skiftande händelser.” (Bodanis 2000: 21)

Lainsäädäntö vaikuttaa usein vahvasti ja pitkäaikaisesti erikoisalojen käsitteistöön ja termistöön. Esimerkiksi uudessa Suomen sosiaaliturvajärjestelmää kuvaavassa sanastossa erilaiset lakitekstit ovat olleet tärkeitä lähteitä, vaikka lakien termit eivät aina olekaan täysin tarkoituksenmukaisia. Yksi tällainen epäjohtonmukainen termi on *kuntoutustuki*, jolla tarkoitetaan määrääjäksi myönnettyä työkyvyttömyyseläkettä sellaiselle henkilölle, jonka työkyvyn arvioidaan palautuvan asianmukaisella hoidolla tai kuntoutuksella. Kuntoutustukea saava henkilö ei kuitenkaan välttämättä saa lainkaan kuntoutusta, vaikka etuuspäätöksen saanut asiakas näin useimmiten päättelee. Sanastossa lain termiä ei voi sivuuttaa, koska sitä on käytettävä päätöksissä. Sanastossa termille on annettu synonyymiksi taustalla olevaa käsitettä paremmin kuvaava *määräaikainen työkyvyttömyyseläke*. (Suhonen 2010)

Alan käytäntö esimerkiksi tekniikan edistysaskeleiden muodossa voi johtaa uusiin käsitteisiin ja sitä kautta uusiin termeihin. ’USB flash memory’ (*USB-muisti, muistitikku*) on esimerkki käsitteestä, joka on syntynyt kun tietotekniikan alalla kehitettiin uusi tallennusväline. Alan käytännöt ovat kytköksissä yhteiskunnan muutoksiin, ja ne ohjaavat usein varsin vahvasti termistöä. Jos alalla on vakiintunut esimerkiksi englannin kielen käyttö viestinnän eri tasoilla ja tyypeissä (sisäinen/ulkoinen, suullinen/kirjallinen), näkyy tämä seikka väistämättä myös ammat-tisanastossa.



Kuvio 1. Uusien termien syntyyn vaikuttavia ilmiöitä

Yhteiskunnassa tapahtuvat muutokset ovat usein suoraan tai ainakin välillisesti kytköksissä tieteeseen, lainsäädäntöön ja alan käytänteisiin. Kaikki kuviossa 1 esitetyt ilmiöt voidaan jakaa joukkoon alakategorioita ja eri ilmiöiden välillä on vuorovaikutusta.

Ammattikorkeakoulu on yksi esimerkki yhteiskunnan muutoksen mukanaan tuomasta käsitteestä. Samoin Euroopan unionin jäsenyys on vaikuttanut siihen, että maitokategoriat muuttuivat Suomessa siten, että maitopurkissa, jonka sisällön rasvapitoisuus on vähintään 3,5 % ei enää lue kulutusmaito vaan täysmaito. Myös taloudelliset olosuhteet heijastuvat käsitteistöön ja termistöön. Esimerkiksi termit *epävirallinen talous* ja *epävirallinen työ* ovat arkipäivää ja elinehto suurimmalle osalle maapallon väestöstä. Teollisuusmaissa monimuotoisesta epävirallisesta taloudesta, joka kannattelee isoa osaa monen maan kansantaloudesta, käytetään myös nimitystä *harmaa talous*. Talouden kieli on altis yhteiskunnallisille muutoksille ja kulloinkin vallitseville näkökulmille.

3 Talouden ammattikielen erityispiirteitä

Käsitettä 'talouden ammattikieli' ei ole aivan yksinkertaista määritellä. Käsitettä voidaan lähestyä toisaalta talouteen liittyvien tilanteiden alakohtaisena kielenkäyttönä (esim. markkinointi, kirjanpito), toisaalta eri toimintojen edellyttämänä kielenkäyttönä (esim. taloudellinen raportointi, alan opetus). Käsitettä voidaan kuvata myös diskurssiyhteisön koosta lähtien kansainvälisenä, kansallisena ja paikallisena kielenkäyttönä. Diskurssiyhteisö puolestaan voidaan jakaa akateemiseen talouden diskurssiyhteisöön ja elinkeinoelämän talouden diskurssiyhteisöön, joilla on omat suulliset ja kirjalliset genrensä (esim. tilinpäätös organisaation ulkoisena, elinkeinoelämän tarpeisiin tuotettuna genrenä). (Hundt 1995: 49–52; Puskala 2003: 68–69, 80)

Talous on ensimmäisiä erikoisaloja, joita on tutkittu kielitieteen menetelmin. Talouden ja siihen liittyvän kielenkäytön kehityksen välistä yhteyttä alettiin tutkia metodologisena ongelmana 1930-luvulla saksalaisissa, sveitsiläisissä ja hollantilaisissa kauppakorkeakouluissa nk. *Wirtschaftslinguistik*-suuntauksen piirissä. Toisen maailmansodan jälkeen tämä soveltavan kielitieteen suuntaus ei enää saanut suoraa systemaattista jatkoa, vaan talouden erikoiskieltä on tutkittu esim. termistön, syntaksin ja morfologian, tekstilingvistiikan sekä kielididaktiikan näkökulmista. (Drozd & Seibicke 1973: 37–38, 68–70; Laurén 1993: 30; Hundt 1995: 24–30)

Laurén ja Nordman (1987: 159) kuvaavat ruotsinkielistä talouden ammattikieltä hajanaiseksi ja pirstaleiksi. Heidän mukaansa syynä on se, että liiketalous koostuu monesta osa-alueesta sekä siitä, että alan kielenkäyttö on epävakaata jatkuvien yhteiskunnallisten sekä lakeihin ja muihin määräyksiin liittyvien muutosten vuoksi. Talouden kieli on yleisesti ottaen myös vahvasti englantivaikutteista, mikä selittyy alan USAssa tehtävästä tutkimuksesta, korkeakoulujen englanninkielisestä oppikirjallisuudesta sekä globaalien suuryritysten ja tilintarkastustoimistojen vaikutuksesta alalla tehtävään normatiiviseen työhön (Nilsson 1992: 79–80). Talouden kieltä voi kuvata myös arkipäiväiseksi siinä mielessä, että se näkyy jokapäiväisessä elämässä ja paljon alan kielestä sijoittuu yleiskielen ja ammattikielen välimaastoon. Alaa popularisoidaan ja termejä lainataan yleiskielestä. (Nordman 1992: 10)

3.1 *Laskentatoimen käsitteistön ja termistön erityispiirteitä*

Riistama (1971) määrittelee laskentatoimen suunnitelmanmukaiseksi toiminnaksi,

”jonka tehtävänä on kerätä ja rekisteröidä yrityksen tai muun talousyksikön taloutta kuvastavia arvo- ja määrälukuja sekä tuottaa niihin perustuen informaatiota, jonka tarkoituksena on auttaa talousyksikön johtoa, rahoittajia ja muita sidosryhmiä sen toimintaa koskevissa päätöksissä sekä toiminnan taloudellisen tuloksen jakamisessa”.

Virtasen (2007a) mukaan laskentatoimea pidettiin tämän vakiintuneen näkemyksen mukaan kauan päätöksentekijästä irrallisena objektiivisena ja puhtaana laskemisena. Toisen näkemyksen mukaan laskentatoimi syntyy ja kehittyy ihmisten välisessä vuorovaikutuksessa. Laskentatoimi nähdään tällöin eräänlaisena kielenä, jolla on oma sanastonsa, kielioppinsa ja oma tapansa käsitteellistää todellisuuden ilmiöitä. (Hines 1988; Manninen 1992; Pihlanto 1996) Virtanen (2007b) katsoo, että ympäristön ja yrityksen välinen vuorovaikutus on molemminpuolista ja monimutkaista, sillä vaihdettaviksi eivät tule vain rahat ja tavarat, vaan myös eettiset arvot, informaatio, luonnonvarat, politiikka, moraali ja inhimilliset tekijät. Täten yritys siirtää ympäristöönsä suoritteidensa lisäksi myös sen omista arvoista ja kulttuurista koostuvaa todellisuuttaan. Toisaalta ympäristö yhä useammin mielle-tään osaksi yritystä, ja perinteisten tavara- ja rahavirtojen rinnalla mitataan ja arvioidaan myös vaihdantaa ympäristön kanssa. (Virtanen 2007b)

Laskentatoimen alan käsitteistön ja termistön kehityshistorian voidaan katsoa alkaneen samaan aikaan, kun ihminen alkoi tehdä kirjallisia muistiinpanoja (ks. esim. Karlöf 1990). Ruotsi-Suomeen laskentatoimi tuli keskiajalla, ja Ruotsilla ja Suomella on pitkä yhteinen historia alalla. Laskentatoimen alan sanasto on ollut Suomessa pääasiassa ruotsinkielistä aina 1800-luvulle saakka, joten suomenkieliseen termistöön ovat vaikuttaneet suoraan ruotsinkielinen termistö ja välillisesti eurooppalainen termistö (latina, ranska, italia). (Lauren & Wiklund 1978: 98; Laurén 1993: 111) Laskentatoimen käsitteiden ja termien muodostuksen taustalla ovat käytäntö, lainsäädäntö sekä tutkimus, joista viimeksi mainittu yleistyi vasta 1900-luvulla (Grandell 1972: 101).

Nissilän (2008: 199–200) mukaan laskentatoimen ja tilintarkastuksen termistöä säätelee pakollinen harmonisointi kansallisen lainsäädännön ohjauksen ansiosta. Toisaalta kansainvälinen normisto (IFRS/IAS) näyttäisi säätelevän käsitteiden harmonisointia hyvinkin vahvasti ottamatta kuitenkaan suoraan kantaa kielenkäyttöön. Terminologian alalla terminmuodostuksessa suosituksena on yleensä omakielisyys. Yleislainojen, erityislainojen, käänöslainojen ja sitaattilainojen käyttö terminmuodostuksessa on ilmiönä sidoksissa ei vain ilmausten läpinäky-

vyyteen vaan myös laajemmin omakieliseen viestintään ja sitä kautta kulttuuriin identiteettiin.

Näsi (2006: 58) toteaa, että laskentatoimi on tänä päivänä hyvin kansainvälistä tutkimusalana, oppina ja käytännön toimintana. Alan käytännön työtehtävät ovat usein monikansallisissa yrityksissä ja työkieli on monesti englanti, vaikka työpaikka olisi Suomessa. Yliopistoissa laskentatoimen opiskelu perustuu ulkomaiseen kirjallisuuteen, ja tutkijoille tulosten kansainvälinen julkaiseminen on itsensä selvyyttä. Näsi sanookin tämän vuoksi suomalaisen laskenta-ajattelun ja koulutuksen olevan ”katoavaa kansanperinnettä”. (Näsi 2006: 58, 65)

Laurénin ja Nordmanin (1987: 154–155) syntaktisten ja leksikaalisten analyysien mukaan laskentatoimen termistö on suhteellisen profiloitumatonta eli teknolektiä ei ole selviä ominaispiirteitä. Termit ovat keskipitkiä substantiiveja, verbejä käytetään yksipuolisesti ja syntaktisesti ala asettuu oikeustieteen ja sähkötekniikan välimaastoon (emt. 158–159). Nissilän (2008: 197) ruotsinkielisiä taseita koskeva tutkimus osoittaa, että termit ovat pääsääntöisesti pitkiä sanaliittoja ja usein läpinäkyviä siinä mielessä, että ne selvästi näyttävät käsitejärjestelmän rakenteen ylä-, ala- ja vieruskäsitteiden osalta. Nissilän (2008: III) mukaan alan käsitteistöä ja termistöä tekee haastavan se, että käsitteiltä pääsääntöisesti puuttuvat konkreettiset tarkoitteet. Nissilän mukaan laskentatoimen käsitteet ovat ”asiantuntijoiden luomia ajatustyökaluja, jotka on kehitetty konkreettisten ja abstraktien esineiden ja asioiden rahallisen arvon mittaamista varten. Ne ovat olemassa ja niitä voidaan käsitellä vain kielen kautta.” Näin kielen merkitys korostuu, ja laskentatoimen luonne pelkästään objektiivisena laskemisena asettuu kyseenalaiseksi. Laskentatoimen kieli heijastaa monimuotoista vuorovaikutusta eri yhteiskunnallisten tahojen välillä. Vaikka laskentatoimen käsitteiden ydin pysyy vakana, sitä ympäröi epävakampien käsitteiden joukko, joissa yhteiskunnan muutos erityisesti näkyy.

Yhteiskunnalliset arvot ja tavoitteet sekä niiden pohjalta käytävä keskustelu luovat uusia termejä erityisesti historiallis-hermeneuttisille tieteenaloille, joilla ihmisen toiminnalla ja sitä ohjaavilla virallisilla säännöillä (lainsäädäntö) ja moraali-käsityksillä on keskeinen merkitys. Laskentatoimen alalla asiakassuuntautuneisuus, omistajalähtöinen johtaminen sekä yhteiskunnallisen vastuun ja liiketoiminnan eettisyyden korostaminen ovat 1990-luvun keskeisiä sidosryhmäajatteluun liittyviä muutoksia. Virtanen (2007b) sanoo, että vaikka muutokset laskentajärjestelmiin tulevat hitaasti, laskenta-ajattelu on muuntautumiskykyinen ja muutoksillaan se heijastelee arvojen muuttumista. Ympäristölaskentatoimen ja henkilöstölaskentatoimen syntyminen ja kehittyminen osaksi yrityksen laskentatodellisuutta voidaan nähdä seurauksena laskenta-ajattelun kehitymisestä, jonka perusta on

yhteiskunnallinen muutos ja eettinen uudelleenarviointi. Esimerkiksi erilaisten ekologisten arvojen korostuminen sai yritykset panostamaan ympäristöjohtamiseen ja yleisti nopeasti yritysten vuosikertomusten ympäristöraportit osana yhteiskuntavastuun raportointia. Tätä kautta syntyi alalle uudenlaista ympäristölaskentaa liittyvää termistöä (esim. *ympäristövastuu*, *ympäristöriski*, *ympäristökustannus*, *ympäristöliikevaihto*). Kirjanpitolain säätelemä tilinpäätösinformaatio on kuitenkin hyvin standardoitua ja rajoitettua. Esimerkiksi yrityksen toiminnan ympäristövaikutukset voidaan ainakin toistaiseksi sivuuttaa kokonaan tai ne voidaan esittää liitetiedoissa. (Määttä 2000). Laine (2009) päätyy siihen, että yritysten vapaaehtoisella kestävä kehityksen raportoinnilla lähinnä reagoidaan ulkoisiin paineisiin, eikä kyse ole niinkään aidosta läpinäkyvyyden lisäämisestä.

Virtanen (2007b) näkee, että henkilöstölaskentatoimen taustalla on uudenlainen näkemys henkilöstön merkityksestä yrityksen voimavarana ja pääomana. Tasa-arvo ja monimuotoisuus sukupuoli ja maahanmuuttoa laajempina ilmiöinä ja käsitteinä näyttäisivät olevan uusimpia arvoihin ja tavoitteisiin liittyviä yhteiskunnallisia keskusteluja, jotka ovat luoneet myös laskentatoimen alalle uutta henkilöstöraportointiin liittyvää käsitteistöä ja termistöä. Tämän käsitteistön ja termistön avulla valikoidaan ja luodaan yhteiskunnallista todellisuutta maailmankuvan ja arvojen muutoksessa (Virtanen 2007b).

4 Yhdenvertaisuudesta monimuotoisuuteen alan käytännössä

Yhtä suomalaisen yhteiskunnan muutosta, jolla on vaikutusta myös talouden ammattikieleen, edustaa työyhteisöjen kulttuurinen ja etninen monimuotoistuminen (vrt. Sippola 2007: 9). Vaikka aihe on ollut Yhdysvalloissa esillä jo 1980-luvulta ja Euroopassakin 1990-luvulta saakka, se ei ole ollut Suomessa tärkeä yhteiskunnallisen keskustelun tai tutkimuksen aihe kuin vasta viime aikoina, kun yhteiskunnassa on havahduttu väestön ikääntymisen haasteisiin, erityisesti työvoiman saatavuuden näkökulmasta. Koska asia ei ole ollut yhteiskunnassa esillä, siihen liittyvät käsitteetkin ovat olleet varsin vakiintumattomia, ja asiasta puhuttaessa on omakielisen termin luomisen sijaan usein käytetty suoraan englanninkielistä termiä. Termi *monimuotoisuus* termin *diversity* vastineena ei esimerkiksi ole vielä kukaan itsestään selvä.

Uudelle käsitteelle tyypilliseen tapaan myös monimuotoisuuden käsitteen määrittelemisen on hankalaa, eikä tehtävää helpota se, että termien käyttö on horjuvaa. Käsitteenmäärittelyn haasteena on muun muassa se, että käsitettä sovelletaan käy-

tännössä hyvin erilaisiin tarpeisiin. Esimerkiksi johtajat, konsultit ja yhteiskunnalliset vaikuttajat käyttävät käsitettä kukin omiin tarkoituksiinsa. Johtaja voi edustaa taloudellista näkökulmaa, jossa korostuvat monimuotoisen henkilöstön mukanaan tuomat liiketaloudelliset hyödyt, konsultit puolestaan voivat ajaa näkemystä, jonka mukaan monimuotoinen työyhteisö vaatii työhyvinvoinnin kannalta omanlaistaan johtamista, ja yhteiskunnallinen vaikuttaja voi omalta osaltaan tuoda esiin asian lainsäädännöllistä tasa-arvoon liittyvää näkökulmaa tai eettistä ihmisten yhtäläisten oikeuksien korostamista. Eri näkökulmista tarkasteltuna eri käsittepiirteet nousevat olennaisiksi, mikä voi vaikuttaa myös käytettyjen termien valintaan.

Näkökulmien runsaudesta johtuen monimuotoisuutta käsitteenä on määritelty myös eri maissa eri tavoin, sen mukaan, mikä kussakin maassa on ollut kulttuurin ja yhteiskunnan kannalta olennaista. Yhteiskunnalliset arvot ja tavoitteet siis määrittävät käsitteen luonnetta. Esimerkiksi Australiassa (ks. esim. ABC 2001) monimuotoisuuden käsite on koskenut lähinnä naisia, alkuperäiskansoja ja vammaisia. Yhdysvalloissa näkemys on ollut laajempi, ja se on käsittänyt etnisen alkupeuran, ihmisen fyysiset ominaisuudet, uskonnon ja seksuaalisen suuntautumisen (Mor Barak 2005: 124). Suomessa ja Ruotsissa käsite on taas liittynyt lähinnä sukupuoleen ja maahanmuuttajiin (ks. Kalonaiyte 2010: 34). Esimerkit osoittavat, miten kulttuuri ja yhteiskunta vaikuttavat siihen, mitkä käsittepiirteet kulloinkin ovat käsitteen kannalta olennaisia, mikä puolestaan saattaa vaikuttaa myös aihepiirin ympärille syntyvän terminologian määrään ja laatuun.

Jos asia on yhteiskunnassa olennainen, sitä kuvaamaan tarvitaan usein monia termejä, joiden taustalla olevat käsitteet ovat eri tavoin suhteessa toisiinsa. Esimerkiksi monimuotoisuuden yhteydessä käytettyjä muita termejä on useita. Englannin kielessä monimuotoisuuden yhteydessä on käytetty muun muassa termiä *equity* kohtuuden ja oikeudenmukaisuuden merkityksessä, vaikka termillä on myös taloustermin status, jolloin se tarkoittaa osakepääomaa tai omaa pääomaa (IFRS-sanasto 2010). *Equity*-termiä käytetään muun muassa yritysten ja julkisyhteisöjen raporttien ja suunnitelmien nimissä. Esimerkiksi amerikkalaisilla yliopistoilla on verkkosivuillaan usein sekä *Equity and diversity (annual) report* että *Equity and diversity plan*, joilla pyritään antamaan yliopistosta kuvaa yhdenvertaisuutta kannattavana ja suunnitelmallisesti kehittävästä instituutiosta. Talouskielen kannalta on mielenkiintoista, että monimuotoisuusraporteista puhutaan vuosikertomuksen tapaisena raporttina, vaikka ne eivät ole virallisesti vuosikertomuksen osia, vaan korkeintaan Määtän (2000) mainitsemia liitteitä. Julkisyhteisöille tyypillisesti ilmiöön liittyy myös hallinnollisia rakenteita: amerikkalaisissa ja australialaisissa yliopistoissa (esim. University of Wisconsin, Madison; University of Sydney) on muun muassa aiheeseen liittyvät toimistot, komiteoita ja keskuksia (*Office for*

Equity and Diversity; Equity and Diversity Committees; Equity and Diversity Centre).

Toinen termi, joka usein esiintyy monimuotoisuudesta puhuttaessa on *equality* eli yhdenvertaisuus, joka on paitsi yleiskielen sana, myös erikoiskielen termin osa. Sana esiintyy termissä *equal opportunity* tai *equality of opportunity*, joka viittaa paitsi kansalaisten yhdenvertaisuuteen lain edessä myös sosiaalisiin oikeuksiin sukupuolesta, rodusta, uskonnosta tai kansallisuudesta riippumatta (ks. Sisäasiainministeriö 2010). Suomeksi käytetään termiä *yhdenvertaisuus*, joka löytyy muun muassa yhdenvertaisuuslain (21/2004) nimestä, mutta myös siihen liittyy oma käsiteperheensä, jota voidaan hahmottaa esimerkiksi lakitekstin kautta. Yhdenvertaisuuslain (Finlex 2010) 4 § mukaan

”Viranomaisten tulee kaikessa toiminnassaan edistää yhdenvertaisuutta tavoitteellisesti ja suunnitelmallisesti sekä vakiinnuttaa sellaiset hallinto- ja toimintatavat, joilla varmistetaan yhdenvertaisuuden edistäminen asioiden valmistelussa ja päätöksenteossa. Viranomaisten tulee erityisesti muuttaa niitä olosuhteita, jotka estävät yhdenvertaisuuden toteutumista. [...] Etnisen yhdenvertaisuuden edistämiseksi viranomaisten tulee laatia suunnitelma (yhdenvertaisuussuunnitelma) siinä laajuudessa kuin kunkin viranomaisen toiminnan luonne sitä vaatii.”

Lisäksi lain 5 § kieltää syrjinnän ”iän, etnisen tai kansallisen alkuperän, kansalaisuuden, kielen, uskonnon, vakaumuksen, mielipiteen, terveydentilan, vammaisuuden, sukupuolisen suuntautumisen tai muun henkilöön liittyvän syyn perusteella”. Laissa esiintyviä samaan käsiteperheeseen liittyviä termejä ovat muun muassa *samanlaisen kohtelun periaate*, *syrjintä* ja *positiivinen erityiskohtelu*.

Kolmas mielenkiintoinen käsiteperheen termi on *inclusion*, josta suomeksi puhutaan *yhteiskunnallisen osallisuuden* nimikkeen alla. Tämä termi vaikuttaa olevan ajankohtainen yhteiskunnallisessa keskustelussa, koska sille on olemassa varsin vakiintunut suomenkielinen vastine, *osallisuus*. Sitä käytetään kuntien verkkosivuilla erityisesti nuorison osallistumisesta yhteiskunnalliseen toimintaan (ks. esim. Oulun kaupunki 2010; Kuntatiedon keskus 2010). Lisäksi se näyttää olevan vakiintumassa englannin kielessä *equity*-termin tilalle käsitepariin *equity and diversity*, joka siis verkkohakujen perusteella (google) näyttää muuttuvan muotoon *inclusion and diversity*. Myös tämä käsitepari liitetään usein vuosikertomuksiin (*inclusion and diversity annual report*) ja siihen yhdistetään strategioita ja toimintasuunnitelmia eli talouskieleen liittyviä termejä.

4.1 Yhdenvertaisuudesta monimuotoisuuteen ja osallisuuteen tieteessä

Paitsi yhteiskunnallisessa keskustelussa ja arjessa monimuotoisuus on ollut myös tieteen tutkimuskohteena. Englanninkielisessä monimuotoisuuden tutkimuksessa tärkeä käsite on ollut *diversity management*, jolle on varsin hitaasti löytynyt suomenkielinen vastine. Lähinnä ilmiöstä käytetään termiä *monimuotoisuuden johtaminen* (Viitala 2007: 291).

Alan tutkimuksessa on erotettavissa useita tutkimussuuntauksia. Näistä tärkeimpiä on ollut liiketalouden, markkinoinnin ja rekrytoinnin näkökulma (esim. Cox & Blake 1991). Toisaalta tutkimus on kohdistunut myös monimuotoisuuden johtamisen kielelliseen ilmenemiseen, eli retoriikkaan mm. kriittisen diskurssianalyysin keinoin. Uudempaa tutkimusta taas edustaa suuntaus, joka keskittyy organisaatioiden käytäntöihin, joiden kautta luodaan ja ylläpidetään epätasa-arvoisuutta. (Ks. Kalonaiyte 2010: 33–34.) Tutkimus tuo siis käsitteeseen omat tarkastelunäkökulmansa, jotka nostavat esille tieteelliseltä kannalta tärkeitä käsittepiirteitä. Paitsi tieteen sisäinen logiikka, alan tutkimusta ohjaa alan käytäntö, jolloin siihen luonnollisesti vaikuttaa myös yhteiskunnan muutos.

Oswick (2010) on tutkinut käsitteiden 'diversity' (monimuotoisuus), 'equality' (yhdenvertaisuus) ja 'inclusion' (osallisuus) esiintymistä tieteellisissä artikkeleissa vuodesta 1970 vuoteen 2008. Aineisto on peräisin Social Science Citation Indexistä (SSCI), ja tarkastelu on tehty bibliometrisiä menetelmiä käyttäen. Oswickin tutkimus osoittaa, että nämä kolme aiheet ovat esiintyneet lähes 13 000 tieteellisessä artikkelissa tarkasteltuna ajanjaksona. Esimerkiksi monimuotoisuus (*diversity*) oli vuonna 1970 vain 35 tieteellisen artikkelin aiheena, kun vuonna 2008 artikkeleita aiheesta oli jo 491.

Yhdenvertaisuusaiheisten artikkelien määrä on pysynyt melko tasaisena, mutta 1990-luvun alussa tapahtui käänne, kun monimuotoisuus ohitti yhdenvertaisuuden tieteellisten artikkelien aiheena ja osallisuus lähti nousuun. Osallisuuden nousu on jatkunut 2000-luvulla niin, että sekin on vähitellen saavuttamassa yhdenvertaisuuden tieteellisten artikkelien aiheena. Toistaiseksi osallisuus siis esiintyy tieteellisten artikkelien aiheissa näistä kolmesta käsitteestä vähiten, mutta Oswickin (2010) mukaan sitä käytetään nykyisin runsaasti Yhdysvalloissa, jossa sen tausta on pikemminkin käytännössä kuin tieteellisessä kielenkäytössä. Yhdenvertaisuus artikkelien aiheena liittyy usein oikeustieteeseen (14,5 %), sosiologiaan (13 %) ja naistutkimukseen (10%), kun taas monimuotoisuus on taloustieteissä käytetty käsite.

Oswickin (2010) johtopäätös on, että tutkimusartikkelien aiheet heijastavat alan muotivirtauksia, joiden suunta näyttäisi olevan kuvion 2 mukainen. Lisäksi hän ennustaa, että tulossa on myös inclusion management, osallisuuden johtaminen, jota käsitteenä ei kuitenkaan vielä näy Oswickin aineistossa. Oswick viittaa myös Abrahamsonin ja Eisenmanin (2008: 741) johtopäätökseen, että kielelliset muutokset termien käytössä erottavat muotivirtauksia toisistaan. Abrahamsonin ja Eisenmanin (2008: 741–42) mukaan muotivirtaukset ovat enemmän kuin sanata-son ”keppihevosiä”, jolloin niillä on pitkäaikaisia ja monimuotoisia seurauksia. Näin esimerkiksi johtamisen erilaiset muotivirtaukset vaikuttavat ennen pitkää myös laskentatoimen käsitteisiin ja termeihin. Ehkä juuri tarve löytää jotain uutta ja osoittaa edistystä on kannustanut siirtymän yhdenvertaisuudesta monimuotoisuuteen ja edelleen osallisuuteen sekä alan käytännöissä että tutkimuksessa. Syn-tyy uutuuden ja edistyksen tunne, vaikka itse käsitteet eivät välttämättä muutu.



Kuvio 2. Käsitteet ’diversity’, ’equality’ ja ’inclusion’ tieteellisten artikkeleiden aiheissa

Myös laskentatoimen muotivirtauksista on viime aikoina keskusteltu alan lehdissä (esim. Malmi 2010). Tähän liittyen Scapens ja Bromwich (2010: 284) peräänkuuluttavat enemmän rohkeutta ja uusia avauksia alan julkaisemiseen:

”Some may decide to ’play it safe’ and work in the mainstream. [...] we would like to see further developments in current research, both in the mainstream and non-mainstream paradigms, but more particularly we would like to see developments which are creative and innovative – possibly in directions that we cannot anticipate at the present time. It is only in this way that we will be able to avoid the homogenization and narrowness which is claimed to be an increasing feature of mainstream accounting research.”

5 Lopuksi

Jäsennys ja käsitteiden nimitykset ovat merkityksellisiä. Ne vaikuttavat ei vain siihen, miten asia omaksutaan suhteessa olemassa oleviin tietorakenteisiin, vaan myös siihen, miten eri asiantiloihin suhtaudutaan. Laskentatoimen alan ytimen

muodostavat peruskäsitteet ovat pysyviä ja myös varsin objektiivisia siten, että niiden avulla yritysten taloudellista tulosta voidaan verrata. Yhteiskunnan muutokset tuovat mukanaan myös muita kuin puhtaasti taloudellisia arvoja, joita voidaan yhdistää talousraportointiin. Voidaankin kysyä, miksi jotkut yritykset liittävät vuosikertomuksiinsa esimerkiksi ympäristöraportteja, yhdenvertaisuusraportteja tai monimuotoisuusraportteja, vaikka niiden status on epävirallinen eikä lainsäädäntö vaadi niitä. Esimerkiksi KPGM:n kansainvälisessä vuosikertomuksessa vuodelta 2009 on laaja monimuotoisuusraportti, jossa korostetaan myös ympäristöarvoja, mutta yhtiön suomalaisessa vuosikertomuksessa tällaista sisältöä ei ainakaan vielä ole.

Suomessakin avautunee mielenkiintoinen uusi tilintarkastuksen tehtävä, jos monimuotoisuus liitetään myös numeerisiin arvoihin (ks. GRI 2010). Tilintarkastajan tehtävänähän on ennen kaikkea valvoa, onko tilinpäätös laadittu kirjanpitolain ja tilinpäätöksen laatimista koskevien muiden säännösten ja määräysten mukaisesti. Tässä suhteessa uudet raportit eivät vielä aiheuta toimenpiteitä, koska niistä ei ole määrätty laissa. Sen sijaan tilintarkastajan valvontatehtävä sen suhteen, antaako tilinpäätös kirjanpitolaissa tarkoitettulla tavalla oikeat ja riittävät tiedot yhteisön tai säätiön toiminnan tuloksesta ja taloudellisesta asemasta, saattaa muuttua nopeastikin. Tähän vaaditaan tilintarkastustoiminnassa uusi älyntyminen. Uusien raporttien suhteen tilintarkastajan tehtävänä on todentaa, onko kyse voittoa tuottavasta vai tappiota aiheuttavasta toiminnasta vai ehkä kenties pelkäästä pöpähäneestä tyhjäästä retoriikasta. Tilintarkastaja on siis ratkaisevassa asemassa, kun kielen kautta punnitaan, onko yrityksen arvojen ja todellisen toiminnan välillä epäsuhta.

Lähteet

ABC (2001). *Australian Broadcasting Company: Equity and Diversity Annual Report*.

Abrahamson, Eric & Eisenman, Micki (2008). Employee management techniques: Transient fads or trending fashions? *Administrative Science Quarterly* 53:4, 719–744.

Bodanis, David (2000). *E=mc 2*. Stockholm: Norstedts.

Cox, Taylor & Blake, Stacy (1991). Managing cultural diversity: Implications for organizational competitiveness. *Academy of Management Executive* 18:1, 25–34.

Dahl, Östen (2000). *Språkets enhet och mångfald*. Lund: Studentlitteratur.

Drozd, Lubomir & Seibicke, Wilfried (1973). *Deutsche Fach- und Wissenschaftssprache*. Wiesbaden: Oscar Brandstetter Verlag KG.

Finlex (2010). *Yhdenvertaisuuslaki* 20.1.2004/21. Saatavissa <http://www.finlex.fi/fi/laki/ajantasa/2004/20040021>.

Grandell, Axel (1972). *Redovisningens utvecklingshistoria*. Göteborg: Tidskrifts AB Företagsekonomi.

GRI (2010). *Global Reporting Initiative 2000–2006*. http://www.globalreporting.org/NR/rdonlyres/DB6C9DEA-E315-4466-9CDD-2946E717A3D9/4239/G3_Guidelines_FIN_Update_200510.pdf.

Hines, Ruth D. (1988). Financial Accounting: In Communicating Reality, We construct Reality. *Accounting Organizations and Society* 3, 251–261.

Hundt, Markus (1995). *Modellbildung in der Wirtschaftssprache. Zur Geschichte der Institutionen- und Theoriefachsprachen der Wirtschaft*. Reihe Germanistische Linguistik, 150. Tübingen: Max Niemeyer Verlag.

IFRS-Sanasto (2010). Tilisanomat. Saatavissa: <http://www.tilisanomat.fi/lehti/article.php?catid=4>.

Kalonaityte, Viktorija (2010). The Case of Vanishing Borders: Theorizing Diversity Management as Internal Border Control. *Organization* 17, 31–52.

Karlöf, Bengt (1990). *Yritystoiminnan avainsanat*. Helsinki: Weilin + Göös.

Kuntatiedon keskus (2010). Saatavissa: http://www.kunnat.net/k_peruslistasivu.asp?path=1;29;192;124767;124770.

Laine Matias (2009). *A Way of Seeing Corporate Sustainability Reporting*. Acta Universitatis Tamperensis; 1486. Tampere: Tampere University Press.

Laurén, Christer (1993). *Fackspråk. Form, innehåll och funktion*. Lund: Studentlitteratur.

Laurén, Christer & Nordman, Marianne (1987). *Från kunskapens frukt till Babels torn. En bok om fackspråk*. Stockholm: Liber.

Laurén, Christer & Wiklund, Raimo (1978). *Redovisningens terminologi*. Svensk-finsk-svensk. Keuruu: Otava.

Malmi, Teemu (2010). Reflections on paradigms in action in accounting research. *Management Accounting Research* 21:2, 121–123.

Manninen, Ari (1992). *Laskentatoimen todellisuusnäkökulma. Teoreettista kehitystä ja empiiristä koettelua*. Jyväskylän yliopisto. Taloustieteen laitoksen julkaisuja.

Mor Barak, Michaelle E. (2005). *Managing Diversity. Toward a Globally Inclusive Workplace*. USA: Sage Publication.

Määttä, Seppo (2000). *True and fair view – Ajatuksia oikeista ja riittävästä tiedoista ja kuvasta erityisesti Suomessa käydyin keskustelun valossa*. Series Discussion and Working Papers 2:2000. Turun Kauppakorkeakoulun julkaisuja 2.

Nissilä, Niina (2008). *Begrepp och termer inom området balansräkning. Teoretisk utveckling och empirisk förankring*. Acta Wasaensia No 189, Språkvetenskap 36. Vaasan yliopisto.

Näsi, Salme (2006). *Laskentatoimi muutoksessa ja liiketoimintaosaamisessa, saatavilla:*
http://www.edu.fi/instancedata/prime_product_julkaisu/oph/embeds/116235_liike-toimintaosaaminen_nasi.pdf

Oswick, Cliff (forthcoming, 2011). The Social Construction of Diversity, Equality and Inclusion: *An Exploration of Academic and Public Discourses*. In G. Healy, G. Kirton & M. Noon (Eds), *Equality, Inequalities and Diversity: From Global to Local*. Palgrave: London.

Oulun kaupunki (2010). <http://www.ouka.fi/nuoriso/osallisuus/index.html>.

Pihlanto, Pekka (1996). *Tieto laskentainformaation tuottajan ja hyväksikäyttäjän tajunnan ilmiönä*. Turun Kauppakorkeakoulun julkaisuja. Sarja A-8.

Puskala, Jaana (2003). *Fackkommunikativ kompetens, i synnerhet textuell. Finsk- och svenskspråkiga ekonomie studerande informerar på svenska om ett företagsförvärv*. Acta Wasaensia No 116, Språkvetenskap 24. Vaasan yliopisto.

Rapola, Martti (1947). *Kieli elää. Pakinoita ja tutkielmia*. Porvoo, Helsinki: Werner Söderström Osakeyhtiö.

Riistama, Veijo (1971). Laskentatoimen hyväksikäytöstä. *Liiketaloudellinen aikakauskirja II*, 209–223.

Scapens, Robert W. & Bromwich, Michael (2010). Management Accounting Research: 20 years on. *Management Accounting Research* 21:4, 278–284.

Sippola, Aulikki (2007). *Essays on Human Resource Management. Perspectives on Diversity Management*. Acta Wasaensia 180. University of Vaasa. Vaasa: Juvenes Print.

Suhonen, Sirpa (2010) Kelan terveystermit. *Terminfo* 3, 6–8.

Sisäasiainministeriö (2010) *Yhdenvertaisuus etusijalle -hanke*, saatavilla: www.yhdenvertaisuus.fi.

Viitala, Riitta (2007). *Henkilöstöjohtaminen: strateginen kilpailutekijä*. Helsinki: Edita.

Virtanen, Aila (2007a). Laskentatoimi ja moraali – Onko niillä jotain yhteyttä keskenään? *Electronic Journal of Business Ethics and Organization Studies* 12:2, saatavilla: http://ejbo.jyu.fi/articles/0701_5.html.

Virtanen, Aila (2007b). Laskentatoimen maailmankuvan laajeneminen. Laskentatoimi heijastelee yhteiskunnan arvojen muutosta. *Electronic Journal of Business Ethics and Organization Studies*, 12:2, saatavilla: http://ejbo.jyu.fi/articles/0401_5.html.

VAPAA-AJAN KULUTUS

Kokemukselliset aikakäsitykset hevosharrastuksessa

Pirjo Laaksonen

Department of Marketing, University of Vaasa

Henna Jyrinki

Department of Marketing, University of Vaasa

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Laaksonen, Pirjo & Jyrinki, Henna (2011). Vapaa-ajan kulutus – kokemukselliset aikakäsitykset hevosharrastuksessa. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 105–117. Eds Annukka Jokipii & Johanna Miettinen.

The article addresses time as an object of consumption, specifically time consumption within free time, and with particular reference to that of horse enthusiasts. The article investigates how horse enthusiasts structure their consumption of time. The data was generated through focus groups, whose input was supplemented by the use of pictorial collages. The findings reveal the prior understanding of time concepts as they emerge through balancing. In *mechanical time*, enthusiasm for horses both takes time and is given time; *natural time* was organized between time enjoyed and time endured; and *social time* featured time spent and time killed. Further, a fourth dimension arose, the *time of engrossing*, when the balancing was between time devoted and timeless time. These four dimensions fit into a theoretical model based on the realm of experiential time consumption. In this model, the four time dimensions were also interlinked. When mechanical and social time intertwined, what can be termed *slow-life* becomes highlighted. On the other hand, when natural time and engrossing time become connected, it is possible to have a *flow* experience. In conclusion, it is suggested that, paradoxically, time becomes most important when its consumption is not noticed.

Keywords: Ajan kulutus, kokemuksellinen kulutus, ryhmäkeskustelut, vapaa-aika, hevosharrastus

1 Johdanto

Vapaa-aika on yhä merkittävämpi kulutuskohde tämän päivän Suomessa. Kelan ja kulutustutkimuskeskuksen vastikään julkaisemassa tutkimuksessa kävi ilmi, että lapsiperheissä rahaa käytetään eniten liikenteeseen, vaatteisiin ja vapaa-aikaan. Vapaa-aika näyttäytyikin uutena *välttämättömänä* kulutuskohdeena, perinteisten

välttämättömyyksien rinnalla. (Niemelä & Raijas 2010.) Tilastokeskuksen kansantalouden tilinpidon (2006) mukaan onkin laskettavissa, että kun vapaa-ajan kulutuksen osuus 1900-luvun alussa oli 1,8 prosenttia, se on nykypäivänä noussut yli 11 prosenttiin.

Vapaa-aika muodostaa erityislaatuisen kulutuskohteen siinä mielessä, että kuluttaessa vapaa-aikaa ei kuluteta pelkästään rahaa, vaan myös aikaa. "Aika on rahaa", sanotaan, ajatellen, että ajan käyttö pitäisi keskittää rahan tekemiseen tai että ansaitsemalla rahaa, ansaitaan vapaa-aikaa. Toisinaan vaikuttaakin siltä, että nykyisessä kulutuskulttuurissa ajasta muodostuu jopa rahaa kriittisempi resurssi. Puhutaan esimerkiksi monenmoisista harrasteista, joita tehtäisiin, jos vain olisi aikaa tai esitetään toiveita "omasta ajasta". Kun viime vuosituhannen loppupuolella kiire ja tapahtumia täysi kalenteri viesti juppistatusta, ja kiireen täyttämän elämäntavan tarpeita vastaamaan nousi pikaruokaloita ja pikapesuloita, vaikuttaa statusta nykyään tuottavan pikemminkin rauha ja hitaus, se, että on varaa nauttia ja viettää aikaa haluamallaan tavalla. Samasta kertoo se, että esimerkiksi syöminen ja ruoanlaitto ovat tämänpäivän trendejä, erityisesti hitaasti ja nauttien [ns. "slow-food"]. Kokonaisvaltaisemmin koko elämänkirjoa leppoistetaan Suomeenkin ranta-tuoneessa, niin sanotussa "downshifting":ssä. Leppoistajien ajankäytössä painottuu materiaalisen hyvinvoinnin tavoittelun sijaan merkitykselliseksi koetun elämän etsiminen (Cherrier 2002). Tällaiset ilmiöt kertovat juuri ajan kuluttamisen tärkeydestä nykyisessä kulutusyhteiskunnassa.

Käsillä olevassa tutkimuksessa keskustellaan ajasta kulutuskohteena erityisesti vapaa-ajan kuluttamisen kentässä vieden tämä teoreettinen keskustelu hevosharrastajien kontekstiin. Tutkimuksessa selvitetään sitä, *miten ajan kuluttaminen jäsentyy hevosharrastuksen parissa*. Teoreettisessa osiossa pohditaan sitä, millainen aika on kulutuskohteena; millaisia käsityksiä ajasta on löydettävissä aikaisemmasta tutkimuksesta. Tutkimuksen metodologia on toteutettu laadullisina ryhmäkeskusteluina, joiden aikana osallistujat kokosivat kuvakollaasit. Löydöksissä tarkastellaan sekä aikaisemman tutkimuksen aikakäsityksiä hevosharrastajien parissa että tutkimuksen aineistosta nousevia tulkintoja. Tutkimuksen lopuksi luodaan teoreettinen malli siitä, kuinka aikakäsitykset hevosharrastuksen parissa voidaan nähdä kokemuksellisesti jäsentyneenä.

2 Aikakäsitykset aikaisemmassa tutkimuksessa

Aikaisempi kuluttajakäyttäytymisen tutkimus on tunnistanut, vaikkakin hämmästyttävän vähäisesti, ajan ja sen määreet mielenkiintoiseksi kuluttamisen kentäksi. Aikaisemmassa tutkimuksessa on muun muassa eroteltu erilaisia ajan luokitteluja.

Grønmo (1989) on nähnyt kolme erilaista aikakäsitystä. Ensinnäkin, *mekaaninen* aika tarkoittaa objektiivista kelloin ja kalenterein mitattavissa olevaa aikaa. Mekaaninen aika on myös lineaarinen käsitys ajasta ja se on laajasti standardoitu yli valtiorajojen. Tästä näkökulmasta katsottuna aika on määrällinen resurssi, jota voidaan jakaa rahan tapaan (Hirschman 1987). Tällöin "ajan säästäminen" voidaan ymmärtää ajan uudelleenjakamisena siten, että vaihtoehtoisia toimia ja tehtäviä punnitessa painotetaan rationaalisia ja nopeutta suosivia valintoja. Toiseksi, *luonnollinen* aika sen sijaan perustuu luonnon rytmien ja vaihtelujen muutoksiin, kuten päivän ja yön sekä vuodenaikojen vaihtumisiin (Grønmo 1989).

Kolmas Grønmon (1989) erittelemä aikakäsitys on *sosiaalinen* aika, joka voidaan ymmärtää suhteessa inhimilliseen toimintaan ja sosiaalisiin prosesseihin. Tämän mukaan aika voidaan kokea verrannollisena omiin toimiin ja kanssakäymiseen muiden kanssa tai suhteessa tapahtumiin sosiaalisessa ympäristössä tai laajemmin yhteiskunnassa ja kulttuurissa. Niinpä, sosiaalinen aikakäsitys saattaa sisältää suuriakin vaihteluja eri yhteiskunnissa, ihmisryhmissä tai yksilöiden välillä, se onkin varsin subjektiivinen käsitys ajasta (Grønmo 1989). Sosiaalista aikaa voidaan luokitella sen mukaan suuntautuuko ajankäyttö itseen vai muihin, puhutaanko "ajasta itselle" vai "ajasta muille / muiden kanssa" (Cotte & Ratneswar 2003).

Lisäksi sosiaaliset suhteet, erityisesti vallitseva kulttuuri vaikuttaa yksilön kokeemukseen kronologisesta ajasta ja ajan kulumisesta, siihen kuinka yksilö havainnoi menneisyyttä, nykyisyyttä ja tulevaisuutta (Graham 1981). Tällä tarkoitetaan sitä, millaisen painoarvon menneisyys, nykyisyys ja tulevaisuus saavat ajattelussa ja kuinka ne ohjaavat tulkintoja ja toimintaa. Onkin merkillepantavaa, että subjektiivisessa aikakäsityksessä painottuu moniulotteisuus, kokemus linkittyy paitsi aikaan, myös paikkaan ja toimiin kussakin kulutustapahtumassa (Laaksonen, Huuhka & Seppälä 2005).

Kuinka nämä erilaiset aikakäsitykset sitten tulevat esiin, kun vapaa-aika on kulutuksen kohteena? Miten erityisesti hevosharrastus jäsentää ajan kulutusta? Hevosharrastus valittiin tutkimuksen kontekstiksi, koska se mahdollistaa laajan kirjon erilaisia harrastajia. Harrastajien joukossa on omaa viihtymistään, hauskanpitoa ja *ajankulua* painottavia harrastajia [ns. casual leisure] ja toisessa ääripäässä tavoitteellisia, vakavammin lajiin suhtautuvia harrastajia, jotka väistämättä käyttävät paljon aikaa harrastukseensa [ms. serious leisure]. Vakavan harrastamisen Stebbins (2001: 54) on määritellyt toiminnaksi, jonka erityispiirteinä ovat syvällisyys, pitkäkestoisuus sekä perustuminen runsaaseen taitoon, tietoon ja kokemukseen.

3 Ryhmäkeskustelut ja kuvakollaasit metodologiana

Artikkelin aineisto kerättiin ryhmäkeskusteluina, joiden kuluessa osallistujat rakensivat kuvakollaasit. Yleensä ottaen voidaan sanoa, että aiheet, joista ihmisten on luonnollista puhua muiden seurassa, sopivat ryhmäkeskusteluun (mm. Macnaghten & Myers 2004: 65). Ryhmäkeskustelut yhdistettynä tällaiseen visuaaliseen ja metaforiseen menetelmään onkin aikaisemmin todettu toimivan, kunhan tutkimusaihe ei ole liian intiimi (Laaksonen, Laaksonen, Borisov & Halkoaho 2006).

Ryhmäkeskustelut etenivät kahdessa vaiheessa, jotka kummatkin alkoivat sillä, että osallistujat leikkasivat ja liimasivat kuvia kuvakollaaseihinsa. Ensimmäisessä vaiheessa osallistujia pyydettiin liittämään kollaaseihinsa kuvia, joiden he näkivät kuvaavan sitä, millaisia merkityksiä he hevosensa liittivät. Osallistujille annettiin etukäteen valittu nippu kuvia, joista he poimivat mieleisensä. Kuvat oli valittu sen perusteella, millaisia merkityksiä aikaisemman tutkimuksen (mm. Beck & Katcher 1983; Belk 1996; Hirschman 1994) mukaan on todettu kuluttajien liittävän lemmikkeihinsä (esimerkiksi ystävä, status symboli ja minän laajentuma). Vastajat joutuivat käyttämään kuvia metaforisessa merkityksessä, koska kuvissa esiintyi melkein mitä vaan, paitsi hevosia sinänsä. Tämä osa keskustelua seuraili löysästi ZMET-menetelmää (Zaltman Metaphor Elicitation Technique) (esim. Zaltman 1997).

Keskustelujen toisessa vaiheessa osallistujia pyydettiin liittämään kollaaseihinsa kuvia tuotteista, joita hevosharrastajat ostivat ja/tai käyttivät hevosilleen tai itselleen hevosharrastuksen parissa. Tuotekuvat käsittivät mm. laajan valikoiman erilaisia riimuja ja riimunvarsia, loimia, tallivaatteita ihmisille ja herkkuja hevosille. Kuvien liimaamisen jälkeen keskusteltiin mm. siitä, miten erilaisiin tuotevalintoihin on päädytty, miten ja millaisissa tilanteissa tuotteita käytetään ja millaisia etuja ja haittoja niihin liittyy. Lisäksi puhuttiin kuvista, joita osallistujat eivät olleet valinneet kollaaseihinsa, miksi niitä ei valittu ja millaiset ihmiset näitä tuotteita käyttäisivät. On huomattava, että ryhmäkeskustelijoita ei missään vaiheessa pyydetty puhumaan ajasta tai ajankäytöstään harrastuksen parissa, vaan tämä puhe on ryhmäkeskustelijoiden omasta aloitteesta esiinnoussutta dataa.

Keskusteluryhmiä oli kaksi. Ensimmäinen ryhmä koostui hevosharrastajista ja toinen ryhmä ihmisistä, joiden ystävä tai sukulainen omistaa hevosen tai harrastaa hevosia. Tämän valinnan taustalla oli halu tavoittaa ikään kuin ulkopuolista näkemystä hevosharrastuksesta. Valittaessa ryhmäkeskusteluun osallistujia pyrittiin ”teoreettiseen otokseen” (Macnaghten & Myers 2004: 68) eli ajatuksena oli löytää keskustelijoita, jotka edustaisivat tutkittavan asian kannalta mahdollisimman monipuolista jakaumaa. Niinpä osallistujien taustat ja kokemukset hevosharrastuksen

suhteen vaihtelivat, ryhmäkeskustelussa oli esimerkiksi ratsastuksen ja raviurheilun harrastajia. Kuitenkin, toimiakseen hyvin ryhmäkeskusteluun osallistujilla tulee olla jotain yhteistä keskenään (Macnaghten & Myers 2004: 67) ja tässä tapauksessa heitä yhdisti erityisesti sosio-demografiset taustatekijät, kaikki haastateltavat olivat kuluttajakäyttäjien kurssille osallistuvia yliopisto-opiskelijoita. Kummassakin ryhmässä oli 5–7 osallistujaa, ja ryhmissä oli sekä miehiä että naisia. Kaikki osallistujat olivat iältään 20–28-vuotiaita, lukuun ottamatta yhtä, joka oli 42-vuotias. Toinen kirjoittajista toimi vetäjänä ryhmäkeskusteluissa. Ryhmäkeskustelun nauhoitettu keskustelu-aika vaihteli 50 minuutista 1,5 tuntiin. Ryhmäkeskustelunauhoitukset purettiin sana sanalta ja aineisto siirrettiin NVivo-tietokoneohjelmaan.

4 Aikakäsitykset hevosharrastuksen jäsentämänä

Ryhmäkeskusteluaineistoa analysoitaessa nousi esiin varsin rikkaasti puhetta erilaisista aikakäsityksistä. Voidaankin sanoa, että aika sinänsä oli yksi tavallisimmista esiinnoitettavista teemoista; jokainen ryhmäkeskustelija puhui siitä jossain vaiheessa. Mielenkiintoista oli, että aikakäsityksissä sekoittuivat monenlaiset, usein jopa vastakkaiset tai ainakin ristiriitaiset merkitykset.

4.1 Mekaaninen aika: vie aikaa – antaa aikaa

Kaikesta aikapuheesta tavallisinta oli se, että ryhmäkeskustelijat ottivat esiin sen, kuinka paljon hevosharrastus *vie aikaa* tai kuinka paljon siihen *kuluu aikaa*. Mekaaninen, kelloin määriteltävä aika vaikutti olevan yksi hevosharrastuksen itsensänselvyyksistä.

"Sitten täällä kulmassa enemmän on sitä, että semmosta tietenkin, että vie hirveesti aikaa. Nytkin just viime lauantaina mentiin kahdeltatoista tallille ja tultiin kuudelta pois. Täytyy vaan käydä niin sanotusti vähän aikaa, ei ollu tarkoitus koko päivää...(Anne)"

Toisaalta puhuttiin myös siitä, kuinka *hevosille ja harrastukselle annettiin aikaa*. Ajan antaminen ja ajan uhraaminen olivat useimmiten kiintymyksen osoituksia. Koska hevoset ovat rakkaita, niille halutaan antaa aikaa.

"Noin nallet kuvastaa sitten sitä, että ne on semmosia vähän niin kuin mun nalleja siellä, hevoset. Kauheen tärkeitä ja niihin on kyllä paljon aikaa uhrattu. (Saija)"

Mekaaninen aika vaikutti jäsenyvän **toiminnan** ja tekemisen kautta. Kellolla mitattiin vaikkapa kauanko tallilla oli touhuttu. Myös ajan antaminen kiinnittyi toiminnan, esimerkiksi hevosten hoitamisen, kautta kiintymykseen.

4.2 *Luonnollinen aika: nautittu aika – kestetty aika*

Luonnollisesta ajasta puhuttiin paljon, tällöin keskustelijat nostivat luonnonaikojen ja vuorokauden aikojen vaihtelut esiin. Tällöin tuli ilmi se, kuinka luonnollisen ajan vaihtelut vaikuttivat siihen, miten luonto ja maisemat koetaan eri aikoina. Oli tavallista, että vaikkapa maastoratsastusta kuvattiin useamman vuodenajan kautta ja kuvakollaaseissa oli erilaisina aikoina otettuja luontokuvia. Luonto ja luonnolliset ajanvaihtelut vaikuttivat mahdollistavan *nautinnollisen* harrastamisen erilaisissa maisemissa ja eri säissä. Luonnollinen aika sisälsi myös "pehmeitä" arvoja, jopa idealistisia kokemuksia esimerkiksi vapaudesta sekä puhetta hyvästä mielestä, rauhasta ja hiljaisuudesta, jota kokee vain hevosen kanssa erilaisissa luonnon ajoissa.

"Sitten tuolla on vielä tuo purjehtiminen, niin mun mielestä ratsastaminen jossain kauniissa maastossa ja kun on ihan hiljaista, niin se on melkein niin kuin olis purjehtimassa keskellä merta. Siinä on sama rauha. (Anne)"

Paitsi että luonto tarjosi mahdollisuuden nautinnollisiin hetkiin, myös luonnon aikojen tuomat haasteet nousivat esiin puheessa. Keskustelijat puhuivat vaikkapa kesästä ja karpäsistä tai talven kylmyydestä, joka vain *kestettiin*, koska into harrastamiseen on niin kova. Kulloiseenkin luonnon aikaan tuntui siis liittyvän myös negatiivisia puolia.

"Tosta talvikuvasta tuli mieleen taas lapsuusmuistoja, että kun reellä mentiin isän kanssa ja isä kysyi onko sun kylmä. Ja ei ollu yhtään kylmä, vaikka jalat ja kädet oli niin jäässä, ettei varpaat taipuneet enää minnekään. Semmosia tuntemuksia tuli. Ei voinu sanoa, kun sitten olis menty heti kotia, jos olis sanonu. (Kati)"

Luonnollinen aika näyttäisikin jäsenyvän **aistimusten** kautta. Luonnon luomat ajat koettiin kauniina ja rauhoittavana tai luonnon aikojen tuomat haasteet kestiin "käsinkosketeltavasti", kuten edellä kuvataan varsin värikkäästi.

4.3 *Sosiaalinen aika: viettää aikaa – tappaa aikaa*

Sosiaalinen aika oli *ajanviettoa* muiden samankaltaisten kanssa; yhteisöllisyys kietoutui tiiviisti aikaan talleilla. Tallikavereiden kuvailtiin olevan "ihan oman-

laisiaan" ja tallihengestä ja tallihierarkiasta puhuttiin myös. Hevosharrastus yhdisti muihin samanhenkisiin, heidän kanssaan vietettiin aikaa.

"...tää kuvastaa mun tallikavereita, että siellä tallilla on yleensä ollu ihan omat kaverit ja sitten niinku on vieläkin muutamia sellaisia kavereita, jotka on ihan siitä asti, kun alkanu joskus pienenä käymään tallilla. Siitä asti on niinku vielä, sitten tota, säilyny. (Saija)"

Toisinaan vain hevonen oli se, jonka kanssa aikaa vietettiin. Hevonen saattoi rinnastua kumppaniin.

"Ei tarvitte buranaa ottaa kun lähtee lenkille ja nauttii luonnon helmassa siitä, että vaan saa olla kahdestaan hevosen kanssa. Ja sitte joskus mää kävelen hevosen mukana siinä, niin tulee ittekin lenkkeilyä. Ja tää keskikuva kuvastaa just sitä lenkillä käyntiä. Kauniit maisemat ja leppoosaa yhdessäoloa. (Kati)"

Talleilla ja hevosharrastuksen parissa saatettiin myös tappaa aikaa, tekemättä välttämättä mitään erityistä.

"Nykyään on tärkeintä sellainen, että saa niinku olla hevosten kanssa. Kun joskus joitakin vuosia sitten, niin oli lähinnä tärkeintä, kunhan pääsee ratsastaan. (Saija)"

Sosiaalinen aika näyttäisikin jäsentyvän "ajassa **olemisen**" kautta. Tällöin harrastamisen keskiöön nousee se, että talleilla ja siinä ajassa saa yksinkertaisesti "vain olla". Toisinaan ajassa oleminen saa sisällökseen ajan viettämisen talleilla, toisinaan aikaa vain kulutetaan talleilla.

4.4 Syventymisen aika: panostaa aikaa – ajatonta aikaa

Aikaisemmassa tutkimuksessa löydettyjen aikakäsitysten lisäksi aineistosta nousi neljäs ulottuvuus, jossa painottui ensinnäkin se, kuinka harrastukseen panostettiin aikaa. Osa harrastajista puhui erityisesti omasta kehittymisestään ratsastajana, joukossa vaikutti olevan tavoiteorientoituneempia harrastajia, jotka tähtäävät kilpailuihin ja omien taitojensa kehittymiseen.

"Ja että siinä on joku järki siinä koko touhussa, että mentäis jotenkin eteenpäin, ehkä mua ainakin kauheesti kiehtois semmonen, että oppis kouluratsastusta vähän enemmän. (Anne)"

Toisaalta aika talleilla ja harrastuksen parissa tuntui välillä nielaisevan otteeseensa, hetkinä, jolloin aika ikään kuin menetti merkityksensä.

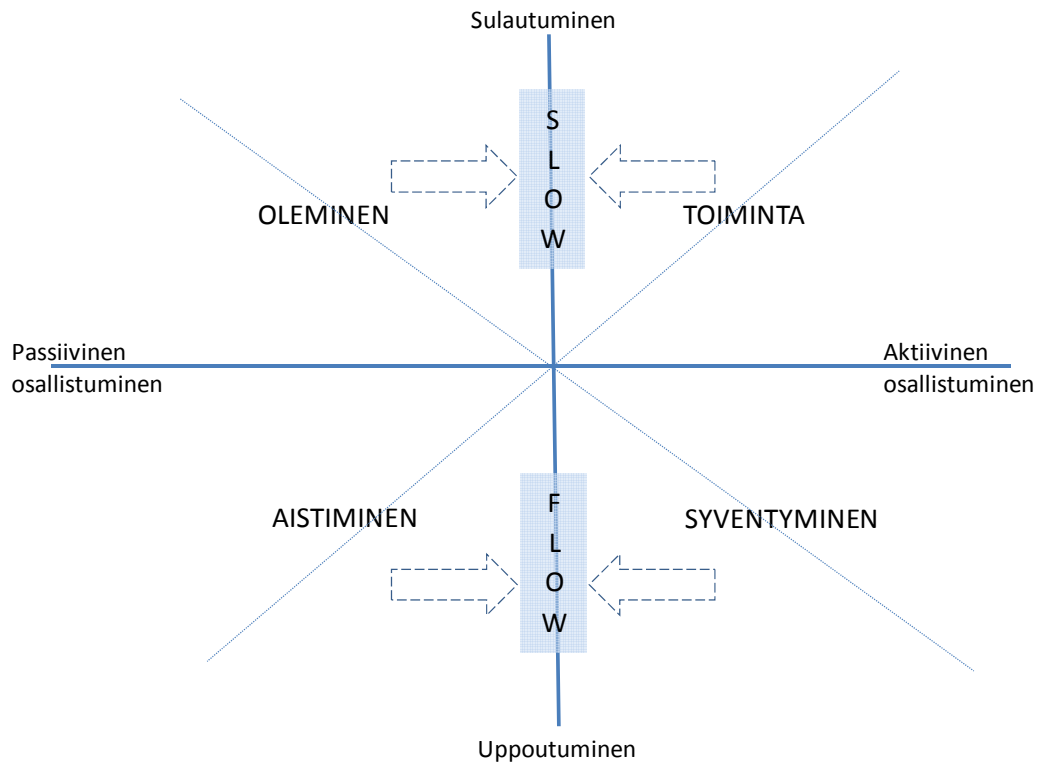
"Sitten tää on ehkä semmosta, kuinka paljon sellaista onnistumisen riemua ja sit kun kehittyy niin se on, ne ei oo kauheen usein tapahtuvia, mutta kyllä se on ehkä sitäkin palkitsevampaa, se ilo siitä. (Anne)"

Ajan mukanaan vieminen tuli esiin varsinkin silloin, kun harrastajat kokivat onnistumisen hetkiä; siksi neljännen ulottavuuden nimeksi sopii hyvin **syventymisen** aika.

5 Hevosharrastus kokemuksellisina aikakäsityksinä

Länsimaisia kulutusyhteiskuntia kutsutaan nykyään usein elämystalouksiksi [experience economy]. Tämä juontaa juurensa ajatteluun, jossa nähdään että elämyksiä ja kokemuksia pidetään kuluttajakäyttäytymisen ymmärtämisen kulmakivinä, merkittävimpana markkinointitarjouksien laatimiskeinona ja jopa kulutusyhteiskunnan perustana (Pine & Gilmore 1998, 1999; Schmitt 1999). Ahola (2005: 91) argumentoi, että sanat elämys ja kokemus ovat yhä tavallisempia myös arkisessa kielenkäytössämme, kuvailimme pa sitten edellisen viikonlopun tapahtumia tai harrastustamme. Onkin nähty, että elämystoiminnan kenttä muodostuu arjen estetikän toimista kuten ostoksilla ja ulkona käymisestä, konserteista, syömisestä, juomisesta, lukemisesta ja urheilusta. Myös lemmikkieläimet nähdään kiistatta elämyskulutukseen kuuluviksi. (Alanen 2007.) Lemmikkien onkin nähty kiinnittävän erilaisiin, vaikkapa kokemuksia tarjoaviin vapaa-ajan harrastuksiin varsin monitahoisesti (Jyrinki & Leipämaa-Leskinen 2006). Niinpä on perusteltua, että hevosharrastuksen ajankäyttöä, sen linkittyessä sekä urheiluun että elämiin, voidaan tarkastella kokemuksellisen kuluttamisen viitekehyksen lävitse.

Ehkä tunnetuimman kokemuksellisen ajankulutuksen viitekehyksen ovat laatineet Pine & Gilmore (1998, 1999), jonka avulla he ovat kuvanneet erilaisten kokemusten piirin ja erotelleet ne "tavallisista" tuotteista ja palveluista. Vastaavanlaista kahdelle akselille rakentuvaa elämysten erottelua on käyttänyt myös muun maussa Deighton (1992) kuvatessaan suoritusten [performance] kuluttamista. Kummassakin viitekehysessä jaottelun vaaka-akselille sijoitetaan kuluttajan rooli, jolloin toisessa ääripäässä kuluttaja on aktiivinen ja toisessa passiivinen osallistuja. pystyakselille Pine & Gilmore (1998, 1999) asettavat yhteyden tai suhteen ympäristöön, joka voi yhtäältä olla sulautumista ja toisaalta uppoutumista. Sulautuminen tarkoittaa esimerkiksi teatteriesityksestä nauttimista katsomosta käsin, kun taas uppoutuminen viittaa teatteriesitykseen osallistumiseen. Poiketen aikaisemmasta tutkimuksesta, viitekehystä ei tässä artikkelissa käytetä erilaisten kokemusten erottelemiseen, vaan analysoimaan miten hevosharrastajien ajankäyttö rakentuu kokemuksellisena ilmiönä saman harrastuksen sisällä. Tätä on hahmoteltu kuviossa 1.



Kuvio 1. Hevosharrastajien ajankäyttö kokemuksellisesti jäsentyneenä.

Kuten tutkimuksen löydöksistä kävi ilmi, hevosharrastajien ajankäyttö vaikutti usein olevan tasapainoilua. Kussakin aikakäsityksessä tuli esiin toisaalta positiivisia toisaalta negatiivisia sisältöjä ajalle. Niinpä kuviossakin on jaettu kukin nelikentästä kahteen kuvaamaan tätä ajan jäsenyyksien kahtiajakautunutta tasapainottelua.

Ensinnäkin mekaanisen ajan kahtiajakautuneisuus tuli ilmi siinä, että toisaalta harrastuksen nähtiin vievän aikaa, ja toisaalta sille haluttiin antaa aikaa. Kaiken kaikkiaan mekaaninen aika jäsenyi *toiminnan* kautta. Toiminta oli aktiivista osallistumista, kuitenkin siihen täysin uppoutumatta. Tällaisina toimina esiintyivät vaikkapa tallityöt, joihin kyllä otetaan aktiivisesti osaa, mutta ne tuskin "nielaisivat" tekijänsä mukanaan, esimerkiksi Hanna kuvaa tallitöitä varsin raadollisesti kiinnittäen ne mekaaniseen kellolla mitattavaan aikaan: "Määkin oon ollu aika paljon tallilla töissä, että sää heräät kuudelta ja meet luomaan paskaa sinne."

Toiseksi sosiaalinen aika jäsenyi ajassa *olemisen* kautta. Ajassa oleminen sai tasapainottelun kohteekseen ajan viettämisen ja ajan tappamisen, jotka kummatkin olivat passiivisempaa kuin esimerkiksi mekaaniseen aikaan kiinnittynyt teke-

minen. Olemisen sisältönä oli sulautuminen, sosiaalisessa ajassa "vain oltiin". Tällöin puhuttiin esimerkiksi leppoista muistoista tai ohikiitävistäkin tuokioista, joita talleilla on koettu, Anne kuvailee niitä näin: "kyllähän se on semmosia tiettyjä välähdyksiä jossain kesäleirillä tai joissakin just, että ollaan jäällä päästy laukaamaan kunnolla."

Näiden kahden aikakäsityksen linkittyessä näyttäisi rakentuvan tärkeäksi nimenomaan se, että toiminnan kautta ajassa olemisesta tulee merkityksellistä. Ajassa ollaan tekemällä mielekkäitä toimia. Tämä nostaa mielenkiintoiseksi vertailukohdaksi ajatusleikkiin nykyään vallalla olevan hitaan elämän tavoittelun [slow]. Niin sanotut leppoistajat pyrkivät poistamaan elämästään kiireen täyttämän kulusorientoituneen materian tavoittelun ja keskittämään aikansa ja tekemisensä merkityksellisiksi kokemiinsa toimiin (Cherrier 2002). Tällöin juuri ajassa olemisen ja tekeminen nousevat merkityksellisiksi vieden paradoksaalisesti itse kuluttamisen keskiöön. Olemalla ja tekemällä kussakin hetkessä, juuri kulutetaan, vaikkapa rauhaisalla maastolenkillä hevosen kanssa. Tällöin ei ole niin tärkeää se mitä kulutetaan, vaan kuluttaminen toimintana rakentuu olemisen sisällöksi.

Kolmanneksi luonnollinen aika, ikään kuin vastakkaisena mekaaniselle ajalle, jäsenyi *aistimisen* kautta. Luonnon ajan vaihtelut tarjoavat mahdollisuuden nauttia tai haasteen kestää, kuitenkin suhteellisen passiivisesti, hevosharrastuksen mukanaan tuomat kokemukset. Luonnon eri aikojen tarjoamat elämykset saattavat myös viedä mukanaan, kokemiseen voi uppoutua täysillä kaikilla aisteilla, kokien vaikkapa vapauden huumaavaa tunnetta: "Sitten täällä kans nämä maastokuvat, että sellainen vapaus, saa tehdä melkein mitä vaan ja nauttia. (Anna)"

Neljänneksi tutkimuksen aineistosta nousi esiin *syventymisen* aika, joka kiinnittyi aktiiviseen osallistumiseen ja uppoutumiseen. Kahtiajakautuminen tulee esiin siinä, että syventyminen vaatii ajan panostamista harrastamiseen ja omaan kehittymiseen, aktiivista uppoutumista, ja toisaalta sen tuotoksena on mahdollista syntyä oppimisen ja syventymisen kautta palkitsevia ajattoman ajan kokemuksia: "se on niin täyspainoinen, että siihen menee koko sydämellään mukaan. Siinä unohdetaan kaikki arjen murheet", kertoi Anna.

Aistimisen ja syventymisen, uppoutumisen, kautta hevosharrastamiseen rakentui hyvin intensiivisiä flow-kokemuksen kaltaisia hetkiä, jotka nielaisivat mukaansa. Sellaisissa hetkissä aika ikään kuin menettää merkityksensä, ajantaju katoaa, kun aikaan uppoudutaan. Näinä hetkinä ihmisen onkin kuvailtu olevan kaikkein onnellisimmillaan (Csikszentmihalyi 1990). Csikszentmihalyi:n (1990) mukaan optimaalinen flow-kokemus syntyy, kun ihmisen taidot vastaavat käsillä olevaa haastetta ja hän on kiinnostuneesti, keskittyneesti ja tavoitteellisesti paneutunut käsillä olevaan aktiviteettiin sulkien kaiken muun pois mielestään. Tämä kuvas-

taakin erityisesti kokemuksia, jolloin halu kehittyä ja oppia lisää, vaatii myös työntekoa ja sitkeää puurtamista. Mielenkiintoista onkin, että hevosharrastuksessa käsitykset vapaa-ajasta ja työstä sekoittuivat monella tavalla. Aikaisemmassa tutkimuksessa on keskusteltu työn ja vapaa-ajan eronteosta, erityisesti ns. vakavan harrastamisen piirissä. Populaaristi ajatellenhan työ ja vapaa-aika rakentuisivat toistensa vastakohtiksi, vapaa-ajan ollessa työstä ja muista velvoitteista vapaata aikaa. Valtonen (2004: 98) kuitenkin argumentoi, että vaikka rajanveto työn ja vapaa-ajan välillä on varsin problemaattista, sen kautta kuitenkin ajatellaan ja puhutaan ajasta, se jäsentää ihmisten aikakäsityksiä. Niinpä ei olekaan kummallista, että vaikka harrastajat puhuivat vapaa-ajan toimistaan, he käyttivät monenlaisia työhön liittyviä termejä ja sanontoja, esimerkiksi ratsastuksesta puhuttiin "vääntämisenä" ja raviharrastuksessa nousi esiin valmennuksen vaatima työnteko.

6 Yhteenveto ja johtopäätökset

Käsillä olevassa artikkelissa on keskusteltu siitä, miten ajan kulutus jäsentyy vapaa-ajan ja erityisesti hevosharrastuksen kontekstissa. Aikaisempi tutkimus aikakäsityksistä rakentui hevosharrastuksen kentässä tasapainottelun kautta, aikaisemmat löydökset mekaanisesta, luonnollisesta ja sosiaalisesta ajasta saivat sisällykseen sekä positiivisia että negatiivisävyisiä merkityksiä. Lisäksi neljänneksi aikaulottuvuudeksi nousi aineistosta syventymisen aika, joka sekin voitiin tulkita sekä ajan panostamiseksi että ajattomaksi ajaksi. Nämä neljä aikaulottuvuutta löysivät paikkansa myös kokemuksellisen ajan jäsennyksen kentästä, mekaaninen aika linkittyen toimintaan, sosiaalinen aika olemiseen, luonnollinen aika aistimiseen ja syventymisen ajan asettuessa neljanteen kokemukselliseen ulottuvuuteen.

Tutkimuksessa nousi esiin myös aikaulottuvuuksien yhteenlinkittyminen. Hitaasta elämästä nautiskelu mahdollistuu hevosharrastuksen parissa hetkinä, jolloin ajassa ja kussakin hetkessä oleminen tulee tärkeäksi siinä tehtyjen mielekkäiden toimien kautta. Toisaalta taas hevosharrastajan uppoutuessa aistimuksiin ja syventyessä harrastukseen, saattaa hänet nielaista mukaansa flow-kokemus. Nämä teoretisoinnit nostavat tulevaisuudessa jatkotutkimusehdotuksiksi vastaavanlaiset tarkastelut muissa kokemuksellisen kuluttamisen kentän konteksteissa. Millaisia kokemuksellisia aikakäsityksiä on löydettävissä vaikkapa muiden harrasteiden parissa? Entäpä kuinka aikakäsitykset niissä liittyvät yhteen? Teoriahan ehdottaa flow-kokemusten syntyvän harjoittelun ja antaumuksen tuloksena, jotka ovat varsinkin vakavalle harrastamiselle tyypillisiä piirteitä. Toisaalta slow-kokemukset saattaisivat syntyä leppoisimmissa harrastusmuodoissa, joissa harrastaja keskittyy itselleen merkityksellisiin toimiin. Joka tapauksessa käsillä oleva tutkimus päättyy siihen, että olipa kokemus ajasta sitten intensiivinen flow-tila tai leppoisa slow-

kokemus, se antaa tutkimuksen keskeiseksi anniksi hevosharrastamisessa ajan merkityksellistymisen merkityksellisyyden menettämisen kautta. Ajasta tulee tärkeää juuri silloin kun sen kulumista ei huomaa.

Lähteet

Ahola, E. (2005). How is the concept of experience defined in Consumer Culture Theory? Discussing different frames of analysis. *Kuluttajatutkimus. Nyt* 1, 91–98.

Alanen, A. (2007). Elämyskulutus kiehtoo yhä useampia. Samasta tuotteesta hyötyä ja elämystä. *Trendi* 6, 57–61.

Beck, A. M. & Katcher, A. H. (1983). *Between Pets and People. The Importance of Animal Companionship*. New York: Putnam.

Belk, R. W. (1996). Metaphoric relationship with pets. *Society and Animals* 4:2, 121–144.

Cherrier, H. (2002). Drifting away from excessive consumption: A new social movement based on identity construction. *Advances in Consumer Research* 29, 245-247.

Cotte, J. & Ratneshwar, S. (2003). Choosing leisure services: The effects of consumer timestyle. *Journal of Services Marketing* 17:6, 558-572.

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: HarperCollins Publishers.

Deighton, J. (1992). The consumption of performance. *Journal of Consumer Research* 19, 362–372.

Graham, R. J. (1981). The role of perception of time in consumer research. *Journal of Consumer Research* 7:4, 335-342.

Grønmo, S. (1989). Concepts of time: Some implications for consumer research. *Advances in Consumer Research* 16, 339–345.

Hirschman, E. C. (1987). Theoretical perspectives of time use: Implications for consumer behavior research. In: J. N. Sheth & E. C. Hirschman (Eds), *Research in Consumer Behavior* 2, 55–81. New York: JAI Press.

Hirschman, E. C. (1994). Consumers and their animal companions. *Journal of Consumer Research* 20, 616–632.

Jyrinki, H. & Leipämaa-Leskinen, H. (2006). Pets as extended self in the context of pet food consumption. *European Advances in Consumer Research* 7, 543–550.

Suomen virallinen tilasto (2006). *Kansantalouden Tilinpito. Kotitalouksien Kulutusmenot*. Helsinki: Tilastokeskus.

Laaksonen, P., Huuhka, A. & Seppälä, K. (2005). How consumers experience time in cafés? Proceedings of the *12th International Conference on Recent Advances in Retailing and Services Science (EIRASS)*, Orlando, FL, USA, July, 21–24.

Laaksonen, P., Laaksonen, M., Borisov, P. & Halkoaho, J. (2006). Measuring image of a city: A qualitative approach with case example. *Place Branding* 2:3, 210–219.

Macnaghten, P. & Myers, G. (2004). Focus groups. In: C. Seale, G. Gobo, J. F. Gubrium & D. Silverman (Eds), *Qualitative Research Practice*, 65–79. London: Sage.

Niemelä, M. & Raijas, A. (2010). Lapsiperheiden kulutus ja perheen sisäinen päätöksenteko. Teoksessa: U. Hämäläinen & O. Kangas (toim.), *Perhepiirissä*, 118–44 Helsinki: Kelan tutkimusosasto.

Pine, B. J. II & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review* (July–August), 97–105.

Pine, B. J. II & Gilmore, J. H. (1999). *The Experience Economy: Work is Theatre & Every Business a Stage*. Boston, MA: Harvard Business School Press.

Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management* 15, 53–67.

Stebbins, R. A. (2001). Serious leisure. *Society* 38:4, 53–57.

Valtonen, A. (2004). Rethinking free time: A study on boundaries, disorders and symbolic goods. Ph.D dissertation, Department of Marketing: Helsinki School of Economics.

Zaltman, G. (1997). Rethinking market research: Putting people back in. *Journal of Marketing Research* 34, 424–437.

RESEARCH-LED TEACHING IN ACCOUNTING EDUCATION

Anja Morton
Southern Cross University, Lismore, Australia

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Morton, Anja (2011). Research-led teaching in accounting education. In: *Contributions to Accounting and Finance. In: Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 119–129. Eds Annukka Jokipii & Johanna Miettinen.

This paper calls for a scholarly approach to accounting education to widen each graduate's perspectives beyond current practice. The meaning of scholarship in teaching is briefly discussed and there is a focus on discipline based research in the accounting curriculum. The paper argues that true scholarship in accounting education cannot be achieved unless all students of accounting are exposed to the multiple paradigms that currently make up the totality of intellectual thinking in financial accounting. Further, indoctrination of students into "accounting think" must be avoided. Curriculum content related to accounting theory topics is likely to be highly selective across business schools. This paper draws on the literature related to the scholarship of teaching and educational psychology, to argue for an inclusive and transparent approach to the teaching of accounting epistemology.

Keywords: Accounting education, teaching research nexus, measurement

1 Introduction

Many countries are experiencing a revolution in higher education. There are several different aspects to this revolution – the embedding of graduate attributes; the development of national minimum standards; assurance of learning; converged delivery; enhancing the first year experience; etcetera. Each area is an attempt to introduce scholarship related to how students learn into teaching practices to improve learning experiences and to hold higher education institutions accountable for the quality of the students they graduate. In the centre of this revolution is the concept of the teaching research nexus (TRN). While TRN has been interpreted in many ways and several dimensions have been identified (e.g. Boyer 1990; Tigwell et al. 2000; Light 2003; Ashwin & Tigwell 2004), this paper focuses on only

one of these dimensions – namely, “research-led” teaching (Boyd et al., forthcoming) and critically applies it to the current state of accounting education.

Most plans about teaching start with the end in mind – the intended learning outcomes. This paper argues that learning outcomes related to gaining and demonstrating a deeper understanding of the dimensions in, and conflicts over, epistemology in accounting should be included in all undergraduate accounting degrees. This is a multi-faceted learning outcome bounded in controversy and lack of agreement, because accounting is a “multiple paradigm science” (Jones & Riahi-Belkaoui 2010). The way in which financial accounting is currently taught borders on indoctrination rather than on education (Ravenscroft & Williams 2004; Clarke et. al. 2005). The call for widening the teaching of accounting theory has been made often (Chambers 1999; and Ravenscroft & Williams 2004). Indoctrination takes the form of exposing students only to the mechanical techniques associated with the preparation of general purpose financial reports or exposing students only to one or two of the existing multiple paradigms of accounting theory and research. This paper argues that to achieve the most desirable outcomes for students and for society the education of accounting students should be inclusive of competing paradigms in the field. This proposal is made as a suggestion on how we can change the accounting curriculum in response to recent scandals – epitomised by Enron – by adopting a truly holistic approach to the concept of discipline based research-led teaching. A further two reasons for the inclusion of a complete explanation of accounting epistemology in the curriculum are: new accountants entering the profession are better equipped to introduce improvements to the system; and it provides the context for the learning of skills related to critical thinking that help develop an inquiring mind.

This paper is organised as follows. The nature of the epistemology of accounting is discussed in the next section. A brief literature review related to scholarship of teaching and the TRN is provided in the following section and the final section contains concluding remarks.

2 Nature of Financial Accounting

There are many different fields of accounting specialisations. The focus of this paper is on financial accounting. Of all the specialisations in accounting, financial accounting has the highest social impact, in practice it is the furthest removed from theory, there is strong, well argued and widely held opposition to current practice and it was a contributor to the global economic crisis (Barth & Landsman 2010). All listed companies and large propriety companies are required to prepare

General Purpose Financial Statements (GPFS). This is the principal means by which companies communicate their financial position and performance to external stakeholders. There is a common misconception among users of GPFS, that these reports are based on rigorous/exacting measurement processes. However, external financial accounting is unique among professions in that there is a chasm between practice and theory. Financial reporting can be conceptualised as a process of measurement backed by sound theory, but in practice it is closer to being an art form (for example, Clarke & Dean 2007). The negative consequences of this chasm on society are not insignificant (Clarke & Dean 2007). It is important that all accounting students develop an ability to critically evaluate current financial accounting practice (Chambers 1999). Critical accounting theory exposes the negative impact of financial accounting on society and normative accounting theories provide sound alternatives to current practice and highlight the limitations of current practice.

Indoctrination of accounting students typically occurs as follows: Most introductory or bookkeeping classes appear rigorous and unambiguous – after all we start with an equation, $\text{Assets} - \text{Liabilities} = \text{Owners' Equity}$. Students learn the rules of bookkeeping and how to apply these rules to enter all transactions accurately and completely; how to derive an income figure; and how to balance the balance sheet. This creates an illusion of rigour that is reinforced in company accounting classes, taken in second and third year, where students are taught the specific rules of selected financial accounting standards and how to apply these in various different scenarios. A similar approach and the reinforcement of the delusion of rigour are provided in all auditing classes. In so doing, business schools feel justified in claiming that they have developed the students' discipline knowledge and problem solving skills and students justifiably feel self satisfied in having mastered the application of complex rules. However, the focus in each of these classes is purely on what the rules are and how to apply them.

The poverty of our current approach to teaching accounting would not be so tragic if financial accounting was not central to the determination of the distribution of wealth and if the global financial crisis and other major company collapses had not been exacerbated by the financial reporting practices adopted (Barth & Landsman 2010).

Recently we have been distracted from the poverty of this approach to accounting education by the focus on the embedding of graduate attributes in to assessment tasks. But even in this endeavour our efforts are poor – Morton (2008) provides evidence that despite over a decade of claims by universities about graduate

attributes development, assessment in accounting units appear to have remained the same as always.

Students are generally not taught theoretical definitions of income and value, before they are taught the rules. In some cases they are not exposed to normative accounting theories at all. Financial accounting is epitomised by a paradox – a paradox between rigour and ambiguity. The rules only based approach to teaching accounting is limited for several reasons: the question of why the rules are the way they are, is not asked; we manage to normalise the abnormal – and perpetuate “accounting think”; better alternatives are not revealed to students; and the student is not given the opportunity to develop an inquiring mind.

It may come as a surprise to non-accountants to discover that the form of current financial accounting practice is not determined by theory – or even an agreed upon underlying construct that forms the basis of what is being measured. There is little doubt that measurement in accounting is highly problematic. This fact should never be a surprise to a practicing accountant, because they should have been told about it during their training.

Accounting standards and the Framework for the Preparation and Presentation of Financial Statements (conceptual framework) were originally developed through a process of induction; they are a codification of practice (Deegan 2009). Today, accounting standards are determined by way of a political process that aims for a consensus solution among competing interests. However, if this is not made explicit to students, they many never realise it. Students who learn the rules of bookkeeping and learn how to apply standards may never be encouraged to question why the rules are the way they are. This approach provides an education that is more akin to a trade than a profession.

Each profession develops in its participants a certain structure for thinking – a way of solving problems within the context of the profession. In accounting, we teach students to accept illogical rules, ones that, for example, violate basic mathematical rules of additivity. It is well known that the current rules allow for the summation of items measured, in dollars from periods with different levels of purchasing power and under different valuation methods. Most practicing accountants are “comfortable” with adding together numbers that have been measured using different scales. It is likely that this misguided comfort stems from the way in which they were taught accounting – they were not encouraged to question the rules.

By being silent, or at least fairly quiet, on the matter, accounting academics also teach students to not only ignore, but to accept incongruity in the rules. To devel-

op the skills necessary to be a financial accountant, individuals must be able to normalise the abnormal. For example, in first year most students learn how to apply the rules related to the purchase and subsequent use of property, plant and equipment (assets bought with the intention of being used in the business). They are taught that the asset is brought into the accounts at cost. They are then taught that the cost of the asset must be depreciated, that is, allocated to expenses over its useful life. Appealing to the authority of the lecturer (*who in turn did the same during their own indoctrination*) students accept depreciation as a reasonable thing to do. Unless made explicit during their education, students may not question the validity of this generally accepted and legally required practice. The most important point to be made explicit in the teaching of depreciation is that it is not a method of valuation, but an allocation method and that the consequences of this is that the carrying amount of the asset on the balance sheet will only by accident provide a meaningful valuation. Allocation of expenses and valuation of assets are totally different concepts and they cannot logically be applied to the same asset. Rather than highlighting this obvious incongruity between depreciation and valuation, we proceed to explain the decision usefulness role of financial reports and the need to provide relevant valuations for assets. How do we explain the link between depreciation and to the need to provide a relevant value for assets? Better to say nothing and hope they don't ask the question. Students have a nagging feeling that something is not quite right, but learn to live with that feeling – if they don't, they cannot be financial accountants. An attempt to make some sense out of this obvious contradiction, theories related to concepts of capital maintenance could be introduced, however, these concepts are typically covered in accounting capstone units and not linked to first year studies related to depreciation.

Learned academics teach students at degree level to add together apples and oranges and to accept illogical rules without question. The indoctrination is complete – how else can we explain the absurdity of what accountants accept. Teachers of accounting, like researchers, should be forthcoming about the assumptions driving practice and any limitations.

In most disciplines there are disagreements among academics about important concepts. In accounting there are several such divides and there is no single paradigm that is overwhelmingly dominant. But, one paradigm, Positive Accounting Theory (PAT), which is grounded in classical economic theory, tends to support the current system of practice (Deegan 2009). Accounting instructors who are proponents of PAT are less likely to challenge the underlying essence of accounting numbers in the class room, because they believe that for an accounting system to survive (as the current system has) it must have validity and reliability. From an educational perspective, however, it is imperative that academics are honest

and transparent about their biases and that they provide opportunities to students that expose them to perspectives that differ from their own. Students must be exposed to alternative paradigms of thought. This is especially important in accounting, because the current practice is in crisis.

Students who are not exposed to normative theories of accounting are likely to not understand measurement. They will not know that concepts of “true income” exist, they do not consider alternative valuations of assets to those used in practice. Lee (2005) notes that accountants do not understand measurement – they calculate.

The conceptual framework of accounting issued by the International Accounting Standards Board makes value judgements about the role of financial reporting in society. Unless this is made explicit to students, they will be indoctrinated into believing that the framework is factual.

3 Scholarship of Teaching

Scholarship of teaching is the integration of research and teaching and is viewed as one of the defining characteristics of an academic’s role. The concept of the scholarship of teaching is still rather undefined, but since the seminal work of Boyer (1990), several dimensions of the scholarship of teaching have been identified. Boyer (1990) was concerned with defining scholarship in totality. He defined scholarship as having four overlapping functions – the scholarship of discovery (traditional research); the scholarship of integration (making connections across disciplines); the scholarship of application; and the scholarship of teaching. His definition of scholarship of teaching focused only on teachers and the embedding of their own discipline research into their teaching. Bradley (2003), however, focused on the learner and the provision of learning environments that enhance learning. An Australian model, which identified the following four dimensions of scholarship of teaching, is proposed by Trigwell et al. (2000: 163):

- “(a) *the extent to which they engage with the scholarly contributions of others, including the literature of teaching and learning of a general nature, and particularly that in their discipline;*
- (b) *the focus of their reflection on their own teaching practice and the learning of students within the context of their own discipline: whether it is unfocused, or whether it is asking what do I need to know and how do I find out;*

- (c) *the quality of the communication and dissemination of aspects of practice and theoretical ideas about teaching and learning in general, and teaching and learning within their discipline; and*
- (d) *their conceptions of teaching and learning: whether the focus of their activities is on student learning and teaching or mainly on teaching.”*

Most of these are related to the teacher becoming informed about and applying evidenced based approaches to how students learn. In contrast to Tigwell et al (2000), but consistent with Boyer (1990), Rice (1992) focused on the extent to which the teacher is informed about and conducts discipline research. Rice (1992) refers to the teacher’s *synoptic* capacity – the ability to draw the discipline together in a coherent and meaningful way, that is, to make connections and identify important questions in the field. Boyer (1990) defined scholarship of teaching as what the teacher knows about his/her discipline. This is where expertise, the lack of bias and the commitment to be informed by the teacher become imperative, if scholarship of teaching is to be achieved in terms of Boyer (1990). Similarly, Andresen & Webb (2000) see scholarship of teaching as being built around the ethic of inquiry, and involves being:

- (a) *well informed from a position of someone having a position (pedagogy of the discipline); and*
- (b) *critically reflective.*

These different dimensions of the scholarship of teaching can be described as making learning possible and teaching the “right” content – that is, the teacher demonstrates a deep understanding of existing scholarship in the discipline. Scholarship in teaching and learning may be confusing (Boshier, 2009), but it clearly includes scholarship of the discipline.

One of the central premises of research culture is that academics have freedom to choose what they research and freedom to communicate their findings and thinking. Shulman (1993), however, describes teaching as community property. It can be argued that the concept of academic freedom does not extend to teaching to the same extent as it does to research. Schulman (2005) also introduces the notion of *signature pedagogies*.

Pedagogy is compromised when exclusive focus or a strong bias is given to one paradigm in a multi-paradigm discipline like accounting. The influence is perpetuated as accounting teachers learn by “apprenticeship of observation” (Schulman, 2005) without instruction on learning pedagogies or exposure to alternative

paradigms. What are the tacit assumptions of accounting discourse communicated to students in specific institutions? What is the hidden curriculum? Research in educational psychology has long ago identified the concept of “personal epistemologies” and its impact on learning and more importantly in the current context, on teaching. As described in Schommer (1990), Perry (1968) first identified this as an individual’s epistemic position. In contrast, Schommer (1990) labelled it as epistemological beliefs. Schommer-Aikins (2004) noted that beliefs about epistemology have a powerful influence on thinking and they affect personal epistemologies by limiting adherence to logic and the willingness to change. A clear distinction exists between beliefs and knowledge systems. The context starts with research active staff (in the discipline rather than in pedagogy) and the interests of staff and the curriculum are aligned with particular research strengths. The more research-led the faculty is the more pervasive is the influence of specific research areas on the curriculum. Much of accounting theory education is driven by beliefs of the academic who writes the content of the subject. This is demonstrated by the strongly held views of the members of widely differing paradigms in accounting. For example, would it be reasonable to expect that the Chicago School of Economics exposes accounting students to critical accounting theory? The assumption that everyone is entitled to their own opinion is not relevant to decisions about content that is included in the curriculum. Even in accounting, or especially in accounting, we need to teach that knowledge is tentative and open to reevaluation.

Given that accounting is a multi-paradigm discipline, scholarly teachers of accounting need to adapt to Boyer’s (1990) scholarship of integration to improve their personal knowledge. Boyer (1990) notes that this is a legitimate form of research with the potential to lead to new knowledge – even wisdom. Many scholars who have an influence over the accounting curriculum need to move beyond the field boundaries they currently believe in and communicate with colleagues who are from different paradigms. Mixing with scholars who think differently to us will develop our knowledge. Educational integrity can be achieved only when knowledge about the multiple paradigms that exist are imparted to students of accounting. This will provide students with a more authentic basis of accounting knowledge and important skills and values – skills related to the ability to think and values related to empathy.

4 Conclusion

Complete, honest and transparent coverage of the epistemology of accounting in the curriculum can be something that could transform the nature of society toward

better ideals of equality. Without such coverage, we cannot claim to have a scholarly approach to accounting education. In contrast we seem to be violating the principle of a liberal education in that we tend to teach mainly technical knowledge, that is “what to think” rather than intellectual skills, that is, “how to think”. In any discipline, learning outcomes for professional education must include a deep understanding of: the origins of the discipline’s knowledge; any controversies and ambiguities in the profession’s knowledge base; and of the value judgements made within the profession’s rules and conventional wisdom. It is important that the curriculum covers the nature of accounting knowledge holistically and that instructors are transparent and reflect on their own epistemological beliefs about accounting. This learning outcome is currently missing or is inadequately covered in many accounting degrees – accounting educators tend to teach techniques rather than the system of ideas underpinning them (Ravenscroft & Williams 2004). Accounting education must not be seen as a routine function, “a necessary evil”. As Boyer (1990) notes teaching needs to be defined as scholarship will both educate and entice students. As a scholarly enterprise, teaching begins with what the teacher knows. Most higher education institutions have a policy or are developing a policy related to TRN (Krause et al. 2007; Boyd et al. 2010). Based on the discussion in this paper, such policy needs to ensure that the TRN dimension related to discipline knowledge, particularly in accounting, is inclusive of the multiple paradigms that exist in the discipline. What we need urgently in accounting education is a more scholarly approach to curriculum design and a more inclusive view of what it means to be a scholar – a recognition that knowledge is acquired through research, through synthesis, through practice and through teaching (Boyer 1990).

References

- Andresen, L. & Webb, C. (2000). *Discovering the Scholarship of Teaching*. Richmond, Sydney: University of Western Sydney Hawkesbury.
- Ashwin, P. & Trigwell, K. (2004). Investigating staff and educational development In: D. Baume & P. Kahn (eds), *Enhancing staff and educational development*, 117–131. London: Routledge Falmer.
- Badley, G. (2003). Improving the scholarship of teaching and learning. *Innovations in Education and Teaching International* 40:3, 303–309.
- Barth, M. & Landsman, W. (2010). How did Financial reporting contribute to the financial crisis? *European Accounting Review* 19:3, 399–423.

Boshier, R. (2009). Why is scholarship of teaching and learning such a hard sell? *Higher Education Research & Development* 28:1, 1–15.

Boyd, W., O'Reilly, M., Bucher, D., Fisher, K., Morton, A., Nuske, E., Coyle, R., Rendall, K. & Harrison, P. (forthcoming 2010). Activating the teaching-research nexus in smaller universities: case studies highlighting diversity of practice. *Journal of University Teaching & Learning Practice*, Special Issue on Achieving Teaching-Research Connections in Undergraduate Programs (November).

Boyer, E. (1990). *Scholarship Reconsidered*. New York: Carnegie Foundation for the Advancement of Teaching.

Chambers, R. J. (1999). The poverty of accounting discourse. *Abacus* 35:3, 241–251.

Clarke, F., Dean, G. & Wolnizer, P. (2005). More questions than answers – A rejoinder to the commentaries on Professor Chambers 1999 paper "The poverty of accounting discourse". *Accounting Education* 14:1, 39–51.

Clarke, F. & Dean, G. (2007). *Indecent Disclosure: Gilding the Corporate Lily*. Melbourne, Australia: Cambridge University Press.

Deegan, C. (2009). *Financial Accounting Theory*. Sydney: McGraw-Hill.

Jones, S. & Riahi-Belkaoui, A. (2010). *Accounting Theory*. Sydney: Harcourt Brace.

Krause, K-L., Arkoudis, S. & Green, A. (2007). *Teaching-Research Linkages: Opportunities and Challenges for Practice and Policy. Stimulus Paper: Carrick TRN Forum 2007*. Canberra: Carrick Institute. <http://trnexus.edu.au/uploads/presentations/KrauseTRN.pdf> (accessed 28.08.10).

Lee, T. (2005). Never mind the quality, feel the width, part of a 'Forum on Chambers' "The Poverty of Accounting Discourse". *Accounting Education* 14:1, 25–27.

Light, G. (2003). Realizing academic development: a model for embedding research practice in the practice of teaching. In: H Eggins & R. Macdonald (eds), *The Scholarship of Academic Development, Society for Research into Higher Education*, 152–162. Buckingham, England.

Morton, A. (2008). *Survey of the Coverage of Graduate Attributes by Australian Universities in the Discipline of Accounting*. Accounting and Finance Association of Australia and New Zealand Accounting Education Special Interest Group Symposia, Sydney.

Ravenscroft, S. & Williams, P. (2004). Considering accounting education in the USA post-Enron. *Accounting Education* 13 (Supplement 1), Conference Address, December, 7–23.

Rice, R. (1992). Toward a broader conception of scholarship: the American context. In: T. G. Whiston & R. L. Greiger (eds), *Research and Higher Education, the United Kingdom and the United States*, 117–129. Society for Research in Higher Education and Open University Press, Buckingham.

Schommer, M. (1990). The effects of beliefs about the nature of knowledge on comprehension. *Journal of Educational Psychology* 82, 498–504.

Schommer-Aikins, M. (2004). Explaining the epistemological belief system: Introducing the embedded systemic model and coordinated research approach. *Educational Psychologist* 39:1, 19–29.

Shulman, L. (2005). Signature pedagogies in the profession. *Daedalus: proceedings of the American Academy of Arts and Sciences* 134:3, 52–59.

Trigwell, K., Martin, E., Benjamin, J. & Prosser, M. (2000). Scholarship of teaching: a model. *Higher Education Research & Developments* 19:2, 155–168.

THE RELATIONSHIP BETWEEN INTERNAL CONTROL EFFECTIVENESS AND OPERATING PERFORMANCE

Emma-Riikka Myllymäki
Accounting and Finance, University of Vaasa

Annukka Jokipii
Accounting and Finance, University of Vaasa

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Myllymäki, Emma-Riikka & Jokipii, Annukka (2011). The relationship between internal control effectiveness and operating performance. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 131–147. Eds Annukka Jokipii & Johanna Miettinen.

This study examines the association between the level of internal control effectiveness and operating performance. This relationship is based on the Finnish Corporate Governance Code 2010 statement that: “*Internal control aims at ensuring the efficiency and profitability of a firm’s operations*”. Therefore, the more effective a firm’s internal control, the higher should be the firm’s operating performance. The unique survey data is drawn from 455 Finnish firms and is combined with financial data from the Amadeus database. Similar to prior research, our primary dependent variable for measuring operating performance is return on assets (ROA). In accordance with the hypothesis, we find a significant relationship between internal control effectiveness and operating performance. When examining effectiveness using three separate dimensions of internal control effectiveness, the dimension ‘efficiency and effectiveness of activities’ is highly significantly and positively associated with operating performance, whereas the ‘reliance on financial information’ and ‘compliance with laws and regulations’ dimensions do not have a separate impact on operating performance. These findings confirm the importance of the relationship between internal control and operating performance.

Keywords: Internal control, operating performance, corporate governance

Acknowledgements: The financial support from the Academy of Finland (grants no. 122175 and 126630) is gratefully acknowledged. Ms. Myllymäki also acknowledges the financial support from Oskar Öflunds Stiftelse.

1 Introduction

It is generally believed that effective internal control reduces risk and helps to ensure the reliability of a firm's financial statements and compliance with laws and regulations (Spira and Page 2003). In addition, internal control aims to ensure the efficiency and profitability of a firm's operations (the Finnish Corporate Governance Code 2008). However, there is little empirical evidence on whether effective internal control improves company performance.

The purpose of this paper is to examine whether internal control effectiveness is related to a firm's operating performance. We argue that effective internal control reduces the probability of financial distress caused by unexpected events. Effective internal control provides a reasonable assurance that a firm is using its resources efficiently, that it is complying with laws and regulations, and that the financial information on it is accurate and reliable (COSO 1992; Fadzil et al. 2005; Agbejule & Jokipii 2009). Therefore, firms with more effective internal controls may have steadier earnings and cash flows and perhaps be more profitable than firms with less effective controls. To examine this issue, we use a sample of companies that have reported their internal control effectiveness in a survey conducted with Finnish firms, and their financial reports from 2004 drawn from the Amadeus database¹. In this study, we measure operating performance by return on assets (ROA) and return on equity (ROE).

In accordance with the hypothesis, we find a significant and positive relationship between internal control effectiveness and operating performance. Results indicate that the higher the level of internal control effectiveness, the higher the ROA. When we examine internal control effectiveness using three separate dimensions described in the literature (e.g. COSO 1992), the dimension 'efficiency and effectiveness of activities' is highly significantly and positively associated with firm profitability. Our 'reliability of financial information' and 'compliance with laws and regulations' dimensions do not have a separate impact on ROA. We get similar results when using ROE as a proxy for operating performance. These results do not reveal, however, whether firm profitability is a direct consequence of efficiency and effectiveness of activities, or whether they are driven by reverse causality. However, since we look at firms' operating performance at the end of the same year in which the survey was conducted and the controls evaluated, we assume that the efficiency and effectiveness of activities has an impact on profitable

¹ The Amadeus database contains financial and non-financial information on public and private companies across Europe.

business. Either way, support for the hypothesis confirms the importance of the relationship between control systems and firm performance.

The current paper is structured as follows: the next section concentrates on the development of a hypothesis. Section 3 discusses the sample selection procedure, data, and describes the methodology used to test the hypothesis. Section 4 presents the results. In the final section we discuss the findings of the research and draw conclusions.

2 Background and hypotheses

For a long time internal control has been recognized as an important feature of firm and corporate governance (Kinney 2000; Kinney 2001). According to the Finnish Corporate Governance Code for listed companies (2008; 2010):

“The purpose of internal control and risk management is to ensure the effective and profitable operations of the company, reliable information and compliance with the relevant regulations and operating principles.”

This definition is based on a framework developed in 1992 by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. The COSO framework 1992 defines internal control in terms of achieving i) the effectiveness and efficiency of operations, ii) reliability of financial reporting, and iii) compliance with applicable laws and regulations. Internal controls should be aligned with the company's stated business objectives (Ramos 2006: 38). Previous research (see Gordon et al. 2009) argues that adopting a systematic and consistent approach to managing risks lessens a firm's overall risk of failure, and provides more solid assurances that firms are efficient and effective in their operations, and thereby, increases the level of performance of the firm.

The majority of recent internal control research is based on the U.S. Sarbanes-Oxley (SOX) legislation of 2002 since it mandates public disclosures of significant internal control deficiencies. Under SOX (sections 302 and 404) managers must review and provide an annual report on their internal controls over financial reporting, assessing the effectiveness of the internal control structure and procedures. Each reported deficiency reduces a firm's internal control effectiveness and, conversely, if deficiencies are not reported, a firm may be assumed to have effective internal control in place. Thus, in prior studies (e.g. Ge & McVay 2005; Doyle et al. 2007a; Ogneva et al. 2007; Ashbaugh-Skaife et al. 2008; Beneish et al. 2008; Hammersley et al. 2008), internal control effectiveness is defined and measured by the existence of disclosed material weaknesses. Firstly, several prior

studies document evidence of the determinants of internal control weaknesses. Firms disclosing material weaknesses are more complex, smaller, and less profitable (Ge and McVay 2005) or younger, growing rapidly or undergoing restructuring (Doyle et al. 2007a) than firms without disclosed weaknesses. Those firms typically have also recently made changes to their organizational structure, have fewer resources to invest in control systems (Ashbaugh-Skaife et al. 2007) and lower quality earnings (Doyle et al. 2007a). Secondly, other studies have focused on the consequences of reported internal control weaknesses. For example, weaknesses in internal control might increase the cost of capital to firms (e.g. Ogneva et al. 2007; Beneish et al. 2008), and decrease the precision of accounting information (e.g. Doyle et al. 2007b; Ashbaugh-Skaife et al. 2008).

In Finland, COSO (1992) has been voluntarily adopted in firms, but statutory rules provide little practical guidance on appropriate internal control devices. Company Law only provides that the board of directors is responsible for maintaining sufficient internal control. The Finnish Corporate Governance Code (2004; 2008; 2010) for listed companies provides that an internal control system should be described and notable risks reported in annual reports. For external auditors ISA (315 and 330) emphasises the importance of understanding clients' internal control processes and utilizes the COSO framework as a foundation for control evaluation. The result is that unlike U.S. firms, in Finland firms do not report internal control weaknesses and the unavailability of public internal control data for firms has complicated empirical investigation of this issue in the Finnish context.

Prior studies (e.g. Ge and McVay 2005; Doyle et al. 2007a; 2007b; Ashbaugh-Skaife et al. 2008), have suggested that firms with no reported weaknesses have effective internal controls in place. In the current study, it is supposed that even though a firm has not reported weaknesses, the level of internal control effectiveness can range between low and very high. Therefore, this research focuses more closely on the level of existing internal control effectiveness than on reported weaknesses, using unique survey data where CEOs have assessed the internal control effectiveness in their firms. It is acknowledged that determining internal control effectiveness in this way is subjective (Root 1998), but senior management should have immediate and detailed knowledge of the operation of their firm's internal control system (Changchit et al. 2001; COSO 1994).

The CEOs' assessments of internal control effectiveness is based on the COSO 1992 framework that supports the contingency approach – where the premise is that the organizational context and structure must fit together in order for an organization to perform well (Drazin and Van de Ven 1985). Similarly the COSO

framework states that the needs of internal control are dependent on organizational characteristics: two organizations should not have the same internal control system unless the organizations are completely identical. Thus, each organization should have internal control over activities, but the control system will vary in nature. The COSO framework offers five interrelated components as a basis for an effective internal control system: control environment, risk assessment, control activities, information and communication, and monitoring. These control components and the organization should fit together with each other, so that management has a reasonable assurance that “they understand the extent to which the entity’s operations objectives are being achieved, published financial statements are being prepared reliably, and the applicable laws and regulations are being complied with” (COSO 1992) i.e. in this study the extent of achievement of those objectives will be interpreted as denoting internal control effectiveness (see Spira and Page 2003).

All five interrelated control components presented in the COSO framework have an important role in the achievement of a firm’s goals. The control environment sets the tone and culture for an organization, upon which all other activities are based. It flows from the top down and includes staff competences, the management's philosophy and operating style and the way management assigns authority and responsibility. For example D’Aquila (1998) concludes that a tone that fosters ethical decision-making emanating from the top of a firm is of overriding importance to financial reporting. Cohen et al. (2002) found that external auditors assess the control environment and its implications to be the most important ingredient for control. The control environment relates to the performance of the firm in setting realistic objectives, absorbing those within the realm of the knowledge of the firm, and ensuring the organization has sufficient resources to carry them out. Management also should determine if objectives are being met, and if not, put corrective actions in place. This follow-up can be done by control activities – the policies and procedures that help ensure management directives are carried out. Control activities are a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties. However, flatter organizational structures and technological innovations have reduced the importance of traditional control activities (Simons 1995). The primary goal for control activities, based on COSO 1994, is ensuring that necessary actions are taken to address threats to the achievement of the entity's objectives. Such threats are identified and analysed in the process of risk assessment, producing a basis for determining how the risks should be managed. Risk assessment is highly weighted in newer control frameworks (e.g. COSO ERM 2004) due to the fact that economic, industry, regulatory and operating conditions are in a continuous state of flux, necessitating a mecha-

nism to identify and deal with the risks associated with change. Information about change from outside and inside the firm is generated by information and communication. It concerns the identification of pertinent information, and further, capturing and communicating the information in a form and timeframe that enables staff to carry out their responsibilities according to the stated objectives. Information systems produce operational, financial and compliance-related reports that make it possible to run and control the business. The information system deals with information necessary to inform business decision-making and external reporting (Stringer and Carey 2002). The quality of an internal control system is assessed by monitoring. The board of directors, internal and external auditors, and sometimes other stakeholders, have an interest in monitoring the functionality of the internal controls and that the firm is achieving its objectives. However, monitoring is more effective in situations that reflect routine processes than dynamic processes (e.g. Henri 2006). On the other hand, firms operating in unstable environments and have informal control activities may require monitoring more often to ensure that changes are in line with objectives. Therefore, monitoring should be implemented according to the specific characteristics of the firm (Agbejule and Jokipii 2009)

Thus, according to the COSO framework, these five internal control components can help a firm achieve its performance and profitability targets, and prevent wastage of resources. By ensuring reliable financial reporting and complying with laws and regulations, internal control may prevent damage to the firm's reputation and other undesirable consequences. In summary, internal control keeps firms on course toward their objectives and minimizes surprises along the way. However, whether a firm achieves its primary objectives may depend on factors beyond the control of the enterprise, for example technological innovation or competition, and as such, those factors are beyond the purview of internal control (COSO 1994). Therefore, internal control may provide timely information on progress towards the achievement of objectives, but cannot guarantee their achievement.

Briefly, effective internal control, evidenced by the five COSO components fitting with the characteristics of the firm will provide a reasonable assurance that the firm is efficient and effective in its operations; that its financial information is accurate; and that it complies with relevant legislation, in other words, that the firm is resource-effective and likely to achieve its established performance-related objectives. Based on the arguments described above, we expect a positive relationship between internal control effectiveness and operating performance, which leads us to hypothesize that:

H1: The level of internal control effectiveness is positively related to operating performance.

3 Research method

3.1 *Sample and data collection*

A unique set of data, including assessments provided by CEOs of the internal control effectiveness of their firms, was collected using a web-based questionnaire at the end of 2004.² The 1,496 companies sampled were drawn from the MicroMedia Database, which contains information on over 160,000 Finnish firms. The selection criteria for the sample were: i) the firm should have more than fourteen employees ii) the company should have an annual turnover in excess of 3m EUR iii) firms should not operate in the finance and insurance sectors or public administration iv) an existing direct e-mail address to the CEO should be available. A total of 762 responses were received. A non-response bias analysis showed no differences between early and late responders (e.g. Oppenheim 1966).³

The 762 firm-specific responses were matched with financial data obtained from the Amadeus database. The financial data is from 2004 in order to be congruent with the survey data. After excluding observations with insufficient financial data, 455 observations remained. The sample selection process is reported in Table 1, Panel A.

Panel B reports the breakdown of the observations by industry. Respondents indicated the relevant industry in the questionnaire using the standard industrial classification TOL 2002 / SIC-code. The largest industry groups in the sample are raw materials and wholesale and retail industries (29% and 35% of the sample respectively). Ninety-five percent of the observations (434 firms) are of limited companies, 13% (59 firms) of which are publicly-held firms. The sample also includes 23 cooperatives.

² The survey data is partly used in Jokipii (2006), Agbejule and Jokipii (2009), and Jokipii et al. (2011).

³ Detailed information of the administration of the survey is available in Jokipii (2006).

Table 1. Sample

Panel A: Sample selection	
The initial sample	1469
Less:	
Firms that did not respond	707
Unusable responses	<u>21</u>
Number of usable responses	741
Less:	
Missing financial data	<u>286</u>
Final sample	455

Panel B: Sample by industry		
Industry description	Number of firms	%
1 Agriculture, Forestry, Mining (TOL 0xxx, 1xxx)	29	6.00
2 Raw Materials Industry (TOL 2xxx)	130	29.00
3 Electronic Industry (TOL 3xxx)	36	8.00
4 Construction (TOL 4xxx)	46	10.00
5 Wholesale and Retail Trade (TOL 5xxx)	161	35.00
6 Transportation (TOL 6xxx)	40	9.00
7 Other	13	3.00

3.2 *Research method*

We test H1 by estimating the following regression models:

$$\text{Performance} = \alpha + \beta_1\text{ICE} + \beta_2\text{SIZE} + \beta_3\text{LEV} + \beta_4\text{CAP} + \beta_5\text{AGE} + \text{INDUSTRY} + \varepsilon, \quad (1)$$

$$\text{Performance} = \alpha + \beta_1\text{EFFI} + \beta_2\text{RELI} + \beta_3\text{LAW} + \beta_4\text{SIZE} + \beta_5\text{LEV} + \beta_6\text{CAP} + \beta_7\text{AGE} + \text{INDUSTRY} + \varepsilon, \quad (2)$$

where:

- Performance = return on assets (ROA), return on equity (ROE)
 ICE = total internal control effectiveness – based on the survey
 EFFI = efficiency and effectiveness of activities – based on the survey
 RELI = reliability, completeness and timeliness of financial and management information – based on the survey
 LAW = compliance with applicable laws and regulations – based on the survey
 SIZE = natural logarithm of total assets

LEV	= the ratio of total liabilities over total assets
CAP	= the ratio of total assets over sales
AGE	= natural logarithm of the number of years since the establishment – based on the survey
INDUSTRY	= standard industrial classification TOL 2002 / SIC-code – based on the survey

Similarly to prior research, our primary dependent variable for measuring operating performance is return on assets (ROA). ROA represents how efficiently the invested assets are generating earnings. As in prior studies (e.g. Larcker et al. 2007; Vander Bauwhede 2009), ROA is measured as operating profit divided by average total assets. To improve robustness, we also employ return on equity (ROE) as another operating performance measure.

We calculate our variables of interest on the basis of the survey (Appendix A). Internal control effectiveness (ICE) represents how well the firms are meeting the three internal control objectives defined in the COSO framework, using the following indicators: efficiency and effectiveness of activities (EFFI), reliability, completeness and timeliness of financial and management information (RELI), and compliance with applicable laws and regulations (LAW). Indicators are measured using four-item questions assessed on a scale ranging from 1 to 7 (1-totally disagree 7-totally agree) and the average scores are used in the variables. The internal reliability of the measure was high with a Cronbach's alpha of 0.794 (Nunnally 1978).

We include control variables in the model of operating performance based on prior studies (e.g. Guest 2009; Lee 2009; Vander Bauwhede 2009). Firm size is measured as the natural logarithm of total assets at the year end (SIZE). To control for the effect of leverage on operating performance, we include the ratio of total liabilities over total assets (LEV) in the model. We also control for firm efficiency measured by capital intensity (CAP). Age is measured as the natural logarithm of the number of years since the company was established based on the survey. We include industry dummies in the model to control for industry effects.

The descriptive statistics in Table 2, Panel A reports mean, median, standard deviation, lower quartile and upper quartile of the variables included in the analysis. The financial values of the variables vary widely across the sample, because we include both privately and publicly held firms as well as cooperatives in the sample. Panel B displays the correlation matrix.

Table 2.

Panel A: Descriptive Statistics						
Descriptive Statistics.						
<u>Variable</u>	<u>Mean</u>	<u>Median</u>	<u>Std. Dev.</u>	<u>Q25</u>	<u>Q75</u>	<u>n</u>
ROA	0.059	0.046	0.079	0.010	0.087	455
ROE	0.133	0.108	0.194	0.029	0.204	455
ICE	5.234	5.333	0.885	4.667	5.889	455
EFFI	4.593	4.750	1.172	3.750	5.250	455
RELI	5.376	5.750	1.347	4.500	6.500	455
LAW	5.733	6.000	1.064	5.000	6.667	455
Total assets (€ mil- lions)	113.238	18.210	569.161	7.067	51.582	455
Leverage	0.560	0.570	0.208	0.409	0.728	455
Capital intensity	0.757	0.556	1.113	0.379	0.816	455
Firm age	49.475	42.000	36.241	17.000	72.000	455

Panel B: Pearson Correlation Coefficients, N = 455									
	ROA	ROE	ICE	EFFI	RELI	LAW	SIZE	LEV	CAP
ROE	0.824								
ICE	0.113	0.096							
EFFI	0.151	0.131	0.705						
RELI	0.072	0.055	0.806	0.331					
LAW	0.025	0.025	0.699	0.237	0.381				
SIZE	-0.105	-0.065	0.144	0.192	0.085	0.040			
LEV	-0.313	-0.021	-0.113	-0.082	-0.115	-0.044	-0.030		
CAP	-0.111	-0.102	0.056	0.118	0.065	-0.071	0.327	-0.074	
AGE	-0.063	-0.139	0.028	0.003	0.013	0.051	0.144	-0.110	-0.004

Bold text indicates significance at 0.05 level.

ROA = return on assets

ROE = return on equity

ICE = total internal control effectiveness

EFFI = efficiency and effectiveness of activities

RELI = reliability, completeness and timeliness of financial and management information

LAW = compliance with applicable laws and regulations

SIZE = natural logarithm of total assets

LEV = the ratio of total liabilities over total assets

CAP = the ratio of total assets over sales

AGE = natural logarithm of the number of years since establishment

4 Results

Table 3 shows the OLS regression results for Equation (1) in column A, and for Equation (2) in column B. Firstly, we estimate Equation (1), and test whether ICE is associated with firm profitability measured by ROA. The adjusted R^2 of the model is 13%. Variables of size, leverage, capital intensity, and age have statistically significantly negative coefficients. In this sample, smaller firms are somewhat more profitable. Firms with high levels of debt are less profitable. As the negative coefficient of CAP shows, the more efficient a company is in producing revenue with the invested assets, the more profitable it is. In addition, younger firms are more profitable.

The variable of our interest, ICE, has a significantly positive regression estimate, which indicates that ICE is positively associated with the profitability of a firm. The positive coefficient is consistent with H1, which states that effective internal controls are related to high operating performance.

Secondly, we estimate Equation (2) to investigate the three dimensions of ICE and their separate influences on firm profitability as measured by ROA. These results are reported in column B of Table 3. The adjusted R^2 of the model is 13%. The significance of SIZE and LEV remain similar to the results of Equation (1). The CAP variable has an even stronger effect on ROA, while the variable AGE loses its significance. The variables of interest, however, reveal interesting results. EFFI is highly significantly and positively associated with firm profitability. RELI and LAW do not have a separate impact on ROA. In addition, we estimate both Equation (1) and Equation (2) using ROE as a dependent variable, and find similar results for the effect of ICE and EFFI on operating performance (not tabulated).⁴

These results do not reveal whether a firm's operating performance is the consequence of the efficiency and effectiveness of its activities, or whether it is driven by reverse causality. That is, firms with good operating performance may invest more in ICE than poorly performing firms (see e.g. Krishnan 2005). In contrast, the other view presented in contingency theory (e.g. Chenhall 2003) emphasises that control provides reassurance of firms being resource-effective while achieving established performance objectives. Therefore in the case of causality, the positive effect of ICE on operating performance demonstrates the significance of well-fitting internal controls to carrying on sustainable business.

⁴ However in the ROE model, estimates of control variables SIZE and LEV are not significant.

Table 3.

Regression Results: Dependent variable ROA						
	<u>A: Equation (1)</u>			<u>B: Equation (2)</u>		
	<u>Coef.</u>	<u>Prob.</u>		<u>Coef.</u>	<u>Prob.</u>	
ICE	0.0083	0.0389	**			
EFFI				0.0108	0.0008	***
RELI				0.0008	0.7914	
LAW				-0.0030	0.4020	
SIZE	-0.0042	0.0936	*	-0.0049	0.0522	*
LEV	-0.1242	0.0000	***	-0.1223	0.0000	***
CAP	-0.0085	0.0139	**	-0.0094	0.0070	***
AGE	-0.0070	0.0734	*	-0.0063	0.1003	
industry dummies	included			included		
Intercept	0.1544	0.0000	***	0.1672	0.0000	***
R ²	0.15			0.17		
Adjusted R ²	0.13			0.13		
N	455			455		

***, **, * denote the significance at the 0.01, 0.05, 0.10 levels, respectively

ROA = return on assets

ICE = total internal control effectiveness

EFFI = efficiency and effectiveness of activities

RELI = reliability, completeness and timeliness of financial and management information

LAW = compliance with applicable laws and regulations

SIZE = natural logarithm of total assets

LEV = the ratio of total liabilities over total assets

CAP = the ratio of total assets over sales

AGE = natural logarithm of the number of years since the establishment

5 Discussion and Conclusion

The focus of this paper is to examine how internal control effectiveness is related to a firm's operational performance. To accomplish this objective, the relation between internal control effectiveness (as assessed by CEO's in Finnish firms) and the operating performance ratios ROA and ROE are examined using OLS regression.

This paper hypothesized that internal control effectiveness is positively related to firm performance because internal control reduces risks and helps ensure the reliability of the firms' financial statements and compliance with laws and regulations (Spira and Page, 2003). Adopting a systematic and consistent approach to the management of risks is assumed to lower firms' overall risk of failure and thus improve the performance of the firm (Gordon et al. 2009). The research findings, taken as a whole, suggest that overall internal control effectiveness, as assessed by the CEO, is significantly related to the performance of the firm and therefore the hypothesis was accepted. When internal control effectiveness was examined using three separate dimensions mentioned in prior literature, the 'efficiency and effectiveness of activities' dimension is highly significantly and positively associated with ROA. The 'reliability of financial information' and 'compliance with laws and regulations' dimensions do not have a separate impact on ROA. Results were confirmed using another operating performance ratio, ROE. The results do not reveal whether the profitability of a firm is a consequence of the efficiency and effectiveness of its activities, or whether it is driven by reverse causality. However, support for the hypothesis confirms the importance of the relationship between a control system and the firm's performance.

It is acknowledged that the survey method has its limitations, and that the internal control effectiveness construct used in the survey may not achieve the depth and intensity of findings presented in the literature. Internal control effectiveness is a complex issue and may be better determined in some other way. However, the approach enabled us to explore the relationship between ICE and performance in detail.

In addition, we analyse a single year of data, a choice that potentially restricts our ability to generalize to other periods. To extend the results presented in this paper, future research could use alternative measures to capture different aspects of internal control effectiveness and operational performance. An interesting avenue for future research would also be the relationship between IC effectiveness and operational performance over a longer period of time.

References

- Agbejule, A. & Jokipii, A. (2009). Strategy, control activities, monitoring and effectiveness. *Managerial Auditing Journal* 24:6, 500–522.
- Ashbaugh-Skaife, H., Collins, D.W. & Kinney, W.R. (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. *Journal of Accounting and Economics* 44:1/2, 166–192.
- Ashbaugh-Skaife, H., Collins, D.W., Kinney, W.R. & LaFond, R. (2008). The effect of SOX internal control deficiencies and their remediation on accrual quality. *The Accounting Review* 83:1, 217–250.
- Beneish, M.D., Billings, M.B. & Hodder, L.D. (2008). Internal control weaknesses and information asymmetry. *The Accounting Review* 83:3, 665–703.
- Changchit, C., Holsapple, C. & Madden, D. (2001). Supporting managers' internal control evaluations: an expert system and experimental results. *Decision Support Systems* 30:4, 437–449.
- Chenhall, R. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for future. *Accounting, Organization and Society* 28, 127–168.
- Cohen, J., Krishnamoorthy, G. & Wright, A.M. (2002). Corporate governance on the audit process. *Contemporary Accounting Research* 19:4, 573–594.
- COSO (1992). Committee of sponsoring organization of treadway commission. *Internal Control – Integrated Framework*. New York: AICPA.
- COSO (1994). Committee of sponsoring organizations of the treadway commission. *Internal Control – Integrated Framework*. New York, NY: AICPA.
- COSO ERM (2004). Committee of sponsoring organizations of the treadway commission. *Enterprise Risk Management – Integrated Framework*. New York, NY: AICPA.
- D'Aquila, J. (1998). Is the control environment related to financial reporting decisions? *Managerial Auditing Journal* 13:8, 472–478.
- Doyle, J., Ge, W. & McVay, S. (2007a). Determinants of weaknesses in internal control over financial reporting. *Journal of Accounting and Economics* 44, 193–223.
- Doyle, J., Ge, W. & McVay, S. (2007b). Accruals quality and internal control over financial reporting. *The Accounting Review* 82:5, 1141–1170.

Drazin, R. & Van de Ven, A. (1985). Alternative forms of fit in contingency theory. *Administrative Science Quarterly* 30, 514–539.

Fadzil, F., Haron, H. & Jantan, M. (2005). Internal auditing practices and internal control system. *Managerial Auditing Journal* 20:8, 844–866.

Finnish Corporate Governance Code (2004; 2008; 2010). Suomen listayhtiöiden hallinnointikoodi (Corporate Governance).

Ge W. & McVay, S. (2005). The disclosure of material weaknesses in internal control after the sarbanes-oxley act. *Accounting Horizons* 19:3, 137–158.

Gordon, L.A., Loeb, M.P. & Tseng, Chih-Yang (2009). Enterprise risk management and firm performance: A contingency perspective. *Journal of Accounting and Public Policy* 28, 301–327.

Guest, P.M. (2009). The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance* 15:4, 385–404.

Hammersley, J., Myers, L. & Shakespeare, C. (2008). Market reactions to the disclosure of internal control weaknesses and to the characteristics of those weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. *Review of Accounting Studies* 13:1, 141–65.

Henri, J-F. (2006). Management control systems and strategy: a resource-based perspective. *Accounting, Organization and Society* 31:6, 529–558.

International Standards on Auditing (ISA) [online]. The International Federation of Accountants (IFAC). Available from Internet: URL:<http://www.ifac.org/IAASB/Pronouncements.php#Standards>.

Jokipii, A. (2006). *The Structure and Effectiveness of Internal Control: a Contingency Approach*. Dissertation, Acta Wasaensia No 166. Business Administration 69, Accounting and Finance, University of Vaasa, Vaasa.

Jokipii, A., Lämsiluoto, A. & Eklund, T. (2011). A clustering and visualization approach to the analysis of internal control structures. *Accounting, Auditing & Accountability Journal*. Forthcoming.

Kinney, W. (2000). Research opportunities in internal control quality and quality assurance. *Auditing: A Journal of Practice and Theory* 19, 83–90.

Kinney, W. (2001). Accounting scholarship: what is uniquely ours? *The Accounting Review* 76, 275–284.

Krishnan, J. (2005). Audit committee quality and internal control: an empirical analysis. *The Accounting Review* 80:2, 649–675.

Larcker, D.F., Richardson, S.A. & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review* 82:4, 963–1008.

Lee, Jim (2009). Does size matter in firm performance? Evidence from US public firms. *International Journal of the Economics and Business* 16:2, 189–203.

Nunnally, J. (1978). *Psychometric Theory* 2nd Edition. New York: McGraw-Hill.

Ogneva, M., Subramanyam, K.R. & Raghunandan, K. (2007). Internal control weaknesses and cost of equity: Evidence from SOX section 404 disclosures. *The Accounting Review* 82:5, 1255–1297.

Oppenheim, A. (1966). *Questionnaire Design and Attitude Measurement*. New York: Basic Books.

Ramos, M. (2006). *How to Comply with Sarbanes-Oxley Section 404*. 2nd Edition. Hoboken N.J.: John Wiley & Sons, Inc.

Root, S. T. (1998). *Beyond COSO. Internal Control to Enhance Corporate Governance*. New York: Wiley.

Simons, R. (1995). Control in an age of empowerment. *Harvard Business Review* (March–April), 80–88.

SOX (2002). *The Sarbanes-Oxley Act of 2002*. United States House of Representatives, Public Law 107–204 [H.R. 3763]. Washington D.C.

Spira, L. & Page, M. (2003). Risk management. The reinvention of internal control and the changing role of internal audit. *Accounting, Auditing and Accountability Journal* 16:4, 640–661.

Stringer, C. & Carey, P. (2002). Internal control re-design: An exploratory study of Australian organizations. *Accounting, Accountability & Performance* 8:2, 61–86.

Vander Bauwhede, H. (2009). On the relation between corporate governance compliance and operating performance. *Accounting and Business Research* 39:5, 497–513.

Appendix A. Questionnaire items

Components of the internal control

Matters pertaining to control in the enterprise.

Please answer the following questions by circling what you consider to be the right number for events and measures in your company *in the past year*. Please note that there are no correct answers; the questions are intended to survey the general control structure which is really in place in the company (1 = Totally disagree, 7 = Totally agree).

Effectiveness (*Hinged questions*)

1. With a reasonable effort the efficiency of operations could have been further improved. (*EFFI1*)
2. There are possibly operational problems, which, if removed, would have resulted in a better input - output ratio (*EFFI2*)
3. There are no stages in the processes which cause me to doubt their efficiency. (*EFFI3*)
4. In some functions resources might have been more efficiently deployed. (*EFFI4*)
5. I did not completely trust the reports by financial management and sometimes had to check the information I received. (*RELI1*)
6. There were sometimes errors in the reports, which had to be corrected later when the information had been confirmed. (*RELI2*)
7. We sometimes received information about error in reports sent out for external use. (*RELI3*)
8. There have been problems with the accounting programs used by financial management. (*RELI4*)
9. It was difficult in practice to apply the regulations governing our company. (*LAW1*)
10. Changes in the legislation frequently came as a surprise to the company. (*LAW2*)
11. I have observed that the personnel had problems with the laws and regulations in force. (*LAW3*)

THE OWNERSHIP EFFECTS OF CASH HOLDINGS IN FINNISH SMES

Mervi Niskanen

School of Business, University of Eastern Finland

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Niskanen, Mervi (2011). The ownership effects of cash holdings in Finnish SMEs. In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 149–161. Eds Annukka Jokipii & Johanna Miettinen.

This paper focuses on the effect of family and managerial ownership on cash holdings in a sample of private Finnish firms. The results suggest that family ownership has a significant impact on cash holdings in that family firms hold lower levels of cash. When we take into account the simultaneous effect of family ownership and the lack of managerial ownership, we find that the family firms with no CEO ownership hold on average more cash than the other family firms in our sample. The results further imply that an increase in liquidity and an increase in profitability increase the level of cash holdings. The results on the dynamic nature of cash holdings suggest that the firms have a target level of cash holdings and that they adjust to this level.

Keywords: Cash holdings, Ownership structure

1 Introduction

The theoretical finance literature offers three alternative models to explain why firms hold cash. First, the trade-off theory model claims that firms compare the marginal costs and benefits of holding cash. The cost of holding cash is the opportunity cost of the capital invested in liquid assets. Cash holdings are useful in this framework because they reduce the likelihood of financial distress, allow for investments in situations when outside funding is not available and minimize the costs of raising funds.

The second framework is provided by the pecking order theory initially outlined in Myers and Majluf (1984) and further developed by Myers (1984). This theory states that firms with information asymmetries should finance new investments first internally, then with low risk debt and finally with equity only as a last re-

sort. This theory suggests that the role of cash is to act as a buffer between retained earnings and investments, and that firm's do not have target cash levels. The fact that information asymmetries are even more pronounced for small firms, suggest that this framework has more importance for small firms than for large firms and that cash levels are lower if information asymmetries can be lowered.

Third, the free-cash flow theory by Jensen (1986) claims that management has incentives to cumulate excessive amounts of cash to increase its own power and to avoid monitoring in situations when applying for new funds from the financial markets. When the firm has sufficient funds to finance its projects internally, it avoids any monitoring activities. This in turn may result in situations when management is free to invest in projects that suit their own interest but are not necessarily in the best interest of the shareholders. The fact that management and ownership often coincide in small firms, suggests that the agency conflicts between owners and managers are not a serious problem. However, this same phenomenon means that the agency problems between owner-managers and debt holders are more significant in small firms (Berger and Udell 2003). In the context of this study, this suggests that agency costs should be more pronounced in small firms and that the level of managerial ownership can be expected to have an impact on the level of cash.

When studying cash holdings within the context of private family firms, we take into account the heterogeneity within the group of family firms. There is a growing consensus that private family firms cannot be viewed as a homogeneous entity (Chrisman et al. 2005, Westhead and Howorth 2007). Whether small and medium sized private family firms maintain higher cash levels, may depend on certain family firm characteristics. One such distinction can be made between different family firm types depending on ownership structure of the firm or the firm's management (by a family manager versus a professional outside manager) (Westhead and Howorth 2007). These family firm characteristics may influence the private family firm's cash holdings level.

Looking at cash holdings from an agency perspective, traditional agency theory predicts that in owner-managed private family firms, the *shareholder-manager agency conflict* is minimal. If family firm ownership and control do not completely coincide, the shareholder-management agency problem arises. The contract between the family owner(s) and family manager leaves scope for management to make decisions that are not in the owners' interests. Jensen (1986) suggests that this may have implications for the level of cash holdings. Free cash flows may induce discretionary behaviour by the management at the expense of the share-

holders. Managers can use the funds on projects that do not benefit the shareholders or use the funds to pursue personal objectives.

The empirical literature on the determinants of cash holdings has recently received a lot of attention (e.g. Kim et al. 1998; Opler et al. 1999; Pinkowitz and Williamson 2001; Faulkender 2002; Dittmar et al. 2003; Ozkan and Ozkan 2004; Niskanen and Niskanen 2007; Garcia-Teruel and Martinez-Solano 2007, 2008; Kuan et al. 2010). However, none of these studies focuses on the effect of managerial ownership on the cash holdings of private family firms. In this paper, we examine this effect for a sample of private family firms operating in the Finnish bank-dominated capital market over the period 2000-2005. As such, this paper contributes to literature in several ways. First, we add to the literature on the determinants of cash holdings small and medium sized *private family* firms. We integrate an understanding of the internal dynamic of the family business into the corporate cash holding literature. Secondly, we take into account the heterogeneity of family firms by considering the effects of managerial ownership on the cash holdings level. Prior empirical studies (e.g. Ozkan and Ozkan 2004; Opler et al. 1999) stress the importance of managerial ownership as a determinant of cash holdings.

This paper proceeds as follows. In the next section, our hypotheses are derived. In the subsequent section, the data and empirical method are discussed. Finally, we present and discuss our results.

2 Earlier Studies

Our measure of cash holdings is the natural log of the ratio cash and marketable securities to total assets. This approach has previously been adopted by, e.g., Ozkan and Ozkan (2004). Alternative approaches are the cash to sales ratio applied by, e.g., Faulkender (2002) and cash to total assets minus cash -ratio applied by Opler et al. (1999). This section discusses the motivation for the explanatory variables used in explaining the level of cash holdings.

Family Ownership

The presence of market imperfections and higher agency costs of debt (Ozkan and Ozkan 2004) seem to make cash holdings necessary for private family firms in order to avoid the high costs of acquiring new debt (transaction cost motive), to meet unanticipated contingencies that may arise and to finance investments if debt financing is unavailable or too costly (precautionary motive). Moreover, pri-

vate family firms have a strong desire to keep control (Romano et al. 2000) and to pass the firm onto their heirs. Family firm owners do not want to open up equity for non family members to prevent the loss of control. Since issuing equity is no viable option for private family firms and the use of debt financing, if available, may cause financial distress and default, family firms could be less willing to apply for external debt finance. Instead, they could be more inclined to maintain higher cash balances in order to reduce the probability of financial distress and to safeguard the firm for subsequent generations (Ozkan and Ozkan 2004). Empirically, Ozkan and Ozkan (2004) confirm that firms having families as ultimate controllers tend to hold more cash.

Managerial ownership

Whether small and medium sized private family firms maintain higher cash levels, may depend on certain family firm characteristics such as the ownership structure of the firm or the firm's management (by a family manager versus a professional outside manager) (Westhead and Howorth 2007). Therefore, we combine both elements into managerial ownership whereas a professional manager does not hold any shares of the firm since a private family firm is defined as fully owned by the family members. A family manager can own all the shares or only a partial amount of the family firm's shares. We take into account the difference between family managed and professionally managed firms by incorporating an ownership variable which takes the value of 1, if the firm is professionally managed (CEO ownership = 0%) and zero otherwise.

Relationship lending

The relationship lending literature essentially states that agency problems and information asymmetries between banks and borrowing firms can be alleviated through close bank-borrower relationships. This literature further concludes, that small businesses in particular could benefit from a closer and more informed relationship with their banks. Previous studies on relationship lending suggest that close bank-borrower relationships enhance credit availability, especially for small firms. Among others, Binks and Ennew (1997) investigate different attributes of bank-firm relationships and suggest that small businesses could benefit from a closer and more informed relationship with their banks. Other studies show that the duration of the relationship decreases interest rates and collateral requirements (e.g. Berger and Udell 1995). Degryse and Van Cayseele (2000) find that in Europe contract terms seem to deteriorate with the length of the bank-borrower relationship. Boot (2000) suggests that this may be caused by the fairly consolidated

nature of the banking sector in Europe with fewer credit alternatives for borrowers. Previous studies on Finnish data (e.g., Niskanen and Niskanen 2000) additionally find that while contract terms deteriorate with relationship length for larger firm, they improve with relationship length for smaller firms. More recently, Niskanen and Niskanen (2004) find that firms with long-term relationships and firms that have recently switched their main bank are more likely to have restrictive covenants in their loan contracts.

Ozkan and Ozkan (2004), Ferreria and Vilela (2004) as well as Garcia - Teluel and Martinez- Solano (2004) all use the level of bank debt to measure the effect of relationship lending on cash holdings and conclude that high debt levels and cash holdings are positively correlated. They interpret this to imply that firms with close lending relationships hold more cash. We are able to use a more detailed measure of this relationship. To control for bank-borrower relationships, we include one relationship lending variable in our models. Our relationship lending variable is the length of the relationship that the firm has with its main bank.

Firm size

Firm size can be expected to be an important determinant of cash holdings, because information asymmetries are by nature larger in smaller firms. Additionally, it can be argued that the probability of default decreases as firm size increases. Both approaches indicate that the ratio of cash to assets should decrease as firm size increases. Alternative lines of reasoning can be based on the pecking order theory and the free cash flow theory. Opler et al. (1999) suggest that larger firms should have more cash because they are presumably more successful. Ferreira and Vilela (2004) base their arguments on the free cash flow theory and suggest that larger firms may hold more cash for two alternative reasons. One is that the number of shareholders is usually higher in larger firms, which gives rise to superior managerial discretion. Also, large firms are less likely to be takeover targets due to the large amounts of cash that they hold. In both cases, managers of large firms have more incentives to hold large cash balances than the managers of small firms.

Leverage

A number of studies imply that leverage is a significant determinant of cash holdings. Most studies suggest that the relationship between leverage and cash holdings is negative. John (1993) argues that this may be because the debt market is a substitute for holding cash. Baskin (1987) suggests that firms with high leverage

ratios have a higher cost of funds and hold less cash because of the higher costs of leverage. Our measure of leverage is the debt-to-assets ratio of the firm.

Liquidity

Investments in liquid assets can be seen as a substitute for cash. Opler et al. (1999), Ferreira and Vilela (2004) and Ozkan and Ozkan (2004) all calculate the measure for liquid assets as the ratio of working capital less cash to total assets. Because the idea behind this variable is that investments in liquid assets are seen as substitutes for cash holding, we expect to obtain a negative coefficient for this variable.

Profitability

Previous findings on the relationship between cash holdings and profitability are ambiguous. One line of literature suggests that more profitable firms use their profits to build up cash reserves and therefore, they can be expected to hold more cash (Opler et al. 1999; Ferreira and Vilela 2004). An alternative line of thought suggests that if cash and profits are substitutes (or if firms use profits to repay debt), there should be a negative relationship between profitability and the level of cash holdings (Kim et al. 1998).

3 Data and Methodology

The data for the study were collected through a private survey. The database consists of 600 Finnish SMEs and is a panel with observations from the years 2000–2005, but the number of observation varies across regression models because of missing data on some variables. Because the data is a panel, we employ appropriate panel data estimation methods in our regression models. More specifically, we employ panel estimation methods which allow for GMM to control for the possibility of an endogeneity problem: random disturbances that affect decisions about cash level may also affect firm characteristics such as leverage and growth opportunities. E.g. Garcia-Teruel and Martinez-Solana (2007) suggest this approach. This methodological approach also enables us to examine, whether the firms have a target level of cash holdings and whether they adjust their cash holdings to this target over time.

Table 1 presents descriptive statistics for the variables used in the study. The results show that the ratio of cash or cash equivalents to assets in the average firm is

23 %. This ratio exceeds by far those presented for corporations in Ferreira and Vilela (2004), who find that the average corporation in the EMU area holds 15 % of total assets in cash or cash equivalents. They also report that the average Finnish corporation had a cash ratio of 15.1 %. The ratio observed for Finnish SMEs in this study is also by far larger than the ratio of 8 % presented for Spanish SMEs in García-Teruel and Martínez-Solano (2004).

Table 1. Descriptive statistics on key variables

	N	Mean	Std. Deviation
Cash to assets	2412	20.02 %	19.30
Debt to assets	2351	61.80 %	53.30
Liquidity	1056	2.11	3.42
ROA	1056	16.17 %	23.13
Sales	1940	117.65	177.49
Lenght of bank-borrower relationship	3151	14.53	12.59
Family ownership %	3148	51.94%	47.27
Managerial ownership = 0% (dummy)	3149	20.42%	40.31

Column I of Table 2 splits the data into firms in which family ownership is below 50 % and into firms in which family ownership is equal to or above 50 %. Column II divides the firms into those with no CEO ownership and those with CEO ownership. When we compare these groups in column I, we find that the firms with lower family ownership hold more cash, are more levered, less profitable and have shorter bank-firm relationships. The results also show that the CEO holds on average higher levels of firm stock at lower levels of family ownership.

When the data is separated into firms with no CEO ownership as opposed to some level of CEO ownership (column II), we observe that the firms with no CEO ownership are less levered, more profitable and have shorter bank-firm relationships. The firms with no CEO ownership are also the ones with higher ratios of family ownership.

Table 2. Descriptive Statistics on Key Variables

Column I presents descriptive statistics for more than or less than 2 banks, column II splits the data into firms with less than or more than ten employees. The differences of the means between the groups in columns II and III is investigated through t-test. Statistical significant difference of means: *** denotes statistically significant difference of means at the 1 % level, ** at 5 % and * at 10 %.

	Column I		Column II		Signifi- cance
	Family ownership <50 %	Family owner- ship>=50%	CEO owner- ship = 0 %	CEO ownership >0%	
Cash to assets	0.224 (0.006)	1.1. 0.187 (0.005)	1.3. 0.206 (0.005)	1.4. 0.191 (0.0085)	1.5. 0.136
Sales	39.09 (13.07)	1.6. 23.71 (9.159)	1.8. 30.85 (9.587)	1.9. 27.61 (5.440)	1.10.0.862
Liquidity	2.02 (0.108)	2.12 (0.087)	2.09 (0.079)	2.03 (0.131)	0.706
Debt to assets	67.18 (2.454)	58.50 (0.870)	60.95 (1.168)	67.06 (3.416)	0.036**
ROA	13.50 (1.277)	19.47 (0.830)	17.87 (0.805)	12.47 (1.801)	0.003***
Ln(Firm age)	2.42 (0.025)	2.39 (0.021)	2.417 (0.018)	2.364 (0.035)	0.171
Length of main bank relationship	13.07 (0.333)	15.90 (0.323)	14.117 (0.220)	16.81 (0.775)	0.000***
Family ownership					0.000***
Managerial ownership	23.30% (1.112)	18.05% (0.920)	53.57% (0.943)	45.68% (1.851)	0.000***

4 Empirical results

Table 3 presents results from regressing the cash to assets ratio on different variables characterizing the firm and its environment. We use two different variables for firm ownership in our analysis. The first one is the percentage of ownership held by the controlling family. The other variable is based on the distinction between family managed and professionally managed firms. We further add a multiplicative variable to capture the interaction between family ownership and CEO ownership. The results indicate that an increase in family ownership decreases the level of cash holdings. This contradicts Ozkan and Ozkan (2004), and may imply that agency costs are lower when family ownership increases. When we add an interaction term to the model in column 2, we observe that the family firms in which the CEO holds no equity, hold on average more cash than the other family firms in our sample. This finding supports the free cash flow hypothesis and suggests that professional outside management as opposed to family management may have an incentive to hold higher levels of cash in order to gain private benefits or to avoid situations in which their actions would have to be approved by shareholders or outside lenders.

The relationship between firm size and cash holdings is non-significant negative in all our models. These results contradict the theoretical predictions of the trade-off theory. The results on the liquidity variable indicate that firms with high levels of liquidity also hold high amounts of cash. This result suggests that liquid assets are not seen as a substitute for cash in our sample of small and micro Finnish firms and is contrary to the expectations based on the trade off theory of cash holdings.

Our measure of leverage is the total debt to assets ratio of the firm. The results in table 3 suggest that leverage is not an important determinant of the level of cash holdings in our sample of small private Finnish firms. The result can be interpreted to imply that our sample firms are not financially constrained by their banks or other financial institutions. Our results on the leverage variable are different from those in most other empirical studies on the determinants of cash holdings. Opler et al. (1999), Pinkowitz and Williamson (2001), Ozkan and Ozkan (2004), Ferreira and Vilela (2004) all find that firms with high leverage ratios have lower cash holdings, while García-Teruel and Martínez-Solano (2004) and Faulkender (2004) both find a positive relationship between cash holdings and leverage.

We also include measures of profitability and firm age into our models. Our measure of profitability is the Return on Assets. The results indicate that an in-

crease in profitability increases the level of cash holdings in our sample firms. This result is in line with, e.g., Opler et al. 1999, and Ferreira and Vilela 2004, who suggest that more profitable firms use their profits to build up cash reserves.

Finally, we add a lagged cash to assets variable into our model. This variable is added to investigate whether the firms have a target cash to assets ratio and whether they adjust to this target over time. The coefficient on this variable is statistically significant, which supports the notion of a target cash to assets ratio.

Table 3. The determinants of cash holdings

The dependent variable is the natural log of the cash to assets ratio. We estimate a dynamic panel data model with the avellano-Bond GMM estimation methodology.

	Column I		Column II	
	coefficient	<i>p-value</i>	coefficient	<i>p-value</i>
Constant	-0.255	0.865	-0.565	0.708
<i>Firm characteristics</i>				
<i>Lagged cash to assets</i>	0.160	0.012	0.174	0.007
Ln (sales)	0.037	0.849	0.063	0.745
Liquidity	0.076	0.074	0.078	0.068
Debt to assets	-0.004	0.319	-0.004	0.317
Return on assets	0.010	0.003	0.010	0.003
Ln(1+age)	0.012	0.913	0.023	0.834
<i>Ownership</i>				
Family ownership %	-0.023	0.009	-0.033	0.000
Managerial ownership 0 %			-0.320	0.673
Family x Managerial ownership 0 %			0.031	0.021
<i>Relationship lending</i>				
Ln(Relationship length)	-0.337	0.375	-0.158	0.687
Wald chi2	53.10	0.000	60.69	0.000
Number of observations		605		605

5 Conclusion

The purpose of this study was to examine the determinants of cash holding in small and medium sized firms with firm level data on Finnish firms. Most previous studies have investigated the determinants of cash holdings on large listed firms and the number of studies using data on SMEs is fairly limited.

We find that overall the family firms in our sample hold less cash than the non-family firms. Our results also indicate that cash holdings are higher when there is a total separation of ownership and control in our sample of small and medium sized family firms. These results can be interpreted to imply that in cases when management holds no shares in the company, it seeks to increase its freedom to make decisions by increasing the level of cash holdings (free cash flow problem). If the level of cash holdings is high, there is less need to consult the owners or lenders of the firm. It can be further hypothesized that this supports the idea that if family firms employ outside managers, they should be required to hold equity in the firm. The results further imply, that the family firms in our sample have a target cash balance and that overall cash holdings are higher in the firms which are more profitable, and that they also increase with an increase in liquidity.

The results may also have practical implications. This argument stems from the fact that cash holdings form an integral part of many liquidity measures such as the quick ratio or the current ratio. If cash holdings are in some cases high for reasons that are not optimal from the shareholders point of view, as we have observed in the case of no CEO ownership in the firm, good numbers on those ratios are not necessarily an indication that all is well within the firm. Rather, they may imply that company assets are potentially being wasted.

References

- Almus, M. & Nerlinger, E. (2000). Testing Gibrat's law for young firms – Empirical Results for West Germany. *Small Business Economics* 15, 1–12.
- Baskin, J. (1987). Corporate liquidity in games of monopoly power. *Review of Economics and Statistics* 69, 312–219.
- Berger, A. & Udell, G. (1995). Relationship Lending and Lines of Credit in Small Firm Finance, *Journal of Business*, 68, pp. 351-381.

Berger, A. & Udell, G. (2003). Small Business and Debt Finance. In *Handbook of Entrepreneurship*. Z. Acs & D. Audretsch (Eds). Kluwer Academic Publishing.

Binks, M. & Ennew, C. (1997). The relationship between U.K. banks and their small business customers. *Small Business Economics* 9, 167–178.

Boot, A. (2000). Relationship banking: What do we know? *Journal of Financial Intermediation* 9, 7–25.

Chrisman, J.J., Chua, J.H. & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm, *Entrepreneurship, Theory and Practice* 29, 555–575.

Davidsson, P., Kirchhoff, B., Hatemi-J, A. & Gustavsson, H. (2002). Empirical analysis of business growth factors using Swedish data. *Journal of Small Business Management* 40, 332–349.

Degryse, H. & van Cayseele, P. (2000). Relationship Lending within a Bank-Based System: Evidence from European Small Business Data. *Journal of Financial Intermediation* 9.

Dittmar, A., Marth-Smith, J. & Servaes, H. (2003). International Corporate Governance and Corporate Cash Holdings. *Journal of Financial and Quantitative Analysis* 38, 111–133.

Faulkender, W. (2002). *Cash Holdings among Small Businesses*. Working paper.

Ferreira, M. & Vilela, A. (2004). Why do firms hold cash? Evidence from EMU countries. *European Financial Management* 10, 295–319.

Garcia-Teruel, P.J. & Martinez-Solano, P. (2008). On the determinants of SME cash holdings: Evidence from Spain. *Journal of Business Finance and Accounting* 35:1 & 2, 127–149.

Harhoff, D., Stahl, K. & Woywode, M. (1998). Legal form, growth and exit of West German firms – Empirical results for manufacturing, construction, trade and service industries. *Journal of Industrial Economics* 46, 453–489.

Jensen, M. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *American Economic Review* 72, pp. 323-329.

John, T. (1993). Accounting measures of corporate liquidity, leverage and costs of financial distress, *Financial Management* 22, pp. 91-100.

Kaplan, S. & Zingales, L. (2000). Investment-cash flow sensitivities are not valid measures of financial constraints. *Quarterly Journal of Economics* 115, 707–712.

Kim, C., Mauer, D. & Sherman, A. (1998). The determinants of corporate liquidity: Theory and evidence. *Journal of Financial and Quantitative Analysis* 33, 335–359.

Kuan, T., Li, C. & Chu, S. (2010). Cash holdings and corporate governance in family-controlled firms. *Journal of Business Research*, forthcoming.

Niskanen, J. & Niskanen, M. (2000). Does Relationship Banking Have Value for Small Firms? *Finnish Journal of Business Economics* 49, 252–265.

Niskanen, J. & Niskanen, M. (2004). Covenants and small business lending: The Finnish Case. *Small Business Economics* 23, 137–149.

Opler, T., Pinkowitz, L., Stulz, R. & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *The Journal of Financial Economics* 52, 3–46.

Ozkan, A. & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking and Finance* 28, 2103–2134.

Pinkowitz, L. & Williamson, R. (2001). Bank power and cash holdings: Evidence from Japan. *The Review of Financial Studies* 14, 1059–1082.

Romano, C.A., Tanewski, G.A. & Smyrnios, K.X. (2000). Capital structure decision making: a model for family business. *Journal of Business Venturing* 16, 285–310.

Scherr, F. & Hulburt, H. (2001). The debt maturity structure of small firms. *Financial Management* 30, 85–111.

Westhead, P. & Howorth, C. (2007). Types of private family firms: an exploratory conceptual and empirical analysis. *Entrepreneurship & Regional Development* 19, 405–431.

CORPORATE GOVERNANCE AND ACCOUNTABILITY

Does Gender Matter?

Aila Virtanen

School of Business and Economics, University of Jyväskylä

Dedicated to Teija Laitinen on the occasion of her 50th birthday

Abstract

Virtanen, Aila (2011). Corporate governance and accountability: Does gender matter? In: *Contributions to Accounting, Auditing and Internal Control. Essays in Honour of Professor Teija Laitinen*. Acta Wasaensia No. 234, 163–178. Eds Annukka Jokipii & Johanna Miettinen.

This paper investigates accountability and gender differences. The focus is on board members of Finnish listed companies. The theoretical frame of reference includes three approaches; shareholder and stakeholder theories and a feminist approach of ethics. The study questions are as follows; 1) Who do the members of Finnish listed companies understand to be accountable to, and 2) Are there differences between male and female board members concerning the views of their accountability. The data was collected by questionnaire. An analysis of the findings revealed only minor differences between the views of women and men. Both female and male board members consider the board to be accountable to the owners of the company. Furthermore, the board members see that the board is accountable to other stakeholders and the environment as well. The feminist ethics with their emphasis on care and love were not as significant, as it was expected based on the existing gender research. The goal of this study is to contribute to the existing research in two ways. Firstly, the paper provides empirical evidence on how accountability is understood by board members of Finnish listed companies. Secondly, the study is intended to enlarge our knowledge of the gender differences of the corporate boards.

Keywords: Corporate governance, accountability, gender differences

1 Introduction

Traditionally, research into accountability has adopted an agency theory approach, focusing on resolving conflicts of interest between the corporate management and the shareholder. The other line of corporate governance research has adopted a theoretical framework which seeks to extend corporate accountability to non-shareholder groups instead of the traditional framework with shareholder and agency theories (Brennan & Solomon 2008; Parker 2007). In addition, there is the

third approach to the corporate governance issue; Machold, Ahmed and Farquhar (2008) and Oakes and Young (2008) used feminist theories as frameworks for accountability and corporate governance research. From the feminist view of point, accountability is shaped to feminist ethics of care instead of the rather masculine ethical theories of justice and utility. A feminist governance model includes several elements of care; care for stakeholders, care values embedded in organisation, and universal obligation of care. According to the feminist ethics approach, the roles, functions and behavioural characteristics of boards of directors can be understood through the point of view of a feminist model (Machold et al. 2008).

In this paper the theoretical frame of reference is based on three approaches; shareholder and stakeholder theories and a feminist approach of ethics. The paper investigates corporate governance, views of accountability and gender differences on the corporate boards of Finnish listed companies. The questions focus on whom the members on the boards are accountable to; to stakeholders, to shareholders or to the broader society and environment. Furthermore, the study aims to find out whether there are differences in the views of accountability between male and female board members. The empirical tests of this study were based on data collected from the members on corporate boards of Finnish listed companies by questionnaire (English translation in Appendix A).

Despite a wide range of research on accountability, very little has been written on how accountability is understood in practise based on primary data (Brennan and Solomon, 2008). The present paper contributes to existing research in two ways. Firstly, it provides empirical evidence on how accountability is understood by the members of corporate boards of Finnish listed companies. Secondly, the goal of the present study is to increase our knowledge of gender differences; do the views of male and female members on the boards differ, and are the views of women different than those of men.

The remainder of the paper is organized as follows. I will first outline earlier research findings concerning accountability. I will then formulate the research questions, and describe the study data and methodology in section 3. In addition, section 3 presents the results of the analysis. Finally, section 4 summarizes the results, discusses the contribution and limitations of the study.

2 Theoretical background and study questions

2.1 *Notions on accountability*

Although accountability is usually understood in financial or numerical terms, it can also be seen as an ethical concept, as a question of right and wrong (Machold, Pervaiz & Stuart 2008; Oakes & Young 2008, Messner 2009; Ogden 1995; Owen & Swift 2000; Parker 2007). Cooper and Owen (2007) linked accountability to corporate social reporting, defining it as “the duty to provide an account or reckoning of the actions for which one is held responsible” (Cooper & Owen 2007). In financial accounting the focus is on accounts that are disclosed to external shareholders and the public (Messner 2009). Sociologically understood, accountability denotes the exchange of reasons for conduct. To give an account means to provide reasons for one’s behavior, to explain and justify what one did or did not do (Messner 2009). Accountability is a morally significant practice, since to demand an account from someone is to ask this person to enact discursively the responsibility for his or her behavior. As Sinclair (1995) saw it, accountability goes beyond the idea of holding to account: the management of accountability is associated with “an understanding of language and ideology, values and ethics, emotions and motivation” (Sinclair 1995).

In management accounting, in contrast, the exchange of accounts takes place within the organization or between the organization and some of its contractual stakeholders (e.g. customers, suppliers), often by means of reporting and control routines in which costs, profits, returns or other management-related information are communicated (Messner, 2009). Roberts and Scapens (1986) suggest that accountability is not only about the responsibility to produce and give accounts. They point out that its importance lies in reducing the information and allowing it to bridge physical distances and become visible; in other words, accounts provide a form of presence at the lower levels of the organization. The authors further argued that in the absence of a “shared context of extensive mutual knowledge”, selectively transmitted accounting information can be used to convey a stylized image of the organization (Ahrens 1996; Roberts & Scapens 1986).

According to Ahrens (1996) a defining feature of the corporate processes of accountability is aligning the organizational rhetoric and practice with wider public discourses. The persons held accountable in an organization are the ones who actually create the style of accountability with their accounting processes (Ahrens, 1996). Ezzamel et al. (2007) approached corporate governance as a socially constructed phenomenon and associated its meaning with “the regulatory and the folk

sources of meaning construction". They distinguished two discourses of accountability: those related to the legislative obligations of companies to legitimate themselves, and those by which corporate actors legitimate themselves with each other in day-to-day activities (Ezzamel, Robson, Stapleton & McLean 2007). Sinclair (1995), on the other hand, was identified five discourses on accountability in the interviews with top executives: political, public, managerial, professional and personal (Sinclair, 1995).

Considering both the content and the practice of accountability seems important when it comes to understanding the ethical dimension of accountability. This is because ethical questions may not only emerge with respect to the 'what' of accountability, but also with regards to the 'how'. The ethics of accountability is not only about the types of demands that the accountable self is subject to; it is also about the way in which, and the extent to which, such demands are raised (Messner, 2009).

2.2 *Approaches to accountability*

The mainstream literature on the accountability issue has adopted a theoretical approach of agency theory focusing on the accountability of the company to the shareholders. The conflicts of interests between shareholders and managers have been investigated through the point of view of principal-agent theory formulated by Jensen and Meckling (1976). Principal-agent theory postulates that by delegating the management of companies to managers (agents), the owners (principals) have to create mechanisms to align the agents' interests with their own (Brennan and Solomon 2008; Jensen & Meckling 1976; Machold et al. 2008). The shareholder-oriented approach has been applied to accounting and finance research which has focused on the impact of boards' effectiveness to produce profit and value for the shareholders (Brennan and Solomon, 2008). The purpose of the corporation is seen to be the maximization of shareholders' wealth (Jensen & Meckling 1976; Letza, Xiuping and Kirkbride 2004).

On the other hand, the alternative approach, stakeholder-oriented framework, emphasizes that the company is responsible to all its stakeholders (Brennan & Solomon 2008). The stakeholder perspective on corporate governance emerged in the wake of developments in the stakeholder theory developed by Freeman (1984). The stakeholder theory is seen as a credible alternative to the shareholder theory, and has indeed been labeled its intellectual successor. The challenge to the stakeholder theory rises from the claim that the company should serve the wider interests of stakeholders rather than shareholders only. Stakeholders such as employees, creditors, suppliers, customers and local communities have relationships

with the company and affect its success (Letza et al. 2004). The most extreme trends of the stakeholder theory suggest that the environment, animal species and future generations should be understood as stakeholders (Solomon & Solomon 2004).

Yet, shareholder and stakeholder theories have commonalities in their reasoning which is underpinned by shared normative bases (Machhold et al. 2007). The debate on corporate governance between the shareholder perspective and stakeholder perspective has been questioned by Letza et al. (2004). Both approaches, however, see the role of the board of the company to be important in providing accountability, not only the structure or composition of the board but behavioural dynamics of the board as well (Roberts et al. 2005). Machold, Ahmed and Farquhar (2008) challenge both the shareholder and stakeholder approaches and write that both of them are based on masculine conceptions of ethics. They instead offer a feminist ethics approach to the corporate governance issue. They also draw the distinction between ethical theories with feminine perspectives and those that are concerned with wider social and political dimensions of inequality, and refer to the work by Carol Gilligan (1982), who demonstrated that moral reasoning and moral development of females was not 'lower' than that of males, it was simply different. Whilst male participants emphasized the importance of individual autonomy and rights of the self and others, female participants constructed their moral reasoning around notions of connectedness and caring for people they were close to. The ethics of care, despite some of the concerns expressed about its relativism and use of imagery, has nevertheless become a powerful challenge to traditional ethical theories, especially justice theories, and has influenced the development of gender theories.

The corporate governance research from the view of feminist ethical approach focuses on gender issues. The results of a study showed that companies with a higher proportion of women on the board engaged in charitable actions more than companies with a lower proportion of female board members (Williams, 2003). In addition, the number of women on the board is of significance when evaluating the contribution they make to it. While one female board member may make a positive contribution, companies with three or more women on the board were likely to benefit most from their contributions. Three women made up a critical mass on a corporate board, normalizing the female presence on the board and allowing women to raise issues more freely, and causing men to listen to them with more open minds (Konrad, Kramer & Erkut 2008).

2.3 *Female and male board members*

An important characteristic for a board member is the ability to share his/her opinions and work with the others on the board. Each board member brings unique resources to the organization, such as expertise, skill, information, and links outside the organization (Hillman, Cannella & Harris 2002; Kesner 1988; Kosnik 1990). The roles the members assume on the boards differ in relation to their efficiency and impressiveness. The roles which have a positive effect to the board's value are related to questioning, changing, constructing consensus and consulting (Lainema 2006; Leblanc & Gillies 2005; Virtanen 2010).

There is a wide range of existing research where the differences between female and male board members are emphasized. Women's presence on boards is seen important, since greater gender diversity among board members increases organisational performance, is likely to increase firm value, and brings international diversity to the boards. However, the women's positions on the boards do not improve. Burgess and Tharenou (2002) noted that the fact that very few women are appointed to corporate boards of directors is a worldwide phenomenon (Bilimoria & Wheeler 2000; Burgess and Tharenou 2002; Burke 1997; Carter, Simkins & Simpson 2003; Daily et al. 1999; Erdhardt, Werbel & Shrader 2003; Singh, Terjesen & Vinnicombe 2008). Norway is an exception to the rule, because Norwegian law requires that 40% of board members in public companies must be of the less represented gender, as a result of which the percentage of women on Norwegian corporate boards is among the highest in the world (Huse et al. 2009).

The situation in most countries is quite different, and only a few women manage to change their positions in organizations (Barako & Brown 2008; Marshall 2007; Sheridan 2001; Sheridan and Milgate 2005). In Australia, for instance, where women represent a very small percentage of corporate board members, 33 of the top 100 Australian companies had no women on their boards, and 51 companies had only one female board member (Kang et al. 2007).

In Finland, there were 128 companies listed on the Finnish Stock Exchange (OMX) in Autumn 2008, with 763 members serving on their corporate boards. The number of male board members was 664 while the number of female board members was 89, or 11.7%. Female and male directors serving on the boards of Finnish listed companies are quite similar regarding personal characteristics, such as family status and educational background, and the only difference in this respect is the women's lower average age compared to the men. When it comes to their careers, the results again are mostly similar. However, female directors consider themselves more flexible, more capable of reforming themselves as demanded by changing circumstances. This result corroborates the findings of pre-

vious research on gender issues where the protean ability to adapt to new situations has been seen as a key personality trait of women aspiring for a successful status in business (Virtanen 2010).

2.4 *Study questions*

I focus on accountability in a sense of “to whom” rather than “what” or “how” (Messner 2009). The research so far has commonly discussed topics like to whom the company is accountable; to the shareholders or the stakeholders (Brennan & Solomon 2008). Other studies have focused on accountability based on feminine ethics (Machold et al. 2008). The first research question asks to whom the board members of Finnish listed companies understand to be accountable, to shareholders, to stakeholders or do they carry a wider social responsibility to environment, or do they emphasize feminine ethical care;

RQ1. Who do the members of Finnish listed companies understand to be accountable to?

The 12 sub questions are given in Appendix A. Three of them analyze accountability to shareholders (SHA1, SHA2, and SHA3), and four focus on accountability to stakeholders (STA1, STA2, STA3, and STA4). The remaining five questions deal with balancing between stakeholders and shareholders (BAL1); taking care for the environment (ENV1, ENV2) taking care for the company’s values (VAL1), and taking care (CAR1).

My second research question examines whether there are differences between female and male board members when it comes to the views of accountability;

RQ2. Are there differences between male and female board members concerning the views of their accountability?

Research Question 2 is based on the notion that women’s views on accountability differ from those of men, and lead to decision-making in which feminist ethics and care are emphasized (Machold et al. 2008; Virtanen 2010).

3 Data, analysis and findings

3.1 Data

The empirical tests are based on data collected from members of Finnish listed companies in spring 2009. At that time there were 89 seats held by women on the boards of Finnish listed companies, which were seated by 79 women. Finally, the questionnaires were sent to the 62 Finnish-speaking female members of the boards mailing to the company addresses. 26 female members responded, representing a response rate of 42.9 per cent. The same questionnaire was mailed to 82 male members who were selected randomly. Of the 82 questionnaires sent to men, 38 responded, representing a response rate of 46.3 per cent. The sample and the responses are presented in Table 5.

Table 5. Responses to the questionnaire

	<i>Female</i>	<i>Male</i>	<i>Total</i>
Sample	62	82	144
Responses	26	38	64
Percent	42.9	46.3	44.4

The data was processed using SPSS (Statistical Package for Social Sciences) and the study questions were analysed using the ANOVA test (Aczel & Sounderpan-dian 2006; O'Connel & Bowerman 2003).

3.2 Results

The descriptive statistics for the variables are presented in Table 6. The mean for each of the variables is relatively high. The highest means are for variables measuring accountability to shareholders (SHA1, SHA 2, and SHA 3), when the variables measuring accountability to stakeholders attain only slightly lower means (STA1, STA2, STA3, and STA4). However, all of the means including accountability to environment (ENV1, ENV 2) and care for the company's values (VAL1) are high.

Table 6. Descriptive statistics

	<i>N</i>	<i>Mini- mum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Devia- tion</i>
SHA1	63	2	5	4,75	,538
SHA2	63	2	5	4,25	,782
STA1	62	2	5	4,13	,932
BAL1	63	1	5	3,62	1,142
STA2	63	1	5	3,70	1,173
ENV1	63	2	5	3,97	,822
SHA3	63	2	5	4,71	,580
STA3	63	1	5	3,59	1,173
ENV2	63	2	5	4,19	,692
STA4	63	1	5	3,43	1,011
VAL1	63	2	5	4,62	,658
CAR1	63	1	5	3,43	1,146
Valid N (listwise)	62				

The means calculated for female and male board members and the results of ANOVA –tests are seen in Table 7 and 8. In Table 7 we can see that there are minor differences in the means of views between the female and male members.

There were three questions focusing on the agency theory, profit and accountability to the shareholders. The corresponding variables are SHA1, SHA2 and SHA3. As seen on the Table 8 there are no significant divergences between the views of women and men. Both female and male members strongly value accountability and responsibility to the shareholders and profit seeking. Four questions focus on accountability to stakeholders; STA1, STA2, STA3, and STA4. Here again we can see that the means of the variables are only slightly higher for female members than those for men. The ANOVA test gives a *Asymp. Sig.* value under 0.5 only for the variable, BAL1, measuring to what extent the board should balance interests of shareholders and stakeholders.

So, though there are no statistically significant differences between women and men, there are some signs that the female board members find accountability to stakeholders more important than the male members. In fact, they like to balance the interests between shareholders and stakeholders. The two last questions focus on a company's values and care. According to the test there were no significant divergences between women and men on the issue, which is based on the thought of feminist ethics.

The results of the analyses suggest that women are more similar than different compared to men regarding the conceptions of accountability. The only difference in this respect was that women see balancing between stakeholders and shareholders more important than men. This can be linked to the women's board behavior, in which consulting, communicating and balancing are important elements (Lainema 2006; Virtanen 2010).

Table 7. Means of the variables

<i>GENDER</i>		<i>SHA1</i>	<i>SHA2</i>	<i>STA1</i>	<i>BAL1</i>	<i>STA2</i>	<i>ENV1</i>	<i>SHA3</i>	<i>STA3</i>	<i>ENV2</i>	<i>STA4</i>	<i>VAL1</i>	<i>CAR1</i>
FEM	Mean	4,84	4,20	4,37	4,00	3,84	4,20	4,80	3,72	4,32	3,52	4,52	3,72
	N	25	25	24	25	25	25	25	25	25	25	25	25
	Std. Deviation	,374	,764	,875	1,000	1,106	,707	,408	1,208	,627	1,005	,823	1,137
MAL	Mean	4,68	4,29	3,97	3,37	3,61	3,82	4,66	3,50	4,11	3,37	4,68	3,24
	N	38	38	38	38	38	38	38	38	38	38	38	38
	Std. Deviation	,620	,802	,944	1,172	1,220	,865	,669	1,157	,727	1,025	,525	1,125
Total	Mean	4,75	4,25	4,13	3,62	3,70	3,97	4,71	3,59	4,19	3,43	4,62	3,43
	N	63	63	62	63	63	63	63	63	63	63	63	63
	Std. Deviation	,538	,782	,932	1,142	1,173	,822	,580	1,173	,692	1,011	,658	1,146

Table 8. Results of ANOVA -test

			<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
SHA1 GENDER	Between Groups	(Combined)	,366	1	,366	1,271	,264
	Within Groups		17,571	61	,288		
	Total		17,937	62			
SHA2 GENDER	Between Groups	(Combined)	,121	1	,121	,195	,661
	Within Groups		37,816	61	,620		
	Total		37,937	62			
STA1 GENDER	Between Groups	(Combined)	2,369	1	2,369	2,809	,099
	Within Groups		50,599	60	,843		
	Total		52,968	61			
BAL1 GENDER	Between Groups	(Combined)	6,015	1	6,015	4,903	,031
	Within Groups		74,842	61	1,227		
	Total		80,857	62			
STA2 GENDER	Between Groups	(Combined)	,831	1	,831	,600	,441
	Within Groups		84,439	61	1,384		
	Total		85,270	62			
ENV1 GENDER	Between Groups	(Combined)	2,226	1	2,226	3,419	,069
	Within Groups		39,711	61	,651		
	Total		41,937	62			
SHA3 GENDER	Between Groups	(Combined)	,305	1	,305	,904	,346
	Within Groups		20,553	61	,337		
	Total		20,857	62			
STA3 GENDER	Between Groups	(Combined)	,730	1	,730	,527	,471
	Within Groups		84,540	61	1,386		
	Total		85,270	62			
ENV1 GENDER	Between Groups	(Combined)	,695	1	,695	1,462	,231
	Within Groups		29,019	61	,476		
	Total		29,714	62			
STA4 GENDER	Between Groups	(Combined)	,346	1	,346	,335	,565
	Within Groups		63,082	61	1,034		
	Total		63,429	62			
VAL1 GENDER	Between Groups	(Combined)	,407	1	,407	,938	,337
	Within Groups		26,451	61	,434		
	Total		26,857	62			
CAR1 GENDER	Between Groups	(Combined)	3,520	1	3,520	2,756	,102
	Within Groups		77,908	61	1,277		
	Total		81,429	62			

4 Discussion

The main limitation to the methods of this study concerns the size of data. The collecting data is not very large for purposes of statistical analysis. However, it gives a picture of gender differences on Finnish corporate boards.

The 'glass ceiling' phenomenon has been widely discussed in research over the past few decades (Broadbent & Kirkham 2008). There is a lot of research on gender issues where the differences between men and women are investigated (Bilimoria and Wheeler 2000; Broadbent and Kirkham 2008; Burgess and Thare-nou 2002; Burke 1997; Campbell & Vera 2010, Carter, Dimkins & Simpson 2003; Dailty, Certo & Dalton 1999, among others). There is empirical evidence that female members on boards improve financial performance. Adding women to the board can have a positive effect on the stock market and investors on average believe that female board members add value (Campbell and Vera 2010). In addition, greater gender diversity among board members increases organizational performance and firm outcomes (Bilimoria & Wheeler 2000; Erdhardt, Werbel & Shrader 2003). Furthermore, there is a significant positive relationship between the portion of women on the board and firm value (Carter, Simkins & Simpson 2003).

In Finland very little has been written about differences between female and male board members. This paper contributes to the existing research by enhancing our knowledge of gender issues on corporate boards of Finnish companies. The evidence of this study is that the views concerning accountability do not differ between female and male board members. Both women and men consider that the board is accountable to the owners of the company and the board's duty is to support maximizing the profits for the owners. Further, the board members see that the board is accountable to all of the stakeholders, including the environment. Contrary, the feminist values and ethics with care and love were not as significant for women, as it was expected.

Though Finland enjoys a gender equalitarian image in cross-national comparisons, the portion of female board members is low on the corporate boards of Finnish listed companies. When it comes to accounting and accounting research, women's role has been minor in writing and publishing accounting research. This study took the challenge for writing research of gender issues. The aim was to contribute to accounting research by representing accountability and gender differences in the context of corporate boards.

References

- Aczel, A.D. & Sounderpandian, J. (2006). *Complete Business Statistics*. Sixth Edition. Singapore: McGraw-Hill International Edition.
- Ahrens, T. (1996) Styles of accountability. *Accounting, Organizations and Society* 21:2/3, 139–173.
- Bilimoria, D. & Wheeler, J. (2000). Women Corporate Directors. In Burke R. and M. Mattis (eds.), *Women on Corporate Boards of Directors*. Netherlands, Kluwer Academic, 25–40.
- Brennan, N.M. & Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: an overview. *Accounting, Auditing & Accountability Journal* 21:7, 885–906.
- Broadbent, J. & Kirkham, L. (2008). Glass ceilings, glass cliffs or new worlds? Revisiting gender and accounting. *Accounting, Auditing & Accountability Journal* 21:4, 465–473.
- Burgess, Z. & Tharenou, P. (2002). Women board directors: Characteristics of the few. *Journal of Business Ethics* 37:1, 39–49.
- Burke, R.J. (1997). Women on corporate boards of directors: A needed resource. *Journal of Business Ethics* 16:9, 909-915.
- Burke, R.J. (2006). Women's career development: recent international research. *Equal Opportunities International* 25:4, 213–235.
- Campbell, K. & Vera, A.M. (2010). Female board appointments and firm valuation: short and long-term effects. *Journal of Management and Governance* 14:1, 37–59.
- Carter, D.A., Simkins, B.J. & Simpson, W.G. (2003). Corporate governance, board diversity, and firm value. *Financial Review* 38:1, 33–53.
- Collier, P.M. (2008). Stakeholder accountability: A field study of the implementation of a governance improvement plan. *Accounting, Auditing & Accountability Journal* 21:7, 933–954.
- Cooper, S.M. & Owen, D.L. (2007). Corporate social reporting and stakeholder accountability: The missing link. *Accounting, Organizations and Society* 32:7–8, 649–667.
- Crowley-Henry, M. & Weir, E. (2007). The international protean career: four women's narratives. *Journal of Organizational Change* 20:2, 245–258.

Daily, C.M., Certo, S. & Dalton, D.R. (1999). A decade of corporate women: some progress in the boardroom, none in the executive suite. *Strategic Management Journal* 20:1, 93–99.

Ezzamel, M., Robson, K., Stapleton, P. & McLean, C. (2007). Discourse and institutional change: ‘Giving accounts’ and accountability. *Management Accounting Research* 18:2, 150–171.

Erdhardt, N.L., Werbel, J.D. & Sharder, C.B. (2003). Board of Director Diversity and Firm Financial Performance. *Corporate Governance: An international Review* 11:2, 102–111.

Gilligan, C. (1982). *In a different Voice, Psychological Theory and Women’s Development*. Cambridge Mass: Harvard University Press.

Hillman A., Cannella, A. Jr & Harris, I. (2002). Women and racial minorities in the boardroom: How do directors differ? *Journal of Management* 28:6, 747–763.

Huse, M., Nielsen, S.T. & Hagen, M.I. (2009). Women and employee-elected board members, and their contributions to board control tasks. *Journal of Business Ethics* 89:4, 581–597.

Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: managerial behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics* 3:4, 305–360.

Kang, H., Cheng, M. & Gray, S.J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance. An International Review* 15:2, 194–207.

Kesner, I. (1988). Directors’ characteristics and committee membership: An investigation of type, occupation, tenure and gender. *Academy of Management Journal* 31:1, 66–84.

Konrad, A.M., Kramer, V. & Erkut, S. (2008). The impact of three or more women on corporate boards. *Organizational Dynamics* 37:2, 145–164.

Kosnik, R. (1990). The effects of board demography and directors’ incentives on corporate greenmail decisions. *Academy of Management Journal* 31:1, 129–150.

Lainema, M. (2006). *Strateginen hallitus*. Jyväskylä: Boardman.

Lassila, A. (2010). Naisten osuus kasvussa pörssiyritysten hallituksissa. *Helsingin Sanomat* 16.2.2010.

Leblanc, R., & Gillies, J. (2005). *Inside the Boardroom, How Boards Really Work and the Coming revolution in corporate Governance*. Ontario: John Wiley & Sons Canada, Ltd.

Letza, S., Sun, X. & Kirkbride, J. (2004). Shareholding versus stakeholding: a critical review of corporate governance. *Corporate Governance* 12:3, 242–262.

Machold, S., Ahmed, P.K. & Stuart, S.F. (2008). Corporate governance and ethics: A feminist perspective. *Journal of Business Ethics* 81:3, 665–678.

Marshall, J. (2007). The gendering of leadership in corporate social responsibility. *Journal of Organizational Change Management* 20:2, 165–181.

Messner, M. (2009). The limits of accountability. *Accounting, Organizations and Society* 34:8, 918–938.

O’Connell, R.T. & Bowerman, B.L. (2003). *Business Statistics in Practice*. Third Edition. McGraw-Hill Irwin.

Oakes, L.S. & Young, J.J. (2008). Accountability re-examined: evidence from Hull House. *Accounting, Auditing & Accountability Journal* 21:2, 765–790.

Odgen, S.G. (1995). Transforming frameworks of accountability: the case of water privatization. *Accounting, Organizations and Society* 20:2–3, 193–218.

Owen, D.L., Swift, C.H. & Bowerman, M. (2000). The new social audits: accountability, managerial capture or the agenda of social champions? *The European Accounting Review* 9:1, 81–98.

Parker, L.D. (2007). Financial and external reporting research: the broadening corporate governance challenge. *Accounting and Business Research* 37:1, 39–54.

Roberts, J. & Scapens, R. (1985). Accounting systems and systems of accountability – understanding accounting practices in their organizational contexts. *Accounting, Organizations and Society* 10:4, 443–456.

Roberts, J., T. McNulty & P. Stiles (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *British Journal Management* 16, 5–26.

Sheridan, A. (2001). A view from the top: Women on the boards of public companies. *Corporate Governance* 1:1, 8–14.

Sheridan, A. & Milgate, G. (2005). Accessing Board Positions: a comparison of female and male board members’ views. *Corporate Governance: An International Review* 13:6, 847–855.

Sinclair, A. (1995). The chameleon of accountability: forms and discourses. *Accounting, Organizations and Society* 20:2–3, 219–237.

Singh, V., Terjesen, S. & Vinnicombe, S. (2008). Newly appointed directors in the boardroom: How do women and men differ? *European Management Journal* 26:1, 48–58.

Stein, M.J. (2008). Beyond the boardroom: governmental perspectives on corporate governance. *Accounting, Auditing & Accountability Journal* 21:7, 1001–1025.

Vinnicombe, S., Singh, V., Burke, R.J., Bilimoria, D. & Huse, M. (2008). *Women on Corporate Boards of Directors: International Research and Practice*. Great Britain: Edward Elgar Publishing Limited.

Virtanen, A. (2010). Women on the boards of listed companies; Evidence from Finland. Accepted for publication in *Journal of Management and Governance*, 14.10.2010.

White, B. (1995). The career development of successful women. *Women in Management Review* 10:3, 4–15.

Williams, R.J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics* 42:1, 1–10.

Appendix A. The questionnaire

1. Grouping variable

GEN	Gender	1	Female
		2	Male

2. Views of accountability

		Totally agree	Agree	Hard to say	Dis- agree	Totally disagree
SHA1	Board is accountable to the shareholders	5	4	3	2	1
SHA2	Board has to make profit to the shareholders	5	4	3	2	1
STA1	Board has to work for all of the stakeholders	5	4	3	2	1
BAL1	Board has to balance between the shareholders and stakeholders	5	4	3	2	1
STA2	Board has to manage equally and fairly to all of the stakeholders	5	4	3	2	1
ENV1	Board has to take care of environment and generations in future	5	4	3	2	1
SHA3	Board is responsible to the shareholders	5	4	3	2	1
STA3	Board is responsible to many stakeholders	5	4	3	2	1
ENV2	Board is responsible to environment	5	4	3	2	1
STA4	Board has to take care of the weak stakeholders	5	4	3	2	1
VAL1	Board has to take care of the company's values	5	4	3	2	1
CAR1	Taking care is as important as the financial goals	5	4	3	2	1