

Christensen, Leif

Doctoral Thesis

Quality of Information: The role of internal controls and materiality

PhD Series, No. 30.2016

Provided in Cooperation with:

Copenhagen Business School (CBS)

Suggested Citation: Christensen, Leif (2016) : Quality of Information: The role of internal controls and materiality, PhD Series, No. 30.2016, ISBN 9788793483255, Copenhagen Business School (CBS), Frederiksberg, <https://hdl.handle.net/10398/9353>

This Version is available at:

<https://hdl.handle.net/10419/208984>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/3.0/>

COPENHAGEN BUSINESS SCHOOL
SOLBJERG PLADS 3
DK-2000 FREDERIKSBERG
DANMARK

WWW.CBS.DK

ISSN 0906-6934

Print ISBN: 978-87-93483-24-8
Online ISBN: 978-87-93483-25-5

QUALITY OF INFORMATION - THE ROLE OF INTERNAL CONTROLS AND MATERIALITY

PhD Series 30-2016

Leif Christensen

QUALITY OF INFORMATION

- THE ROLE OF INTERNAL CONTROLS AND MATERIALITY

The PhD School of LIMAC

PhD Series 30.2016

CBS  **COPENHAGEN BUSINESS SCHOOL**
HANDELSHØJSKOLEN

Quality of information

The role of internal controls and materiality

Leif Christensen

Supervisors

Thomas Plenborg (CBS)

Thomas Riise Johansen (CBS)

LIMAC PhD School

Copenhagen Business School (CBS)

Leif Christensen

Quality of information – The role of internal controls and materiality

1st edition 2016

PhD Series 30.2016

© Leif Christensen

ISSN 0906-6934

Print ISBN: 978-87-93483-24-8

Online ISBN: 978-87-93483-25-5

LIMAC PhD School is a cross disciplinary PhD School connected to research communities within the areas of Languages, Law, Informatics, Operations Management, Accounting, Communication and Cultural Studies.

All rights reserved.

No parts of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without permission in writing from the publisher.

Acknowledgements

The idea of this PhD project was born at a birthday party for one of my former PwC colleagues. Over a glass of wine, one of the other guests, Associate Professor Lars Kiertzner from CBS, suggested that I should consider doing something useful with my life instead of staying with PwC. About a year later, this PhD project was initiated, and I was introduced to my supervisors at CBS, Professors Thomas Plenborg and Thomas Riise Johansen. Thank you both to Lars for opening the door to CBS and to Thomas and Thomas for guidance and support and for dealing with challenges along the way. This support was both necessary and highly appreciated.

A PhD dissertation is a project that involves several people. In addition to the supervisors who have followed the project from the beginning, I would like first of all to mention Professor Carsten Rohde, CBS. Carsten asked me to take part in a project sponsored by the Chartered Institute of Management Accountants (CIMA) in the UK. This project was staffed by a joint Icelandic and Danish team. The Icelandic team consisted of Professor Pall Rikhardsson - who started the project - and PhD Fellow Catherine E. Batt from Reykjavik University. The project had a dual purpose and resulted in the CIMA publication "Financial Crisis and Changes in Management Controls in Banks" (Rikhardsson et al., 2016) and formed the basis for three other papers of which one is included in this thesis. Thank you to Carsten, Pall and Catherine for an effective teamwork effort.

I also want to thank PhD Fellow and PwC employee Thomas Ryttersgaard for the joint effort in preparing the third paper included in the thesis, another example of effective teamwork.

In addition to the above, my other colleagues at the CBS Department of Accounting and Auditing, in spite of their busy schedules, have taken the time to share experiences when needed. Thank you for that.

Other highly appreciated input was provided by Professor Gerrit Sarens, who was a discussant at my pre-defense.

I also thank FSRs Studie- & Uddannelsesfond for co-sponsoring the PhD project.

Finally, I would like to thank all the respondents who have taken part in the case studies.

Leif Christensen

Copenhagen, 1 August 2016

Summary

Accounting and auditing is closely related to the quality of data. Two important elements supporting the quality of information are internal controls and materiality. Inspired by Simons (1994), these elements can be considered “basic building blocks”. Internal controls are perhaps the most important element, as they ensure that information used for management purposes has the required quality (Kinney, 2000). This information can be used as a basis for preparing the external financial reporting (COSO, 2013) and as a prerequisite for establishing information-based management control systems (MCS) (Simons, 1994). When regarding management controls as a package, internal controls are part of the administrative controls and often formalised in policies and procedures (Malmi and Brown, 2008).

The level of controls should be guided by the need for reliable information. These considerations are linked to another “basic building block”, namely the concept of materiality. The basic meaning of materiality is “that there is no need to be concerned with what is not important or with what does not matter” (Bernstein, 1967). Gaining an understanding of these concepts is important in order to answer the question “when is enough – enough?” The information should be both reliable and relevant, but there is also the cost to consider, since companies spend considerable resources on the design, implementation and operation of administrative controls and financial reporting (Carney, 2006). It is also important to understand these concepts when performing an audit of the internal controls embedded in the company systems and processes (Kinney et al., 2013), as well as when preparing an annual report. The overall objective of this thesis is to add to the understanding of the role of internal controls and materiality. The three articles included aim at meeting this objective by analysing selected areas within accounting and auditing:

Article #1 - To what extent, how and why do internal control audits affect internal controls?

Based on a case study in a large financial institution it is examined to what extent, how and why audits performed by an internal audit function (IAF) affect internal controls. The case study included a review of the management letters reporting the

result of the internal control audits for the period 2008 – 12. The result reveals that 30% of auditors' recommendations initiate an implementation of new internal controls, 60% relate to weaknesses in existing controls, and 10% can be referred to insufficient documentation.

To explain how and why the audits affect internal controls, an analysis of the interaction between auditors and client was performed. The analysis was based on a combined audit/client interaction model (Saltario, 2012; Fernley et al., 2011), and the result showed that the interaction in the management letter process is primarily a fact-based exchange of information. The outcome of the process, which are recommendations for improvement of existing or implementation of new internal controls, should be considered a joint product. The regulatory requirements are blamed for the burdensome work with improvement and implementation of new internal controls. However, it seems that the improved level of internal controls would have been implemented regardless of the regulatory pressure since it adds value from both an audit and a business perspective.

Article #2 – Financial crisis and administrative controls: An institutional theory perspective.

The financial crisis in Iceland was of an extraordinary magnitude, as all the banks went bankrupt and a few days later were re-established. The three Icelandic banks were compared with three Danish banks in order to identify and distinguish the crisis-driven response from ordinary market-driven reactions. The three Danish banks managed the financial crisis without specific governmental support. Based on a case study of these six banks, the changes made to the administrative controls (Malmi and Brown, 2008) were viewed through an institutional lens, focusing on the sources and embeddedness of change (DiMaggio and Powell, 1983; Burns and Scapens, 2000).

The analysis shows that all the banks have established a number of formalised and visible changes, which can be verified by audits and inspections from the Financial Supervisory Authorities (FSA). The most significant difference is that the Icelandic banks after the financial crisis have increased the risk management functions to a size five times as large as is the case in Denmark. Further, as an extraordinary action they established new values immediately after the financial

crisis. The analysis indicates that more detailed regulatory requirements, which have been common practice for a long time (Franks et al., 1997; Van der Stede, 2011), will not improve the effectiveness of controls. Further improvements have to rely on managements' use of cultural controls to direct employees' behaviour (Erkens et al., 2012).

Article #3 – Disclosure materiality: An analysis of stakeholders' perception

Preparer and auditors decide what to disclose in the annual report. These decisions are made behind closed doors (Fernley et al., 2011), and the users only see the final result as presented in the annual report (Brennan and Gray, 2005). Based on a case study it is illustrated how preparer and auditors perceive materiality. This perception is compared to the way users view materiality of the notes included in the annual report.

Preparer and auditors primarily assess materiality on the basis of size of amounts. This assessment is comparable with the evaluation of misstatements (Eilifsen et al., 2014-B). As a second step they consider if the development from prior year deviates from an expected trend. Finally they consider if the disclosure adds value to the user. This assessment approach is misaligned with the current standards guiding materiality (IASB, 2015). An important response from the analysts is that they only to a limited extent use the disclosures as presented in the annual report. The main reasons are that the information required for the financial analysis is provided in the quarterly statements or communicated at meetings with the companies (Brown et al., 2015). Consequently it is concluded that preparers' and auditors' perception of materiality is not aligned with that of the users of annual reports when assessing disclosure materiality.

Resume på dansk (Summary in Danish)

Regnskab og revision er tæt knyttet til kvaliteten af data, og der er to væsentlige elementer der understøtter datakvaliteten, nemlig interne kontroller og væsentlighed. Inspireret af Simons (1994) kan disse elementer betragtes som "grundlæggende byggesten". Interne kontroller er nok det vigtigste element, da de har til formål at sikre at data der anvendes til ledelsesmæssige formål har den nødvendige kvalitet (Kinney, 2000). Disse data kan anvendes som grundlag for udarbejdelsen af eksternt finansiel rapportering (COSO, 2013) og som basis for etablering af ledelsessystemer (Simons, 1994). Hvis ledelsessystemer defineres som en pakke, udgør de interne kontroller en del af de administrative kontroller som ofte er dokumenteret i politikker og procedurer (Malmi og Brown, 2008).

Kontrolniveauet bør være bestemt af behovet for pålidelige data. Sådanne overvejelser er tæt knyttet til en anden af de "grundlæggende byggesten", som er væsentlighed. Grundlæggende betyder væsentlighed "at der ikke er grund til at være bekymret over det der ikke vigtigt eller det som er ligegyldigt" (Bernstein, 1967). En forståelse af disse begreber er vigtig for at kunne besvare spørgsmålet: "hvornår nok er nok". Informationerne skal være både pålidelige og relevante, men omkostningerne skal også tages med i betragtning, da virksomhederne anvender betydelige ressourcer på design, implementering og drift af administrative kontroller og finansiel rapportering (Carney, 2006). Forståelse er også vigtig når der skal udføres revision af de interne kontroller, der er en del af virksomhedens systemer og processer (Kinney et al., 2013), og ved udarbejdelse af årsregnskabet. Det overordnede formål med denne afhandling er at bidrage til forståelsen af den rolle, interne kontroller og væsentlighed spiller. De tre artikler der indgår i afhandlingen søger at opfylde dette formål gennem analyser af udvalgte områder inden for regnskab og revision:

Artikel # 1 - I hvilket omfang, hvordan og hvorfor påvirker revisionen af intern kontroller de interne kontroller?

Baseret på et casestudie i en stor finansiel virksomhed er det undersøgt i hvilket omfang, hvordan og hvorfor revision udført af en intern revision påvirker de interne kontroller. Casestudiet omfattede en gennemgang af resultatet af revision af interne kontroller rapporteret i management letters for perioden 2008 – 12.

Resultatet viser, at 30% af revisors anbefalinger medfører implementering af nye interne kontroller, 60% vedrører svagheder i eksisterende kontroller, og 10% kan henføres til utilstrækkelig dokumentation.

For at forklare hvordan og hvorfor revisionen påvirker de interne kontroller blev der gennemført en analyse af interaktionen mellem revisorer og klient. Analysen er baseret på en kombineret revisor/klient interaktionsmodel (Saltario, 2012; Fernley et al, 2011). Resultatet af revisionen, som er en anbefaling af nye eller forbedring af eksisterende kontroller, skal anses som en fælles beslutning. De regulatoriske krav bliver brugt som et alibi for det ressourcekrævende arbejde med forbedring af eksisterende og implementering af nye kontroller. Det tyder imidlertid på at forbedringerne både giver en revisionsmæssig og forretningsmæssig værdi, og at de ville have været gennemført uanset de regulatoriske krav.

Artikel # 2 - Finanskrisen og administrative kontroller: Et institutionelt teoriperspektiv.

Den finansielle krise i Island havde et ekstraordinært omfang, da alle bankerne gik konkurs og få dage senere blev reetableret. De tre islandske banker er blevet sammenlignet med tre danske banker for at adskille den krisedrevne reaktion fra den ordinære markedsdrevne reaktion. De danske banker er alle kommet gennem den finansielle krise uden individuel statsstøtte. Baseret på et casestudie af disse seks banker er ændringerne i de administrative kontroller (Malmi og Brown, 2008) blevet analyseret i et institutionelt perspektiv med fokus på årsagen til ændringerne og forankringen af disse (DiMaggio og Powell, 1983; Burns og Scapens, 2000).

Analysen viser, at alle banker har implementeret en række formaliserede og synlige ændringer, der kan verificeres af revisionen og Finanstilsynet. Den væsentligste forskel er, at de islandske banker efter finanskrisen har udvidet risikomanagement funktionerne, så de er fem gange så store som i Danmark. Endvidere har de umiddelbart efter finanskrisen som en ekstraordinær handling fastsat nye værdier. Analysen indikerer tillige at yderligere regulatoriske detailkrav, som har været praksis i lang tid (Franks et al, 1997; Van der Stede, 2011), ikke vil medføre mere effektive kontroller. Yderligere forbedringer skal i stedet baseres på

ledelsens brug af kulturelle kontroller til påvirkning af medarbejdernes adfærd (Erkens et al., 2012).

Artikel # 3 – Noter og væsentlighed: En analyse af interessenternes opfattelse

Virksomhederne og revisorerne beslutter hvad der skal oplyses i årsrapporten. Disse beslutninger træffes bag lukkede døre (Fernley et al., 2011), og brugerne kan kun se resultatet heraf i årsrapporten (Brennan og Gray, 2005). Baseret på et casestudie er det undersøgt hvordan virksomheder og revisorer opfatter væsentlighed. Denne opfattelse er sammenholdt med brugernes vurdering af væsentlighed på grundlag af noterne til årsrapporten.

Virksomheder og revisorer vurderer primært væsentlighed på grundlag af beløbsstørrelser. Dette svarer til vurderingen af regnskabsmæssige fejl (Eilifsen et al., 2014-B). Sekundært overvejer de om udviklingen fra tidligere år afviger fra den forventede trend. Endelig overvejes det om oplysningerne giver værdi for brugerne. Denne tilgang er ikke i overensstemmelse med de gældende vejledninger om væsentlighed (IASB, 2015). En vigtig respons fra analytikerne er at de kun i begrænset omfang bruger noterne i årsrapporten. De væsentligste årsager hertil er, at de nødvendige informationer fremgår af kvartalsmeddelelserne eller modtages på møder med selskaberne (Brown et al., 2015). Det kan derfor konkluderes, at virksomhedernes og revisorenes opfattelse af væsentlighed ikke svarer til brugernes opfattelse.

Content

1.	Background, motivation and objective	15
2.	Internal controls: Management accounting and controls systems	17
3.	Summary	22
4.	Research method	24
5.	Presentation of findings	25
6.	Contributions and implications	33
7.	References	37
8.	Articles	47
9.	To what extent, how and why do internal control audits affect internal controls?	49
10.	Financial crisis and administrative controls: An institutional theory perspective.	103
11.	Disclosure materiality: An analysis of stakeholders' perception	141

1. Background, motivation and objective

Control of other people's work has been used in a variety of contexts for more than 5,000 years. A number of examples have been identified from the Mesopotamian and Egyptian civilisations through the Dark Ages to the present day (Lee, 1971). Even though it has been an integrated part of doing business for centuries, very little has been written about internal control as a separate topic for a long time. In the early 20th century, auditors did however start writing about the subject under the heading "General system of internal check" (Dicksee, 1905). Later these controls were referred to as internal controls, which is the accepted terminology today (COSO, 1992). In a wider management control perspective, controls can be defined as: "The process by which managers ensure that resources are obtained and used efficiently and efficiently in the accomplishment of the organization's objectives" (Anthony, 1965). Internal controls may be considered a subset of management controls (Simons, 1994), and they can be used to influence the behaviour of employees (Flamholtz et al., 1985).

My personal experiences with internal controls started more than 30 years ago when we performed process audits according to Skinner and Anderson (1966). This work accelerated from 1995 when AICPA adapted COSO's definition of internal control by issuing SAS 78 (COSO, 1992; AICPA, 2002). Following SAS 78, the "Big 6" audit firms introduced system-based audit approaches. One example was the implementation of "System Assurance – A Practical Approach", which was rolled out globally by Price Waterhouse. This approach aimed at evaluating the systems risk "analysing and testing controls in the components being system assured". The guidelines aimed at changing the traditional audit focus to a more control-based approach. This was a response to the growing use of ERP systems and the corresponding increase in the number and complexity of enterprise transactions. Especially the release of SAP R/3 in 1992 initiated this change in the audit approach.

The next major event that had an impact on the attention to control was the Sarbanes-Oxley Act of 2002 (SOX). According to sections 302 and 404, the companies should establish a documented system of internal control and issue quarterly and annual reports including specific statements regarding internal

control. On an annual basis, this reporting is subject to audit. My personal experience from several SOX implementation projects and audits is that almost all companies designed and documented the controls based on an approach which could have been formulated as “rather safe than sorry”. This resulted in high costs of implementing and operating the controls (Carney, 2006). This is also supported by the anecdotes that internal control audits will result in recommendations for improvements or implementation of new controls. Further, the implementation of more modules to e.g. SAP gave rise to an increasing number of controls. In the financial area, Basel requirements, including operational risk, have also required significant managerial attention (Power, 2005). In all material aspects, control has been a fast growing area and as such it has – and still do - required huge attention and resources (Carney, 2006). To support this work, frameworks have been issued guiding the design, implementation and operation of controls (COSO, 2004; COSO, 2013). Both COSO’s internal control and enterprise risk management framework suggest a structured risk assessment prior to the implementation of internal controls. This requires consideration of likelihood and impact combined with risk appetite when making decisions regarding controls. In addition, materiality should also be considered regarding reporting (IASB, 2015). But why is it that definitions and fundamental concepts regarding risk and controls are unclear? (Aven, 2012; Power, 2009). And why are the borders blurred between internal controls and management controls? (Merchant and Otley, 2006; Scannell et al., 2013).

These considerations initiated the PhD project “Quality of information: The role of internal controls and materiality”. The overall ambition when starting the project was to answer the question “When is enough enough – and who make such decisions?” The answer is of importance when considering the design, implementation and operation of controls. Hopefully, the analyses of the role of internal controls and materiality included in this thesis add to the understanding of this overall question.

The rest of this section is organised as follows: Section 5 includes a description of the relation between internal controls and management accounting and controls systems (MACS). Section 6 describes the research method, and in section 7 the study findings are presented. Finally, in section 8 contributions and implications are summarised.

2. Internal controls: Management accounting and controls systems

Definitions regarding risk and controls are unclear (Aven, 2012; Power, 2009), and borders between internal control and management controls are blurred (Merchant and Otley, 2006; Scannell et al., 2013). In order to clarify definitions, the relations between internal controls and MACS have been reviewed.

A control should serve a purpose such as mitigating risk or pursuing an opportunity. The distinction between risk and opportunities is closely linked to the definition of risk. Risk can be classified by a negative, neutral or broad definition, illustrated by the following examples (Raz and Hillson, 2005):

Negative definition	Neutral definition	Broad definition
“the chance of injury or loss”	“a combination of the probability of an event and its consequence”	“a combination of the probability of an event and its consequence ... consequences can range from positive to negative”

Table 1 - Examples of risk definitions

Independently from the definition, risk can be described by the terms likelihood and consequences (Kaplan and Garrick, 1981). Based on a negative definition, risk is expressed as expected loss. Related to the finance literature, expected loss is used when measuring value at risk (Jorion, 2007). There is also a visual similarity between value at risk and the negative definition, since both terms focus on the left side of e.g. a normal distribution. Expanding the visual view to cover the broad risk definition, which also includes positive consequences, this will be presented by the whole distribution. In this situation, likelihood and consequence will express the expected value. In relation to the management controls, the expected value could be defined as a budget, which is a part of the cybernetic controls (Malmi and Brown, 2008). In the finance and statistical literature it is assumed that both likelihood and consequence and thus risk can be quantified. This is, however, not a prerequisite, since it is generally assumed that risk should be measurable but not necessarily quantifiable (Knight, 1921). Further, the purpose of risk quantification is not a goal in itself, but rather a

means to provide input to an underlying decision (Kaplan and Garrick, 1981). Quantification of risk can, however, be helpful both for business managers and auditors in their effort to access controls (Huang et al., 2013). An assessment based on a cost benefit analysis might serve as an input for a decision regarding design, implementation and operation of control activities. The cost of a specific control could be compared to the benefit of the expected improvement in the level of controls. If data are insufficient or unavailable, it is perhaps not possible to quantify the risk. Further, if an event has never occurred, it is impossible to quantify the likelihood that it will happen. In these situations it is, however, by definition (Knight, 1921) possible to measure risk by classifying likelihood and consequences on a subjective basis. As an example, the classification scale can be measured from rare to almost certain and from insignificant to catastrophic (Walke et al., 2011).

From a management perspective, risk-taking and management of risk are seen as part of the business strategy process, and it is an integrated part of the management control process to consider uncertainties (Simons, 1990). MCS are adopted to assist managers in decision-making and thereby in achieving desired organisational goals (Chenhall, 2003). This indicates that management controls at the core control level (Flamholtz et al., 1985) consider risk on the basis of a broad definition. As an example, managers have a tool like Levers of Control at their disposal to manage risk. At the detailed level, such controls depend on reliable information, which is considered an important prerequisite since management controls can be considered: “Formal information-based routines and procedures used by managers to maintain or alter patterns in organizational activities.” (Simons, 1987).

The quality of information depends on well-functioning internal controls which are considered an essential foundation for controlling risks in all organisations (Simons, 1999). Internal accounting controls are designed to ensure data integrity and are the most “basic building block”. The link between the strategic objectives at the top and the internal control at the bottom can be illustrated in the following way by using Simon’s definitions (Simons, 1994):

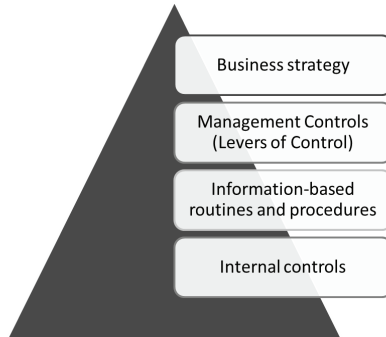


Figure 1 - Link between business strategy and internal controls

The business strategy is supported by management controls, e.g. Levers of Control, which consist of information-based routines and procedures. Reliable information requires that the necessary internal controls have been implemented. This chain between business strategy and control activities should not be considered a one-to-one set of links but rather a set of one-to-many links. This view is supported by the guidance established as part of the Sarbanes-Oxley implementation projects, including a mapping between control activities at the bottom and financial reporting at the top (IT Governance Institute, 2004).

It is worth noting the distinction between “internal accounting controls” and “internal controls”. This can be explained by the development in the definition of internal controls. In 1957 it was suggested that internal controls should be divided into three groups, Internal Administrative Controls, Internal Accounting Controls, and the original term used by Dicksee in 1905, which was Internal Check (Byrne, 1957). SAS No.1 from 1972 indicated that accounting controls were the primary types of controls with which the auditor was to be concerned (Heier et al., 2004). The Minahan Report also used the term accounting control, which is concerned with “... reliability of financial statements and with the broad internal control objectives of authorization, accounting, and asset safeguarding” (AICPA, 1979). Another comment from this report tried to stop the discussion regarding the definition of elements of internal control: “From a management viewpoint (and that of many interested third parties), the distinction between accounting and administrative controls is usually not

recognized or even acknowledged ... more often than not, academic when it comes to establishing, maintaining, and evaluating internal accounting controls". The release of SAS No. 55 in 1988 did not make a distinction between administrative controls and accounting controls. Rather, it discussed the concepts of internal control in a broader sense called a control environment (Heier et al., 2004). This auditing standard was followed by COSO's "Internal Control – Integrated Framework" in 1992 (COSO, 1992). The framework used the term "internal control" instead of "internal accounting controls".

In the management control area, Simons recognised this change. In the 1999 paper "How risky is your company", a boundary to management controls was established by defining internal control as: "The checks and balances that safeguard assets and ensure reliable information." (Simons, 1999). Further, it is mentioned that internal controls do not vary with strategy but are an essential foundation for controlling of risk. In line with Simons, Merchant and Otley consider internal controls primarily as an audit term designed to prevent or to detect errors at the transaction level and as such an important aspect of the overall management control system (Merchant and Otley, 2006).

Since the first release in 1992, COSO's definition of internal control has been considered the most important and has been widely supported by practice (Kinney, 2000; PCAOB, 2011). In the latest version of the framework, internal control is defined as (COSO, 2013):

"Internal control is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives related to operations, reporting and compliance."

The definition includes the word "objective" and not the more specific "control objective", which is used by a number of other frameworks, both management controls and internal controls (Pfister, 2009). A "control objective" is often related to a compliance requirement and therefore by nature normatively describes what needs to be done. A business objective by nature describes what should be done – a distinction between "need" and "should" (Sadiq et al., 2007).

“Reasonable assurance” is a well-known audit term which according to the International Framework for Assurance Engagements can be used as a basis for a positive conclusion in an assurance report e.g.: “in our opinion internal control is effective, in all material respects” (IFAC, 2004). If the design of internal controls meets the “reasonable assurance” requirements and the processes have been quality assured (or audited) at a level comparable with this term, it should be expected that the output fulfils the objectives defined for that specific process. Comparing the management controls requirements to COSO’s definitions of internal controls, it seems that if “reasonable assurance” can be provided, the prerequisite for the information-based systems is established. Therefore, accounting control or internal control is still considered a fundamental or essential means to provide reliable information for management control purposes.

A risk assessment is a required phase when making decisions regarding controls (Scannell et al., 2013). It is therefore notable that none of COSO’s frameworks includes a definition of a risk assessment. Other frameworks and guidelines do, however, include definitions. ISO has issued a specific document “Risk management – Risk assessment”, which includes a definition of risk assessment (IEC/FDIS 31010, 2009): “The overall process of risk identification, risk analysis and evaluation”. Almost all definitions of risk assessment in the literature include an estimation of likelihood of occurrence and possible impact (Kern et al., 2012) and a prioritisation in order to be able to choose suitable management actions (Hallikas et al., 2004). At a more specific level, the risk assessment process should provide the information required to determine an optimal balance between cost of control and benefits from control activities (Kleindorfer and Saad, 2005). It may be necessary to adjust this rather precise objective, since accurate estimates of likelihood may not always be available, and the decision-making may be based on a more subjective foundation (Manuj and Mentzer, 2008). Risk assessment can therefore be considered an assessment of uncertainties related to the determination of both likelihood and impact. In that respect it may be the case that uncertainties have to be assessed by a combination of objective and subjective information where judgment is used to approximate the risk (Tummala and Schoenherr, 2011).

The purpose of risk quantification is not a goal in itself but rather a means to provide input for an underlying decision; in this respect it is easier to compare alternatives measured by numbers than qualitative terms based on subjective judgments. If, however, a probabilistic approach is not possible, alternative tools such as risk analysis can be used to get a reasonable estimate suitable for decision-making (Manuj and Mentzer, 2008). Researchers in other fields of science challenge this approach, since the use of risk assessment when knowledge about likelihood and consequence is lacking is potentially misleading (Stirling, 2007). Further, a quantified risk assessment cannot be considered a traditional scientific method, since it is not possible to make accurate estimates and predictions (Cumming, 1981). It can even be claimed that risk assessment is an art rather than a science (Weinberg, 1981). Despite these comments, the objective of a risk assessment should be kept in mind, which is to help decision-makers, but not necessarily serve as the sole basis for decision-making. Considering the general level of materiality, business needs a different set of methods and models compared with e.g. nuclear science or medicine (Aven, 2012). In such a situation it could be argued that tools and methodologies should be selected with due respect to the required level of precision. If the control activities in question are related to the accounting area, materiality is, although not scientific by nature, a term which includes professional judgment. Following this view, the essence of a risk assessment is to answer three questions (Apostolakis, 2004):

- What can go wrong?
- How likely is it?
- What are the consequences?

3. Summary

To summarise the above considerations regarding controls, there seems to be the general understanding that internal control is a process (COSO, 2013). This process includes at least two elements – a risk assessment and the control activities (Kern et al., 2012). The main purpose of a risk assessment is to answer the question: “What can go wrong?” (Apostolakis, 2004). Further, the risk assessment should estimate the likelihood and impact in order to establish a

basis for prioritisation of the resources used to mitigate the risk or achieve the objectives (Hallikas et al., 2004).

In defining the borders between internal control (COSO, 2013), risk management (COSO, 2004) and management controls (Simons, 1987), it seems that the overall objective of internal controls is to fulfil the control objectives (Pfister, 2009) and thereby ensuring reliable information for management purposes (Simons, 1999). Based on this view, internal controls are primarily designed to prevent or detect errors at the transaction level (Merchant and Otley, 2006).

This view on internal control is based on a negative definition of risk (Raz and Hillson, 2005). Internal controls either work as planned and thus fulfil the control objectives at the required level of assurance, or do not perform as planned and thus introduce a potential negative impact on the quality of the information.

An accounting system is designed to support decision-making by providing management information, which is the input to management accounting (Simons, 1994). As this information should be reliable, quality requirements are defined that are ensured by internal controls. This way a link is established to the audit practice (Eilifsen et al., 2014-B) and the various levels of assurance (IFAC, 2004). These considerations also establish a link between management accounting systems (MAS), MCS and internal controls:

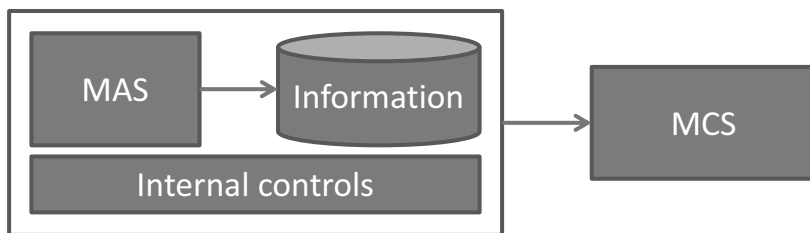


Figure 2 - Relation between internal control, MAS and MCS

4. Research method

The overall objective of this thesis is to explore the role of internal control and materiality related to the quality of information. This is done in three different areas:

- To what extent, how and why do internal control audits affect internal controls?
- Financial crisis and administrative controls: An institutional theory perspective
- Disclosure materiality: An analysis of stakeholders' perception.

As little is known in all three areas, case studies have been used to explore the details (Eisenhardt, 1989). This method is appropriate, since the focus is on a real-life situation aiming at answering how and why questions (Yin, 2009). It is recognised that case studies require additional work in order to verify and generalise the conclusions presented (Scapens, 2004). To support the generalisation of the findings the individual papers include a contextual description (Parker and Northcott, 2016). These descriptions are prepared with due respect to the confidential agreements entered with the respondents. The aim of the research approach is to “verstehen” and “explain patterns” regarding the research questions and the research paradigm is based on an interpretive epistemology and a relativistic ontology (Ryan et al., 2002). These considerations might be classified as “middle-range” thinking (Laughlin, 1995).

The primary source of empirical data was semi-structured interviews (Kvale and Brinkmann, 2009). In all the case studies it is, however, also the underlying arguments, descriptions and stories of the respondents that are important. Therefore the semi-structured interviews were supported by a responsive element (Rubin and Rubin, 2012). This approach requires that the researcher has detailed knowledge about the subject and the industry (Morse and Field, 1995; Richards and Morse, 2012). The required experience also makes it possible during the interviews to evaluate the answers in a pragmatic context (Kvale, 1994).

In two of the case studies, the interviews were recorded and transcribed. In the last case study tape recording was not allowed. Instead notes were taken during the interview and memos prepared after the meetings. The transcribed interviews and the memos were coded according to the organising frameworks.

In all the cases, the information is considered confidential by the respondents. Due to the confidentiality agreements we were not allowed to remove internal information from the premises (except memos and recorded interviews). To deal with the confidentiality requirements and to get sufficient evidence that the observations and quotes used in the papers fairly present the facts, relevant sections were reviewed by the respondents. This procedure also ensured that any misunderstandings were corrected and helped mitigating some of the challenges regarding a single case study, including the risk of a biased data collection (Eisenhardt and Graebner, 2007). Further, other sources of information, both internal documents and publicly available documents, were used to verify the interviews. Finally, during the case studies we were allowed to be at the respondents' premises, which provided on-site observations. This allowed to some extent for data source triangulation (Yin, 2013).

5. Presentation of findings

Based on the case studies, different aspects of the roles of internal controls, administrative controls and materiality have been explored.

The role of internal controls

The role of internal controls was analysed on the basis of a single case study of the management letter process (Manson et al., 2001) in a large financial institution. The process audit is performed by an IAF, which is organised in such a way that they are not involved in any other roles besides auditing (Arenka and Sarens, 2015). This role is defined and supported by local regulatory requirements (BEK, 2013). In addition, the employees have the same qualifications as found in a Big 4 audit firm. Consequently, they perform internal control audits at the same quality level as that of external audits (Stefaniak et al., 2012).

To explore to what extent the internal control audits affect the controls, a detailed review of the management letter reporting for 2008 – 12 was performed. This part of the case study showed that 30% of the recommendations in the management letters resulted in the implementation of new internal controls. The remaining 70% related to improvements of existing controls including requirements for preparation of further documentation.

To explore how the internal control audit affects the internal controls, the interaction between auditor and client was analysed. In order to perform the analysis, a combined audit/client interaction model was established utilising existing theories (Fearnley et al., 2011; Salterio, 2012). In the combined interaction model, both auditor and client behaviour is classified on a scale from permissive over argumentative to insisting. The combined behaviour is classified as exchange of information, discussion or negotiation. The outcome of the interaction can be a client, auditor or joint product.

Based on the analysis of the interactions in the management letter process it seems that IAF in general is argumentative in the direction towards being insisting. The client is generally argumentative. The combined behaviour is an exchange of information in which the quality of arguments and documentation presented at the meetings determines the outcome of the interaction. The outcome, which is the decision on implementation of new or improvements of existing controls as presented in the management letters, is classified as a joint product. This co-operation between auditor and client has been seen for a number of years regarding the annual report (Antle and Nalebuff, 1991). Since the audit of internal controls support the financial audit (Kinney et al., 2013), it seems that the total audit of the company should be considered a joint product.

The result of the internal control audits is reported to the audit committee in the management letters together with a summary in the long form audit report (BEK, 2013). It seems that the audit committee and thus the board of directors respect the management letter process since they generally take note of the result. This could be explained by the fact that client employees at various levels in the organisation have been involved and agreed on the result of the interactions. This can also be seen as a management letter process with strong internal controls. Even though they respect the result, the board of directors

have an impact on the management letter process through “Tone at the Top” (Lail et al., 2015), based on a desire to have well-controlled business processes (Sarens et al., 2009).

Why do internal control audit affect internal controls? The analysis of the contextual features, which are included in the combined audit/client interaction model, indicates that the regulatory regime is the main challenge due to the risk of being caught (Fearnley et al., 2011). This might be expected, since the summarised result of the management letter process is reported to FSA in the long form audit report (BEK, 2013). FSA is seen as a burden and by part of the organisation considered a “dark cloud”. Therefore it seems a logical consequence to establish a defence complying with the regulatory requirements (Van der Stede, 2011). This might also be a convenient explanation of why it is necessary to spend considerable resources on improvement of existing and implementation of new controls. However, this is only the explanation on the surface. When analysing the result, it turns out that the improved level of controls adds both significant audit and business value. Further, it seems that the improved level of control would have been established independently of the regulatory requirements.

Based on the case study, the joint effort of improving the level of internal controls is driven by a desire from both auditors and client to have well-controlled information. In this case the role of internal controls is twofold; by assuring well-controlled business processes (Sarens et al., 2009) it helps mitigating the audit risk (Eilifsen et al., 2014-B) and provides reliable information for management purposes (Simons, 1994).

The role of administrative controls

Besides being viewed as an individual element, internal controls are also part of administrative controls and included in the package of management controls (Malmi and Brown, 2008). To analyse the role of administrative controls in a crisis situation, a multiple case study was performed involving three Icelandic and three Danish banks. The Icelandic banks were hit hard by the financial crisis, whereas the Danish banks selected for comparison (Gissequist, 2014) managed the crisis without specific governmental support. The analysis was performed by viewing the identified changes to the administrative controls

through an institutional lens. The lens included the drivers of change (DiMaggio and Powell, 1983) and the level of embeddedness (Burns and Scapens, 2000).

The re-establishment of the Icelandic banks a few days after they went bankrupt included a replacement of the executive board and the board of directors in each of the banks. The new managements decided to implement a number of changes to administrative controls (Malmi and Brown, 2008) assisted by other employee groups (Merchant and Van der Stede, 2007). These changes were compared to the Danish banks in order to identify the additional actions initiated in Iceland. Additional changes were identified in the following areas:

- “Tone at the Top” and values
- Operation of IT
- Risk Management function
- Policies and procedures

As an immediate response to the reconstruction, the Icelandic banks initiated an implementation of new values. It seems that the new values, supported by the “Tone at the Top”, have given rise to a behavioural change (Walker, 2009; Erkens et al., 2012). However, compared with the Danish banks, the maintenance of the values is not an integrated part of the ordinary strategic process and has at present not reached a level of reproduction (Burns and Scapens, 2000).

In the area of IT, the operational models have remained un-changed in both Iceland and Denmark. All the Icelandic banks operate their IT in-house, whereas all the Danish banks have outsourced these services. As a consequence, the Icelandic banks have an average of 75 additional IT-staff employed. The changes in the external reporting requirements (Basel, 2014) have had a different impact. In order to manage the changing reporting requirements, the Icelandic banks have hired additional support staff in a number of functions. In total this accounts for an average of 10 – 15 additional employees.

An area where significant differences have been identified is the risk management function. Even though both countries are governed by the same regulatory requirements and perform the same tasks (Basel, 2011), since the financial crisis the risk management functions in Iceland have grown from an

average of 5 to 30 fulltime employees. In Denmark the average number of employees has been stable at the level of 5. Both countries respond to the coercive pressure (DiMaggio and Powell, 1983) from FSA supported by a mandatory review by IAF. Further they copy other banks and thus expose themselves to a mimetic pressure. In addition, the Icelandic risk management practices have managed to establish a normative pressure, since the board of directors followed the recommendations from the risk management professionals regarding establishment and staffing. This combined pressure (Ribeiro and Scapens, 2006) have resulted in a situation where the risk management functions are institutionalised. As a consequence it seems that "...it is difficult to remove power" (Danish CEO) and that the staffing levels should be considered permanent. Consequently the additional staffing should be considered a fixed cost going forward. This is supported by the view that institutionalised functions are difficult to change (Burns and Scapens, 2000).

Policies and procedures is an area where there have been significant changes in the regulatory requirements (Van der Stede, 2011). The level of formalisation had different starting points in Iceland and Denmark. At present the Icelandic banks seem to have difficulties in moving from enacting to reproduction. The difficulties can be explained by the fact that fundamental changes are more difficult than evolutionary changes (Zoni et al., 2012). In Denmark most of the policies and procedures had been documented prior to the financial crisis, and changes in regulatory requirements have resulted in a situation where procedures are encoded as a mechanical response without a clear business-driven need, which leads to ineffective solutions (Munir et al., 2013). Further, the need for encoded rules seems to be replaced by employees' experience (Van der Steen, 2011). This is an indication of institutionalisation (Burns and Scapens, 2000). In both countries, policies and procedures are seen as a management tool (Flamholtz et al., 1985; Margison, 2002). Although the literature on management controls sees policies and procedures as important for changing behaviour, the managers consider culture to be more important. This indicates that the use of administrative controls as a management tool should be combined with the use of cultural controls. It also indicates that there might be limitations as to how much reliance can be placed on policies and procedures – and consequently on internal controls (Eilifsen et al., 2014-B).

There are a number of areas in which changes have been implemented in both countries. New regulatory requirements have initiated significant changes regarding formal lines of authority. Furthermore, FSA issued orders to IAF on mandatory reviews in this area. The responses, which are the same in both countries, are seen as a combination of coercive (regulatory) and normative (IAF) pressure (Ribeiro and Scapens, 2006). Even though both management and employees see these changes as “too much time is spent on ticking the boxes”, and resistance should be expected, the combined pressure has resulted in a reproduction (Burns and Scapens, 2000).

It should be expected that pressure may lead to the implementation of ineffective solutions or difficulties (Munir et al., 2013; Zoni et al., 2012). The implementation of code of conduct is an example of this. Since all the banks have implemented a code of conduct, it may be classified as a result of a mimetic pressure (DiMaggio and Powell, 1983). Despite the fact that it is formalised, many employees have not read it, and it may therefore be considered as a minor encoding (Burns and Scapens, 2000).

The Icelandic banks have introduced a number of visible changes to the administrative controls, including formalisation of policies and procedures, and have hired additional risk management staff. Since these changes have been documented, they can be verified by auditors and FSA. Therefore they serve the purpose of dealing with the coercive pressure (DiMaggio and Powell, 1983) in order to re-establish trust (IMF, 2014; Jännäri, 2009). The changes also initiated a behavioural change (Walker, 2009; Erkens et al., 2012), and internal controls were used to support this. Depending on the level of institutionalisation (Burns and Scapens, 2000) the role of internal controls differs. When controls become institutionalised, formal rules tend to be replaced by employees’ experience (Van der Steen, 2011), and further improvements have to rely on cultural controls (Malmi and Brown, 2008). Consequently the role and effectiveness of internal controls as a tool to assure reliable information depend on the level of institutionalisation.

The role of materiality

As part of the thesis, the role of materiality regarding disclosures in the notes to the annual report has been analysed. Based on a case study it has been explored

how materiality regarding disclosures is perceived by preparers, auditors and users. The annual report is the result of an interaction between preparer and auditors (Brennan and Grey, 2005). A key issue in this interaction is whether users would change their decisions depending on whether an item of information is included or omitted (IASB, 2010). In this respect it is necessary to understand what decisions the information is used for and consider the thresholds. The decisions therefore depend on the user, and sell-side analysts are considered one of the most advanced groups of users (Brown et al., 2015).

Preparer and auditors have the same perception of materiality. This might be explained by the fact that during their careers, many of the preparers have worked as auditors for one of the Big 4 audit firms. This common understanding includes a tendency to consider sell-side analysts as the most important users. When preparer and auditors assess disclosure materiality, they use a three-step model:

- Is the disclosure or the related line item quantitative material?
- Is there a significant change to the disclosure or related line item compared with previous years?
- Does the disclosure add value to the user?

If the answer to one of these questions is yes, the disclosure is material.

In the first step the sizes of the current year figures are used as thresholds. These thresholds can be based on the financial statement, the related line item or individual lines in a specification. The assessment is comparable with the approach used when misstatements are evaluated. The difference is that evaluation of misstatements is based on standardised thresholds (Eilifsen et al., 2014-A), whereas assessments of disclosure materiality are context specific and more judgmental.

In the second step the figures are compared with prior year, based on the same types of amounts as the first step. If the development deviates from an expected trend it is likely that the related disclosures are assessed as material. In a situation where the absolute change from prior year is immaterial, a large relative change can be assessed as material.

The third step includes qualitative characteristics, and it is assessed if the disclosure adds value to the user. The qualitative characteristics include a number of company specific elements related to the financial report. Examples are information about risks and uncertainties, accounting policy choices, expectations or stewardship. It is also considered whether the disclosure is read and understood by the user or if it is too complicated. This assessment does not include a consideration of whether the information is used as input to a financial analysis or if it might have an impact on buy, sell or hold decisions. Therefore preparers' and auditors' considerations about users' needs for information are different from the actual needs. As a consequence, preparer and auditors do not follow the long standing key requirements regarding "influence" on "users" "decision" (Kohler, 1957; Barker et al., 2013; EFRAG, 2012; IASB, 2015).

The response from the sell-side analysts regarding the actual use of the disclosures as presented in the annual report was that most of the information is available from other sources, primarily quarterly statements, the company's website and investor relations (Brown et al., 2015; Cole et al., 2009). It was however a surprise that some of the sell-side analysts stated that they did not use the notes in the annual report at all, but only the primary financial statement. When disregarding the annual report as a medium and focusing exclusively on the disclosed information – irrespectively of what source they came from – the assessment is consistent. As a consequence of the use of Excel to store information, sell-side analysts only focus on current year to update the models. Standard text, boilerplate and prior-year figures are not used. Further, if the results of the financial analysis do not meet expectations, it is assumed that management provides an explanation in the first part of the annual report, and not in the notes.

There is a risk that immaterial information might obscure useful or relevant information (IAASB, 2014). These considerations are however not seen as a major problem, since the sell-side analysts simply do not use irrelevant disclosures.

When making decisions on what information should be disclosed in the annual report the concept of materiality should be applied to ensure that the users get relevant information. Based on the case study, the perception of materiality

between preparer and auditors differ from the users' actual needs for information. Consequently the required information is not provided, and the users consult other sources to find the information.

6. Contributions and implications

The thesis contributes in the areas analysed to an understanding of the role of internal control and materiality regarding the quality of information.

The role of internal and administrative controls

The most important "basic building block" is internal control. The purpose of internal control is two-fold, as part of an internal control audit it provides audit assurance by mitigating the overall audit risk related to the annual report (Eilifsen et al., 2014-B). Further, it ensures that reliable information is available for management purposes (Simons, 1994); this includes MCS as well as internal and external reporting. Even though substantial costs are involved in the design, implementation and operation of internal controls (Carney, 2006), it seems that it is a joint decision between auditors and client to improve the level of controls. Such decisions are made as an outcome of the management letter process, which results in a joint agreement of improvement of existing or implementation of new internal controls.

Internal controls are part of administrative controls (Malmi and Brown, 2008), and they can be used to change employees' behaviour (Walker, 2009; Erkens et al., 2012) and as a response to the financial crisis. The changes in Iceland were primarily of a coercive nature (DiMaggio and Powell, 1983) since the banks had to re-establish trust (IMF, 2014; Jännäri, 2009). To deal with this pressure, a number of visible and documented changes were implemented, which is a prerequisite for auditing and inspection by FSA. These initiatives can also be seen as compliance with changes to the regulatory requirements (Van der Stede, 2011; Franks et al., 1997). However, the role of the administrative controls is also a management tool, which can support the establishment of a taken-for-granted behaviour (Burns and Scapens, 2000). This can also be considered a prerequisite for changing the cultural controls and thus the values (Walker, 2009; Erkens et al., 2012). To succeed with changes to the values developed in

the banks (Birnberg and Snodgrass 1988), the employees should therefore establish a taken-for-granted behaviour.

The role and effectiveness of internal controls depend on the level of institutionalisation (Burn and Scapens, 2000). The impact is reduced when the employees have experience with the processes (Van der Steen, 2011), and further improvements in the level of controls have to rely on cultural controls (Malmi and Brown, 2008).

Besides contributing to the understanding of when and how internal controls should be used to change employees' behaviour, the analysis also considers relations to the regulatory requirements. These requirements have an impact on decisions regarding internal controls, but not at the detailed level. Detailed requests for further formalisation will only be an administrative compliance burden without adding to the level of controls. Instead it seems that informal information from other financial companies, e.g. IAF sharing experiences regarding FSA, has an impact on the scope of the internal control audit. Consequently, FSA should focus more on principle-based regulation rather than the long lasting practice of seeking to establish detailed rules (Franks et al., 1997). This has an impact on the definition of requirements in favour of principle-based regulation aiming at affecting management's approach to the overall level of controls rather than the details (Ho et al., 2013). This potential change is also supported by the behaviour of the employees; despite their complaints about FSA, they respect internal controls, which is supported by the "Tone at the Top" (Lail et al., 2015).

IAF has indicated that they use additional resources due to pressure from FSA but that this is difficult to measure. However, it could be of interest for future research to explore the nature and magnitude of this burden, which might be considered an indirect cost of regulatory compliance. How much additional work, in excess of what is needed to mitigate the audit risk (Eilifsen et al., 2014-B), does IAF deliver due to FSA? At the company level it could also be of interest to explore if the administrative burden of regulatory requirements is mainly related to internal controls considered as a "basic building block", or rather to management controls, including liquidity, capital and reporting requirements.

Further, it is important for the banks to know when to focus on administrative controls as a management tool and when to use other management controls. The banks seek to balance compliance with regulatory requirements, a business-driven need for satisfactory controls and optimisation of the resources used. It could therefore be of interest for further research to analyse how the configuration of management controls can be optimised. As a basis for this research it might be beneficial to gain an understanding of how the total package of management controls (Malmi and Browns, 2008) has been used as a response to the financial crisis.

The role of materiality

Another important “basic building block” is materiality. Preparer and auditors assess materiality regarding disclosures in three steps. This assessment is primarily based on tools for misstatements rather than omissions, which may be due to lack of guidance. Consequently the result of the assessment is not aligned with users’ requirements for information, and too many disclosures are presented in the notes to the annual report, which indicates an information overload (EFRAG, 2012). This also supports the view that clarification regarding the use of disclosure materiality is needed (IASB, 2015). These findings should be used when standard setters develop new guidance on disclosure materiality. The result also indicates that the annual report as a source of information competes with the company’s website and questions to investor relations (Brown et al., 2015). If analysts need additional information, they prefer to search the company’s website or other sources rather than the annual report. In that respect they consider information made available at the company’s website as credible, even though it may not be subject to external audit.

There are a number of important implications of these findings. First, they raise the question of why Danish listed companies prepare an average of 46 pages of disclosures when there is a limited use and value of this? Furthermore, there seems to be a need for alignment between the users’ needs for information, which are based on input to the financial analysis, and the preparers’ and auditors perception of disclosure materiality. IASB’s draft practice statement (IASB, 2015) does not address this difference clearly.

The annual report has a long tradition, and the auditors have seen it as the most important assurance object. If users depend on other sources of information, preparers and auditors might consider if the companies' websites should be the main focus for assurance services going forward. These implications could be of interest for further research. Additionally a quantification of the potential for cutting clutter (FRC, 2011) seems to have immediate interest.

7. References

AICPA, 1979. "Report of the Special Advisory Committee on Internal Accounting Control". New York: American Institute of Certified Public Accountants". AICPA, New York.

AICPA, 2002. "SEC Proposal on Internal Controls, Ethics, Expertise". AICPA, New York.

Anthony, Robert Newton. *Planning and Control Systems: A Framework for Analysis*. Harvard University, 1965.

Antle, Rick, and Barry Nalebuff. "Conservatism and auditor-client negotiations." *Journal of Accounting Research* 29 (1991): 31-54.

Apostolakis, George E. "How useful is quantitative risk assessment?" *Risk Analysis* 24.3 (2004): 515-520.

Arena, Marika, and Gerrit Sarens. "Editorial: Internal Auditing: Creating Stepping Stones for the Future." *International Journal of Auditing* 19.3 (2015): 131-133.

Aven, Terje. "The risk concept—historical and recent development trends." *Reliability Engineering & System Safety* 99 (2012): 33-44.

Barker, Richard, et al. "Response of the EAA FRSC to the EFRAG/ANC/FRC Discussion Paper: Towards a Disclosure Framework for the Notes." *Accounting in Europe* 10.1 (2013): 1-26.

Basel Committee on Banking Supervision. *Principles for the Sound Management of Operational Risk and the Role of Supervision*. June 2011.

Basel Committee on Banking Supervision. *Capital requirements for bank exposures to central counterparties*. April 2014.

BEK nr 1024 af 21/08/2013 "Bekendtgørelse om revisionens gennemførelse i finansielle virksomheder m.v. samt finansielle koncerner".

Bernstein, Leopold A. "The concept of materiality." *Accounting Review* (1967): 86-95.

Birnberg, Jacob G., and Coral Snodgrass. "Culture and control: a field study." *Accounting, Organizations and Society* 13.5 (1988): 447-464.

Brennan, Niamh M., and Sidney J. Gray. "The impact of materiality: accounting's best kept secret." *Asian Academy of Management Journal of Accounting and Finance* 1 (2005): 1-31.

Brown, Lawrence D., et al. "Inside the "Black Box" of Sell-Side Financial Analysts." *Journal of Accounting Research* 53.1 (2015): 1-47.

Burns, John, and Robert W. Scapens. "Conceptualizing management accounting change: an institutional framework." *Management accounting research* 11.1 (2000): 3-25.

Byrne, Gilbert R. "The independent auditor." *Journal of Accountancy* (pre-1986)103.000001 (1957): 41.

Carney, William J. "Costs of Being Public after Sarbanes-Oxley: The Irony of Going Private, The." *Emory LJ* 55 (2006): 141.

Chenhall, Robert H. "Management control systems design within its organizational context: findings from contingency-based research and directions for the future." *Accounting, organizations and society* 28.2 (2003): 127-168.

Cole, V., Branson, J., & Breesch, D. How to measure the comparability of financial statements? *International journal of managerial and financial accounting*, 1(4) (2009), 379-397.

COSO. Internal control—an integrated framework. The Committee of Sponsoring Organizations of the Treadway Commission; 1992.

COSO (Committee of Sponsoring Organizations of the Treadway Commission) 2004. Enterprise Risk Management – Integrated framework.

COSO (Committee of Sponsoring Organizations of the Treadway Commission) 2013. Internal control – Integrated framework.

Cumming, Robert B. "Is risk assessment a science?." *Risk Analysis* 1.1 (1981): 1-3.

- DiMaggio, Paul, and Walter W. Powell. "The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields." *American Sociological Review* 48.2 (1983): 147-160.
- Dicksee, Lawrence Robert. *Auditing: a practical manual for auditors*. Gee, 1905.
- EFRAG, ANC and FRC (2012) Towards a Disclosure Framework for the Notes (discussion paper) (Brussels: EFRAG).
- Eilifsen, Aasmund, and William F. Messier, Jr. "Materiality guidance of the major public accounting firms." *Auditing: A Journal of Practice and Theory* (2014-A).
- Eilifsen, Aasmund, Messier, William F., Steven M. Glover, and Douglas F. Prawitt. "*Auditing and assurance services*." (2014-B).
- Eisenhardt, Kathleen M. "Building theories from case study research." *Academy of management review* 14.4 (1989): 532-550.
- Eisenhardt, Kathleen M., and Melissa E. Graebner. "Theory building from cases: opportunities and challenges." *Academy of management journal* 50.1 (2007): 25-32.
- Erkens, David H., Mingyi Hung, and Pedro Matos. "Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide." *Journal of Corporate Finance* 18.2 (2012): 389-411.
- Fearnley, Stella, Vivien Beattie, and Tony Hines. *Reaching key financial reporting decisions: how directors and auditors interact*. Wiley, 2011.
- Flamholtz, Eric G., T. K. Das, and Anne S. Tsui. "Toward an integrative framework of organizational control." *Accounting, organizations and society* 10.1 (1985): 35-50.
- Franks, Julian R., Stephen M. Schaefer, and Michael D. Staunton. "The direct and compliance costs of financial regulation." *Journal of Banking & Finance* 21.11 (1997): 1547-1572.

FRC 2011. *Cutting clutter: combating clutter in annual reports*. Financial Reporting Council, London.

Gisselquist, Rachel M. "Paired Comparison and Theory Development: Considerations for Case Selection." *PS: Political Science & Politics* 47.02 (2014): 477-484.

Hallikas, Jukka, et al. "Risk management processes in supplier networks." *International Journal of Production Economics* 90.1 (2004): 47-58.

Heier, Dr, et al. "Sarbanes-Oxley and the culmination of internal control development: A study of reactive evolution." *Sarbanes-Oxley and the Culmination of Internal Control Development: A Study of Reactive Evolution*. American Accounting Association (2004).

Ho, Thomas SY, Miguel Palacios, and Hans R. Stoll. "Dynamic Financial System: Complexity, Fragility and Regulatory Principles." *Financial Markets, Institutions & Instruments* 22.1 (2013): 1-42.

Huang, Yundong and Smith, Murphy and Durr, David, A Weighted Mean Model for Operational Risk Assessment (June 7, 2013). *Journal of Law and Financial Management*, Vol. 12, No. 1, July 2013. Available at SSRN:<http://ssrn.com/abstract=2276284>

International Auditing and Assurance Standards Board (IAASB). Exposure draft - May 2014. "*Proposed Changes to the International Standards on Auditing (ISAs). Addressing Disclosures in the Audit of Financial Statements.*"

International Accounting Standards Board (IASB). "*The Conceptual Framework for Financial Reporting*". September 2010.

International Accounting Standards Board (IASB). Exposure draft - ED/2015/8. "*IFRS Practice Statement Application of Materiality to Financial Statements*".

IFAC, 2004. "*International Framework for Assurance Engagements.*" <http://www.ifac.org/system/files/downloads/b003-2010-iaasb-handbook-framework.pdf>

International Monetary Fund – IMF Country Report No. 14/257. “Iceland – Report on observance of standards and Codes (ROSE)”. August 2014.

IEC/FDIS 31010:2009(E). “*Risk management – Risk assessment techniques*”. http://www.iso.org/iso/catalogue_detail?csnumber=51073

IT Governance Institute, 2004. “*IT Control Objectives for Sarbannes-Oxley – The Importance of IT in the Design, implementation and Sustainability of Internal Control over Disclosure and Financial Reporting*”. www.isaca.org

Jorion, Philippe. *Financial risk manager handbook*. Vol. 406. John Wiley & Sons, 2007.

Jännäri, Kaarlo. "Report on Banking Regulation and Supervision in Iceland: past, present and future." Report commissioned by the Icelandic government as part of its Stand-By Arrangement with the International Monetary Fund 30 (2009).

Kaplan, Stanley, and B. John Garrick. "On the quantitative definition of risk." *Risk analysis* 1.1 (1981): 11-27.

Kern, Daniel, et al. "Supply risk management: model development and empirical analysis." *International Journal of Physical Distribution & Logistics Management* 42.1 (2012): 60-82.

Kinney Jr, William R. "Research opportunities in internal control quality and quality assurance." *Auditing: A Journal of Practice & Theory* 19.s-1 (2000): 83-90.

Kinney Jr, William R., Roger D. Martin, and Marcy L. Shepardson. "Reflections on a Decade of SOX 404 (b) Audit Production and Alternatives." *Accounting Horizons* 27.4 (2013): 799-813.

Kleindorfer, Paul R., and Germaine H. Saad. "Managing disruption risks in supply chains." *Production and operations management* 14.1 (2005): 53-68.

Knight, Frank H. "Risk, uncertainty and profit." *New York: Hart, Schaffner and Marx* (1921).

Kohler, 1957. *A Dictionary for Accountants*. Englewood Cliffs, Prentice Hall.

Kvale, Steinar. "Ten standard objections to qualitative research interviews." *Journal of phenomenological psychology* 25.2 (1994): 147-173.

Kvale, Steinar, and Svend Brinkmann. *Interviews: Learning the craft of qualitative research interviewing*. Sage, 2009.

Lail, Bradley, et al. "The Influence of Regulatory Approach on Tone at the Top." *Journal of Business Ethics* 126.1 (2015): 25-37.

Laughlin, Richard. "Empirical research in accounting: alternative approaches and a case for "middle-range" thinking." *Accounting, Auditing & Accountability Journal* 8.1 (1995): 63-87.

Lee, T. A. "The historical development of internal control from the earliest times to the end of the seventeenth century." *Journal of Accounting Research* (1971): 150-157.

Malmi, Teemu, and David A. Brown. "Management control systems as a package—Opportunities, challenges and research directions." *Management accounting research* 19.4 (2008): 287-300.

Manson, Stuart, Sean McCartney, and Michael Sherer. "The value of management letters to unlisted companies." *The British Accounting Review* 33.4 (2001): 549-568.

Manuj, Ila, and John T. Mentzer. "Global supply chain risk management." *Journal of Business Logistics* 29.1 (2008): 133-155.

Marginson, David EW. "Management control systems and their effects on strategy formation at middle-management levels: evidence from a UK organization." *Strategic management journal* 23.11 (2002): 1019-1031.

Merchant, Kenneth A., and David T. Otley. "A review of the literature on control and accountability." *Handbooks of management accounting research* 2 (2006): 785-802.

Merchant, Kenneth A., and Wim A. Van der Stede. *Management control systems: performance measurement, evaluation and incentives*. Pearson Education, 2007.

Morse, Janice M., and Peggy-Anne Field. *Nursing research: The application of qualitative approaches*. Nelson Thornes, 1995.

Munir, Rahat, Sujatha Perera, and Kevin Baird. "An analytical framework to examine changes in performance measurement systems within the banking sector." *Australasian Accounting, Business and Finance Journal* 5.1 (2011): 93-115.

Parker, Lee D., and Deryl Northcott. "Qualitative generalising in accounting research: concepts and strategies." *Accounting, Auditing & Accountability Journal* 29.6 (2016): 1100-1131.

PCAOB, 2011. "*Presentation – Auditing Implications of COSO Project to Update the COSO Internal Control – Integrated Framework*". March 24, 2011.

Jan Pfister, "*Managing Organizational Culture for Effective Internal Control: From Practice to Theory*" Berlin, Germany: Physica-Verlag, 2009.

Power, Michael. "The invention of operational risk." *Review of International Political Economy* 12.4 (2005): 577-599.

Power, Michael. "The risk management of nothing." *Accounting, organizations and society* 34.6 (2009): 849-855.

Raz, Tzvi, and David Hillson. "A comparative review of risk management standards." *Risk Management* 7.4 (2005): 53-66.

Ribeiro, João A., and Robert W. Scapens. "Institutional theories in management accounting change: contributions, issues and paths for development." *Qualitative Research in Accounting & Management* 3.2 (2006): 94-111.

Richards, Lyn, and Janice M. Morse. *Readme first for a user's guide to qualitative methods*. Sage, 2012.

Rikhardsson, Pall, Rohde, Carsten, Christensen, Leif and Batt, Catherine E. "Financial Crisis and Changes in Management Controls in Banks" <http://www.cimaglobal.com/Thought-leadership/Research->

topics/Governance/Financial-Crisis-and-changes-in-management-controls-in-banks/

Rubin, Herbert J., and Irene S. Rubin. *Qualitative interviewing: The art of hearing data*. Sage Publications, 2012.

Ryan, Bob, Robert William Scapens, and Michael Theobald. "Research method and methodology in finance and accounting." (2002).

Sadiq, Shazia, Guido Governatori, and Kioumars Namiri. "Modeling control objectives for business process compliance." *International conference on business process management*. Springer Berlin Heidelberg, 2007.

Salterio, Steven E. "Fifteen years in the trenches: Auditor–client negotiations exposed and explored." *Accounting & Finance* 52.s1 (2012): 233-286.

Sarens, Gerrit, Ignace De Beelde, and Patricia Everaert. "Internal audit: a comfort provider to the audit committee." *The British Accounting Review* 41.2 (2009): 90-106.

Scannell, Thomas, Sime Curkovic, and Bret Wagner. "Integration of ISO 31000: 2009 and Supply Chain Risk Management." *American Journal of Industrial and Business Management* 3.04 (2013): 367.

Scapens, R. W., 2004. Doing case study research. *The real life guide to accounting research: a behind-the-scenes view of using qualitative research methods*, 257-79.

Simons, Robert. "Accounting control systems and business strategy: an empirical analysis." *Accounting, Organizations and Society* 12.4 (1987): 357-374.

Simons, Robert. "The role of management control systems in creating competitive advantage: new perspectives." *Readings in Accounting for Management Control*. Springer US, 1990. 622-645.

Simons, Robert. "How new top managers use control systems as levers of strategic renewal." *Strategic management journal* 15.3 (1994): 169-189.

Simons, Robert. "How risky is your company?" *Harvard Business Review* 77.3 (1999): 85-94.

Skinner, Ross MacGregor, and Rodney James Anderson. *Analytical auditing*. Pitman, 1966.

Stefaniak, Chad M., Richard W. Houston, and Robert M. Cornell. "The effects of employer and client identification on internal and external auditors' evaluations of internal control deficiencies." *Auditing: A Journal of Practice & Theory* 31.1 (2012): 39-56.

Stirling, Andrew. "Risk, precaution and science: towards a more constructive policy debate." *EMBO reports* 8.4 (2007): 309-315.

Tummala, Rao, and Tobias Schoenherr. "Assessing and managing risks using the supply chain risk management process (SCRMP)." *Supply Chain Management: An International Journal* 16.6 (2011): 474-483.

Van der Stede, Wim A. "Management accounting research in the wake of the crisis: some reflections." *European Accounting Review* 20.4 (2011): 605-623.

Van der Steen, Martijn. "The emergence and change of management accounting routines." *Accounting, Auditing & Accountability Journal* 24.4 (2011): 502-547.

Walke, R. C., V. M. Topkar, and Nisha U. Matekar. "An Approach to risk quantification in construction projects using EMV analysis." *International Journal of Engineering Science and Technology* 3.9 (2011): 6847-6855.

Walker, D. (2009) A Review of Corporate Governance in UK Banks and Other Financial Industry Entities: Final Recommendations (HM Treasury, UK), available at www.hm-treasury.gov.uk/walker_review_information.htm.

Weinberg, Alvin M. "Reflections on risk assessment." *Risk analysis* 1.1 (1981): 5-7.

Yin, Robert K. *Case study research: Design and methods*. Vol. 5. Sage, 2009.

Yin, R. K., 2013. Validity and generalization in future case study evaluations. *Evaluation*, 19(3), 321-332.

Laura Zoni , Andrea Dossi & Marco Morelli (2012) Management accounting system (MAS) change: field evidence, *Asia-Pacific Journal of Accounting & Economics*, 19:1, 119-138, DOI: 10.1080/16081625.2012.668062

8. Articles

Article #1 - To what extent, how and why do internal control audits affect internal controls?

Article #2 – Financial crisis and administrative controls: An institutional theory perspective.

Article #3 – Disclosure materiality: An analysis of stakeholders' perception

9. To what extent, how and why do internal control audits affect internal controls?

Presented at

The 13th European Academic Conference on Internal Audit and Corporate Governance

London, 15 – 17th April 2015

Leif Christensen

Copenhagen Business School, Department of Accounting and Auditing,
Denmark

Abstract

Based on a single case study in a large financial institution the paper examines a) the extent to which, and b) how and why internal control audits performed by internal audit affect internal controls. The study includes a review of management letters for the period 2008 – 12 reporting the result of the internal control audits. The review revealed that 30% of auditor's recommendations gave rise to the implementation of new internal controls. Seen in isolation, this indicates that management letters are a source of new internal controls.

To explain how and why internal control audits affect internal controls, an analysis of the audit/client interaction in the management letter process was conducted. The analysis showed that the recommendations and improvement of existing and implementation of new controls are a joint product between auditors and client. The improved level of internal controls adds value both from an audit and a business perspective. Further it serves as a defence against the regulatory regime. Even though FSA is blamed for the burdensome work with internal controls, it seems that the improvements would most likely have been implemented regardless of pressure from FSA. The paper seeks to fill a gap in the knowledge of auditor impact on internal control and modifies the anecdotes that auditors alone are to blame for the growing number of internal controls.

1. Introduction

In recent decades, it has been suggested to regulatory authorities and auditors that they develop pressure on companies to establish further internal control (Ashbaugh-Skaife et al., 2009; Power, 2004; Power 2005). Both the internal audit function (IAF) and external auditors (EA) have for a long time been assumed to play a key role in relation to reporting on internal control (Maijoor, 2000; Spira and Page, 2003). The auditors' recommendations are typically reported in management letters, which is a long-standing current practice of communicating observations and advice, especially regarding improvements of internal controls (Manson et al., 2001). In this respect, internal controls are not considered in terms of broad risk management (Spira and Page, 2003) but rather at the detailed process level where they are evaluated from an audit perspective (Eilifsen et al., 2010) against "control objectives" (AICPA, 2008).

The assumption that auditors put extensive pressure on companies for further internal controls is to some extent based on anecdotes. During my years as an external systems and process auditor, we got the following comment from a top tier CFO:

"You always recommend improvements and implementation of new controls in your management letters – so you are actually to blame for the growing number".

There is perhaps some truth in this statement, since we had to be visible to the client (recommending improvements) in order to demonstrate value.

Even though IAF is an important player, they generally do not have a well-defined role in relation to internal control (Power, 2008; Arena and Sarens, 2015). This uncertainty should also be seen in the context that with regard to both independence and professional qualifications, IAF are of varying quality (Arena and Jeppesen, 2010). Despite the importance of IAF, there is little academic knowledge about their impact on internal controls (Bame-Aldred et al., 2013). To fill this gap, a single case study has been conducted aimed at exploring: To what extent, how and why do internal control audits affect internal controls?

In order to answer this research question, empirical material was collected from a case study of an IAF in a large financial institution. This IAF is to a large extent organised and staffed and work similarly to EA and is subject to detailed regulatory requirements (BEK, 2013). This includes the requirement that IAF report exclusively to the board of directors (Arena and Jeppesen, 2010). Further, the head of IAF has to be approved by FSA, and an audit agreement governed by the audit committee must be established on an annual basis describing the distribution of tasks between EA and IAF. In the Group (anonymous name of the entity used in the paper), IAF is responsible for the internal control audit, including the related management letter reporting. EA is required to do a quality review of the work performed by IAF and report the result to the board of directors (BEK, 2013). Further, they are required to redo some of the work (ISA 610, 2013), but according to local practice this can be done as a joint audit in a limited area, which reduces the need for additional work (DR and IIA, 2013). It is therefore anticipated that the findings of the present paper may be applicable not only in an IAF context, but also to the role of auditors in general.

In order to understand to what extent management letters impact internal control, a detailed analysis of the management letters for the period 2008 – 12 was performed. The analysis included a review of working papers and clarifying interviews of audit and client staff. This part of the analysis showed that approx. 30% of the recommendations in the management letters result in the implementation of new controls. The remaining 70% cover various weaknesses in existing controls. The majority of those, 60% of the total population, are observations regarding weaknesses in existing procedures, design or operational issues (AICPA, 2008). The remaining approx. 10% relate to issues where controls are operated as intended but the documentation is insufficient. Based on the analysis, auditor's recommendations in management letters should be considered a source of new controls.

To clarify how and why internal control audits affect internal controls, the management letter process was outlined on the basis of an examination of draft and final versions of reports, including supporting working papers, documentation and minutes. The review was supported by interviews of audit and client staff participating in the process. On this basis, a number of interactions between auditor and client were identified. These interactions were

analysed drawing on theories of auditor-client interaction (Fearnley et al., 2011 and Salterio, 2012) by combining elements from both theories and using them as a basis for structuring the information from the case study.

How do internal control audits affect internal controls? The analysis shows that the interaction between auditor and client is an exchange of information based on a primarily argumentative strategy by both parties. The outcome of the interaction, which is the result of the internal control audits and the subsequent management letter process, is an improvement of existing and implementation of new controls. The result should be classified as a joint product based on co-operation between auditor and client, which improves the level of internal controls.

Why do internal control audits affect internal controls? The impact occurs because recommendations for improvement of existing and implementation of new controls add value from both an audit and a business perspective. Further the improvements serve as a defence against the regulatory regime. This defence seems important for everyone in the organisation, and the recommendations are often prompted by FSA regulations. The reference to FSA concerns, which are often made by auditors and client staff, serves to ensure that the organisation takes the recommendations seriously. Moreover, it appears convenient to blame FSA and to justify huge efforts and burdensome changes to the internal control system with reference to the rigid and mechanistic FSA practices and regulations. Even though the defence seems important, the added value from both an audit and a business perspective is significant, and recommendations would most likely have been implemented regardless of the pressure from FSA. It seems that FSA has an impact on the management letter process, but not on the implementation of internal controls. This conclusion could indicate that FSA should focus on a principle-based regulation and pressure rather than seek to establish detailed rules regarding internal controls, which is a change to the current trend of more detailed regulation (Ho et al., 2013).

Based on a single case study, this paper contributes with a detailed understanding of how and why internal control audits impact the internal controls system in a financial institution. This also adds a deeper understanding

of the management letter process compared with previous studies. Further, the paper modifies the anecdotes that auditors alone are to blame for the growing number of internal controls. Instead, the paper concludes that the main explanation is the cooperation between auditor and client. The result is an improved level of internal controls which mitigates both audit and business risk – and serves as a defence against the regulatory regime.

The rest of the paper is organised as follows: Section 2 presents the combined audit/client interaction model used to analyse the “how” and “why” part of the research question. Section 3 contains a description of the method, and section 4 a description of the Group and audit in the Group. The result of the case study is presented in sections 5 – 6, and the final section combines the conclusion and discussion.

2. Interaction between internal audit and client

The result of an internal control audit is reported in a management letter, which includes recommendations for improvement of existing or implementation of new internal controls (Manson et al., 2001). Although the management letter is formally prepared by the auditor, it is also the result of a process involving a number of interactions between auditor and client. A description of the management letter process in the Group, including the audit/client interactions, is illustrated in appendices 1 and 2.

Interaction between EA and client has been the subject of studies since 1991 (Antle and Nalebuff, 1991), where issues regarding the audit opinion on the financial statement were analysed. Based on the number of citations, there are two other important papers in this area: Gibbins et al. (2001) and Beattie et al. (2004). Both studies, which have been revised by Salterio (2012) and Fearnley et al. (2011), focus on interactions regarding the external audit of financial reporting issues. This is different to the case study, where IAF performs the internal control audit. The nature of the IAF (Arena and Jeppesen, 2010), including independence from the executive board, and the quality of the work seem, however, to be at the same level as an EA (Bame-Aldred et al., 2013; Stefaniak et al., 2012). The specific setting of IAF is described in section 4.2.

Consequently, the conceptual models, Salterio (2012) and Fernley et al. (2011), appear to be useful to support an analysis of the question of “how” and “why” internal control audits affect internal controls. Based on these studies, the model used in this paper is presented in figure 1:

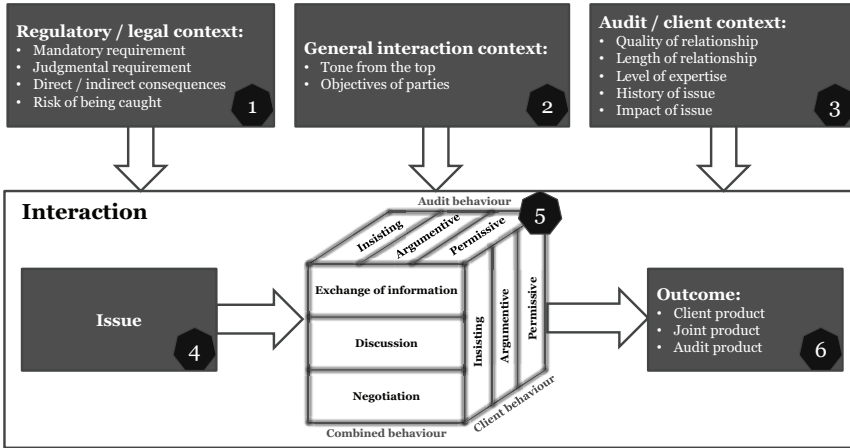


Figure 1 - Combined audit/client interaction model based on Salterio (2012) and Fearnley et al. (2011).

At its core, the model has an interaction process (4), (5) and (6), which is surrounded by a number of contextual features (1), (2) and (3):

Core interaction

The centre of the model describes the core interaction. The interaction starts with an “Issue” (4), which is the input to the “Interaction” (5). In relation to auditors reporting on internal controls, one issue could be a recommendation, and later in the management letter process an audit memo, a management letter or the LFAR. The nature of the behaviour ranges from “permissive” through “argumentative” to “insisting” for both auditor and client. The insisting behaviour can be illustrated by a situation where the auditors, due to professional responsibilities or legal requirements, have thresholds which cannot be exceeded. As opposed to “insisting”, “permissive” is added to describe a situation where one of the parties simply accepts the issue. It seems,

however, that a situation where the parties have mixed behaviour should be expected (Muninghan and Bazerman, 1990). A mix between “permissive” and “insisting” has been labelled as “argumentative”.

According to Beattie et al., (2000) interaction can range from an “exchange of information” through “discussion” to “negotiation”. Of these classifications, the only one clearly defined in the literature is “negotiation”, e.g. (Gulliver et al., 1979). The other two classifications seem to be added based on a graduation of the concept “negotiation”. These classifications are used as a description of the combined behaviour of auditor and client.

The “Outcome” (6) can be classified either as a client product, a joint product or an audit product (Salterio, 2012). A management letter is by definition an audit product, since the auditor prepares and “owns” the document. The same argument can be used for the annual report, which is the responsibility of the company and thus a client product. Since for a number of years the annual report has been considered a joint product (Antle and Nalebuff, 1991), the classification of the output should be seen as a description of who has influenced the outcome rather than who formally owns the document.

Contextual features

The contextual features (1) (2) and (3) are categories of factors that in various degrees affect the core interaction. Examples of individual factors have been derived from the initial studies (Gibbins et al. 2001; Beattie et al. 2004) and related papers from the same group of authors. Examples of these factors have been added to each of the contextual features in a “bullet” format.

The regulatory/legal context (1) has been analysed by Fearnley et al. (2011), who compare the result of this study with the initial study by Beattie (2004). The “Risk of being caught” has risen in the period between these two studies, and this has impacted the behaviour of the client (5) from insisting towards the direction of passive acceptance. Another example in the regulatory/legal context is the impact of the Sarbanes-Oxley Act, according to which auditors have been mandated more power, which has resulted in a move from a permissive to a more insisting behaviour (Brown and Wright, 2008).

Regarding the general interaction context (2), the “tone from the top” (Lail et al., 2015) could be a policy by the board of directors on “no surprises”, which tends to make the parties more co-operative (Fearnley et al., 2011). An example of the impact of “Objectives of the parties” is the Sarbanes-Oxley Act, where the auditor needs assurance in order to certify the internal controls. On the other hand, the cost of controls for complying with auditors’ recommendations can be high (Carney, 2006). In this situation, the parties could have differing preferences, but should at the same time end up with a joint decision. Combined with the above comments, the behaviour of the auditor might be insisting, which could affect the possible outcome (6) in the direction of an “Audit product”.

The audit/client context (3) has been analysed in a number of studies. The development of this feature was analysed by Fearnley et al. (2011) when comparing the result with an early study by Beattie et al. (2000). The impact of the audit/client context has been reduced in the period between these two studies in favour of the regulatory/legal context. A different result is reported in a study on the effect of past client relationship in which it is concluded that the impact of the audit/client context is significant (Brown-Liburd and Wright, 2011). The “History of issue” is inspired by antecedent related to previous interaction and its outcome and is closely related to the core interaction (Salterio, 2012). As an example, the behaviour chosen when dealing with a significant audit difference has been analysed in combination with the result of previous interaction (Hatfield et al., 2010). The study indicates that the magnitude of the audit difference (“Impact of issue”) has an effect on the nature of auditor’s interaction moving in the direction of being more insisting. There is, however, also a pull in the opposite direction, since client concession from prior interaction could have this impact. The “History of issue” may potentially affect behaviour in the direction of either permissive or insisting, depending on the result of the previous interaction. It seems that you either cannot or should not win them all.

3. Method

The overall goal is to examine a) to what extent and b) how and why internal control audits affect internal controls. As little is known about auditor's impact on internal controls, a single case study is used to explore the phenomenon in detail (Eisenhardt, 1989). This method is appropriate, since the focus is on a real-life situation with a variety of data sources aiming at answering a question of "how" and "why" (Yin, 2009). The case study also seek to illustrate if the specific internal control audit supports the combined audit/client model (figure 1) (Keating, 1995). Looking at the elements of the research question, the approach used to analyse the "extent" part is different compared to that used for the analysis of "how" and "why". The "extent" part is primarily analysed based on a review of management letters. Besides addressing the "extent" part, the result is also used as a basis for analysing "how" and "why" by gaining a general understanding of the management letter process. The main part of the investigation of "how" and "why" is, however, based on an analysis of the interaction in the management letter process.

The data sources included documentation, e.g. the management letters, auditors' supporting memos and working papers. Access was also granted to the annual customer satisfaction survey, where IAF is evaluated by the client. Furthermore, observations from participation in meetings together with interviews of audit and client staff are important data sources. The information assessed and analysed is considered confidential by the Group. According to the confidentiality agreement I was granted free access to information on the company's premises. Further I was placed in IAF and collected data alongside with the auditors and had immediate access to the staff. This access to information allowed for a collection of detailed data, which is supported by the case study method. The inherent risk of biased information was reduced by access to various data sources, including several knowledgeable informants in all areas (Eisenhardt and Graeber, 2007). Due to the terms of the confidentiality agreement I was not allowed to remove information from the premises unless this had been approved by the head of IAF. To deal with the confidentiality requirement and to get sufficient evidence that the observations and quotes used in the paper fairly represent the informants' attitudes, we agreed that the relevant sections of the paper should be reviewed by the informants. In addition,

a member of the audit team with years of experience in the Group reviewed the entire section 6 “Interaction between auditor and client”. This procedure also ensured that any misunderstandings were corrected and helped mitigate some of the challenges regarding a single case study, including the risk of a biased data collection (Eisenhardt and Graebner, 2007).

3.1. Review – management letters

A management letter is a well-defined and widely used form of communication to make recommendations to the client based on observations made during the audit (Eilifsen et al., 2010). According to Manson et al., (2001), a management letter is a formal way of communicating advice and comments to management in order to:

- improve the accounting and internal control systems;
- encourage the adoption of appropriate accounting policies; and
- improve the general efficiency and effectiveness of the business.

The reporting in the case study only covers the result of the internal control audit (first bullet).

In order to clarify to what extent internal control audits affect internal controls, a detailed analysis of the management letter reporting covering the period 2008 – 12 was performed. On an annual basis, 30 – 35 audit memos are prepared, each with 2 – 5 recommendations. For the period reviewed, a total of 404 recommendations were reported.

The management letter reporting consists of two documents: an audit memo and a management summary. Together they fulfil the definition of a management letter (Manson et al., 2001). Furthermore, an LFAR addressed to the board of directors is closely related to the management letter process, as it summarises the result of the audit. An important element in the management letter is the classification of recommendations (Hellman, 2006). A prioritisation into three categories (1, 2 and 3) is used in the Group. This is to some extent comparable with AICPA’s classifications: “material weakness” (1), “significant deficiency” (2) and “deficiency” (3), (AICPA, 2008). Appendix 2 describes the documents,

and appendix 3 includes a short version of a management summary as an example.

In the documents reviewed, the only quantitative information is the prioritisation of observations. The documents have, however, all been prepared in a standardised format, which helps to mitigate the risk related to the validity of the extracted data (Tellis, 1997). In order to classify the information by other criteria than the prioritisation, a detailed analysis of the wording of the observations, risk evaluations and recommendations were performed. Based on this, a number of classifications were derived, inspired by a study of management letters by Manson et al., (2001). The review of the documents gave rise to a number of clarifying questions which were answered on an ongoing basis through short interviews with audit staff.

3.2. Management letter process

In order to understand “how” and “why” internal control audits affect internal controls, an analysis of the interaction between auditor and client within the management letter process was performed. Since the Group had no description of the management letter process, an overview description was prepared, and “handshake” symbols were inserted at the places where interaction between auditor and client was identified (appendix 1). The description was based on a review of the management letters supported by interviews of audit staff responsible for the individual process steps. The description of the management letter process (appendix 1 and 2) together with the description of the Group and audit in the Group (section 4) allows the reader to compare the context with other cases (Parker and Northcott, 2016). In addition, I had access to working papers including draft and final versions of all documents produced as part of the internal control audit. These documents were reviewed when analysing the interaction and preparing for the interviews, e.g. in order to understand how many changes were made to the documents as a result of the interaction.

In order to explore the interaction, a number of responsive interviews (Rubin and Rubin, 2012) were held with audit and client staff. A responsive interview is based on a number of main questions aiming at exploring “how” and “why”

internal control audits affect internal control (appendix 4). The follow-up questions are not defined before the interviews but rather formulated in direct response to the answers provided to the main questions that are aimed at establishing a dialogue. In order to support the dialogue and keep the conversation focused, the overview of the management letter process (appendix 1) and the combined audit/client interaction model (figure 1) were used. These documents provided for matters raised during the interviews to be related directly to the interaction taking place in the management letter process and the contextual features. Further the discussion served as a validation of the description of the management letter process.

The main questions addressing the “how” part of the research question are based on the core elements of the combined audit/client interaction model (figure 1 - numbers 4, 5 and 6). The “how” questions provide information whether:

- the behaviour of auditor and client is: Permissive, argumentative or insisting;
- the combined behaviour of the auditor/client interaction could be seen as an exchange of information, a discussion or a negotiation;
- the outcome should be considered a client product, a joint product or an audit product.

At the detailed level, 10 recommendations were selected which, both from an audit and a business perspective, could be considered significant. The selection was made by the head of IAF and the head of IT-security. The latter has previously worked for many years in 1st line functions. The head of IAF and the head of IT-security were presented a list of 20 recommendations, identified as part of the review of the management letters, which they reduced to 10. The selection criteria included the requirements that the recommendations should be included in the LFAR, the mitigation of the risk should require significant resources, e.g. an implementation project, and both existing and new internal controls should be included. Examples of these recommendations are included in appendix 3. The recommendations supported the discussion regarding the “Outcome” (6), which can be classified as either a joint product, an audit product or a client product (Salterio, 2012).

The main questions addressing the “why” part of the research question were based on the contextual features of the interaction model (figure 1 – numbers 1, 2, 3 and 4). The “why” questions provided information about what impact the contextual features have on the audit/client interaction and on the “outcome”. The analysis of the “outcome” also included discussions of the value of the recommendations, both from an audit and a client perspective.

The Group did not allow the use of a voice recorder. Instead notes were taken during each interview, and memos were produced immediately after the meetings. Furthermore, we agreed that informal follow-up meetings could be arranged if required. Since I was located in the internal audit department and close to both 1st and 2nd line staff, this opportunity to go back to the interviewees was repeatedly used both to clarify issues but also to expand the responsive interviews and thereby get more information and a deeper understanding. The informal nature of the meetings resulted in interviews of more than 30 persons. The main informants were 6 auditors and 5 client representatives.

4. Description of the Group

A summarised description of the Group and audit in the Group based on material collected is included below. The description is an addition to the general regulatory context applicable to Danish banks (Arena and Jeppesen, 2010, p. 116).

4.1. The Group

The Group is one of the local top tier financial institutions with three main business areas, mortgage, bank and insurance. Each business area is organised into a number of subsidiaries fully owned by a holding company. According to local legal requirements, members of the board of directors are not allowed to take part in the day-to-day management of the company. It is a further responsibility of the board of directors to appoint the head of IAF. The

organisational structure is established and governed in compliance with the local companies act and requirements of FSA (BEK, 2010).

The organisation of internal control and risk management activities follows the “Three Lines of Defence” model (BIS, 2012):

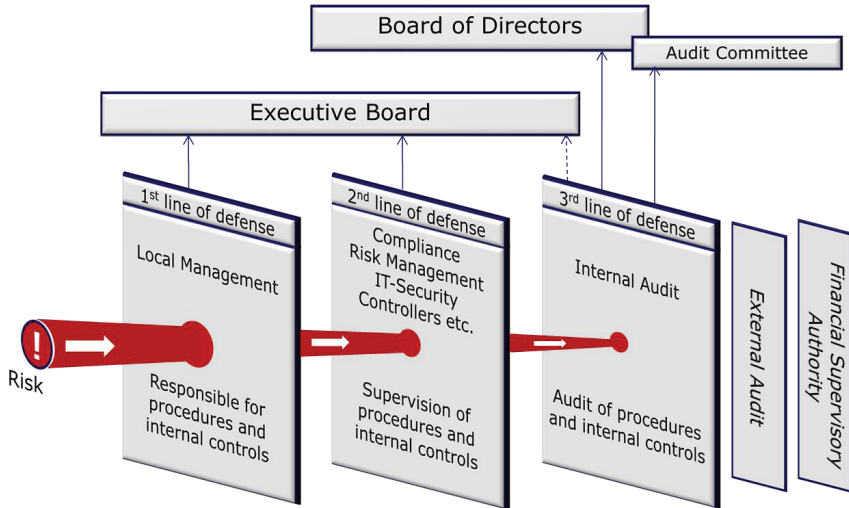


Figure 2 – Group three lines of defence model (Group internal figure)

1st line of defence

The local management of each business area is responsible for identifying, assessing and managing risks associated with the performance of their duties, and to ensure that satisfactory internal controls are established. They have an individual task of fulfilling Group internal policies as well as financial legislation and other external requirements. These tasks are not part of the incentive system in the Group. The local management refers to the executive board.

2nd line of defence

This line includes a number of interdisciplinary departments in the Group, i.e. Risk Management, Compliance and IT Security. These departments have the responsibility to establish policies and procedures, and monitor that the activities are operated according to these requirements, which includes ensuring that the internal controls are satisfactory. The 2nd line of defence is organised with reference to the executive board.

3rd line of defence

IAF must be established with reference to the board of directors, and they are not allowed to do any other work than audit (BEK, 2013). It is not a requirement but a long-standing local practice that the head of IAF in major financial institutions is a state-authorized auditor. The internal audit staff have degrees as state-authorized auditors (20%), master's degrees in auditing (30%), master's degrees in finance (20%) and bachelor degrees in accounting (30%). Regarding independence requirements, the local regulation follows the code of ethics for professional accountants (IESBA, 2013) in all material aspects.

Outside the three lines of defence, EA has an independent responsibility for the audit opinion on the financial statements.

4.2. Audit in the Group

In order to understand the nature of IAF and the quality of work delivered, the Group has been related to EA's reliance on IAF. The following framework has been used for this evaluation (Bame-Aldred et al., 2013)¹:

- Regulatory environment
- Environmental factors affecting IAF reliance
- IAF factors affecting EA' reliance on the IAF
- Nature and extent of EA reliance on IAF
- Outcome effects of EA reliance on the IAF

¹ The paper "A summary of Research on External Auditor Reliance on the Internal Audit Function (Bame-Aldred et al., 2013) includes a review of academic literature and selected practitioner research organised according to the bullets.

Regulatory environment

The regulatory requirements are primarily included in the “Executive order on auditing financial undertakings etc. and financial Groups” (BEK, 2013). The main requirements are:

- Appointment and dismissal of the head of IAF must be made by the board of directors and reported to FSA.
- The budget for IAF must be approved by the board of directors.
- IAF are not allowed to perform any other functions than auditing.
- The audit must comply with generally accepted auditing standards and be performed in accordance with the audit agreement. Specific reference is made to ISA 315.
- EA must perform a sample-based quality review of IAF work and report the result to the board of directors in the LFAR. Specific reference is made to ISA 610.2

Furthermore, in the year-end LFAR EA must state if the work according to the audit agreement has been done and if IAF functions satisfactorily, including being independent from the executive board. The LFAR from both EA and IAF must be forwarded to FSA after having been formally signed by the board of directors (BEK, 2013).

Environmental factors affecting IAF reliance

The environmental factors include the governance structure which may mainly be evaluated through the relationship between IAF and the audit committee. Key elements in this relationship are reporting duties, hiring/termination rights and budget control (Abbott et al., 2010). These three issues are all supported by regulatory requirements, which results in a strong audit committee oversight of IAF. The facts that the Group operates in the financial service sector and that the audit committee approves the budget are also indications that the IAF has the required resources (Carcello et al., 2005).

² The references to ISA 315 and 610 are also included in the description of the relation between internal and external audit in “The internal audit function in banks” (BIS, 2012).

It is also the responsibility of the audit committee to ensure that an audit agreement is entered into between EA and IAF (BEK, 2013). According to the audit agreement, the internal control audit and the related management reporting is the responsibility of IAF. This is a traditional task for IAF (Arena and Sarens, 2015). In contrast, the audit of the financial statement is primarily performed by EA, supported by IAF staff. The co-operation between EA and IAF means that it is an integrated financial and internal control audit (Kinney et al., 2013):

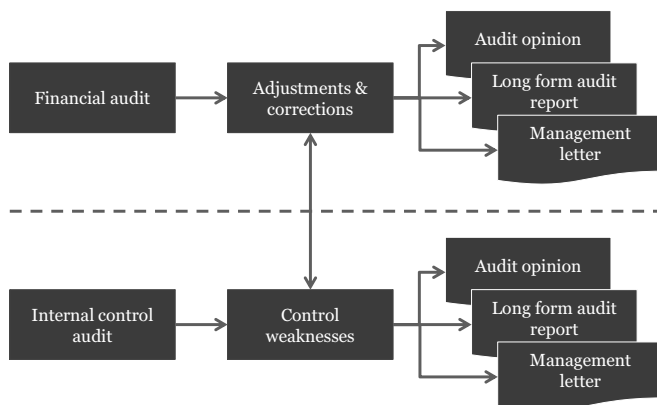


Figure 3 – Integrated financial and internal control audit in the Group (inspired by Kinney et al., 2013)

Regarding oversight, FSA also exercises ad hoc supervision. During the case study, the head of IAF had a request from FSA about the reporting lines. The request was based on a newspaper article which indicated that IAF reported to the executive board rather than to the board of directors. Even though the newspaper article was based on false information, it initiated the request from FSA, which indicates strong monitoring.

IAF factors affecting EA’s reliance on the IAF

The primary IAF factors affecting EA’s reliance are competences and quality of work. According to the regulatory requirements, EA must perform a sample-based quality review. In addition, they have to comply with the international

standards on auditing, including ISA 610 “Using the Work of Internal auditors” (ISA 610, 2013). ISA 610 requires EA to redo some of the work done by IAF. According to local practice, which is approved by FSA, this can be done as a joint audit in some areas selected by EA. The main objective of this practice is to avoid duplication of work (DR and IIA, 2013).

Nature and extent of EA reliance on IAF

Based on the result of the quality review and redoing of work, EA decides the level of reliance in the work delivered by IAF. Since EA has an independent responsibility regarding their audit opinion on the annual report, they have to ensure that the required work is done to mitigate the audit risk (Eilifsen et al., 2010). If additional work is needed, EA must ensure that the necessary resources are provided. A review of the audit agreement for 2013, which is based on the result of the audit for 2012, showed no indications of additional work from EA, which means that EA plans to rely on the work performed by IAF (Arel, 2010).

Outcome effects of EA reliance on the IAF

The outcome of the internal control audit from EA’s perspective is reliance on the internal controls and recommendations for mitigation of weaknesses (Bame-Aldred et al., 2013). The agreed sharing of the audit in the Group is consistent with the view that IAF has an advantage over EA, since they experience a higher level of identification with the client and know the business processes better. IAF has a long-term view, since they do not have to consider the renewal of the assignment and thus are able to provide a less lenient internal control evaluation (Stefaniak et al., 2012). The actual value of the internal control audit, including the identification of weaknesses, also depends on the coordination of the audit (Lin et al., 2011). During the case study a number of meetings between internal and EA was observed. According to the head of IAF, these meetings are primarily related to detailed planning and sharing of results of the work performed. The nature of these meetings indicates a joint-audit approach, which can be seen as a way of utilising the combined knowledge and thus improve the overall level of comfort (Sarens et al., 2009).

5. To what extent do management letters affect internal controls?

The detailed review of the management letter reporting covering the period 2008 – 12 aims at clarifying to what extent the internal control audits affects internal controls through their total of 404 recommendations. The recommendations classified by IAF’s prioritisation and divided into new and existing controls are presented in table 1. The table also shows the number of recommendations included in the LFAR.

Year	New controls							Existing controls								
	Total/Priority		1		2		3	Total/Priority		1		2		3		
	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR		
2008	21	9	7	7	13	2	1	0	62	6	3	3	48	3	11	0
2009	45	9	8	8	33	1	4	0	55	10	7	7	42	3	6	0
2010	12	3	1	1	9	2	2	0	59	12	7	7	42	5	10	0
2011	21	5	1	1	14	4	6	0	59	13	7	7	41	6	11	0
2012	19	5	3	3	14	2	2	0	51	7	3	3	40	4	8	0
Total	118	31	20	20	83	11	15	0	286	48	27	27	213	21	46	0
Year	New and existing controls															
	Total/Priority		1		2		3									
	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR								
2008	83	15	10	10	61	5	12	0								
2009	100	19	15	15	75	4	10	0								
2010	71	15	8	8	51	7	12	0								
2011	80	18	8	8	55	10	17	0								
2012	70	12	6	6	54	6	10	0								
Total	404	79	47	47	296	32	61	0								

Table 1 - Summary of recommendations in management letters by priority

The only year with a significantly higher number of recommendations for new controls is 2009 – following the financial crisis and an increase in new requirements from FSA (Van der Stede, 2011). Apart from 2009, the number of recommendations for new controls is stable at around 20 on an annual basis.

The only classification in the management letters is the prioritisation of recommendations (1 – 3). In order to understand the nature of the requirement for recommendations, a review of the wording was performed. If the observation or the risk evaluation include a reference that can be related to “legal”, “regulatory” or “internal policy”, they are classified as such. According to IAF, it is preferable that a specific reference is included, since it can make the interaction between auditor and client less judgmental. If no reference is included, the recommendation is based on the auditor’s professional evaluation

and classified as “Audit”. The recommendations classified by nature of requirement are listed in table 2:

Nature of requirement	New controls						Existing controls									
	Total/Priority		1		2		3		Total/Priority		1		2		3	
	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR	ML	LFAR
Legal	4	0	0	0	4	0	0	0	15	2	0	0	10	2	5	0
Regulatory (FSA)	34	15	10	10	21	5	3	0	50	12	9	9	29	3	12	0
Internal policy	4	0	0	0	4	0	0	0	16	3	2	2	14	1	0	0
Audit	76	16	10	10	54	6	12	0	205	31	16	16	160	15	29	0
Total	118	31	20	20	83	11	15	0	286	48	27	27	213	21	46	0

Table 2 - Recommendations classified by nature of requirement

The nature of the weaknesses which the recommendations relate to for the two major groups “Regulatory (FSA)” and “Audit” are specified according to Manson et al. (2001) in table 3:

Nature of weakness	New controls				Existing controls				All controls	
	Total	1	2	3	Total	1	2	3	Total	%
Adequacy of accounting system	12	2	10	0	13	2	7	4	25	33%
Segregation of duties	3	1	2	0	5	2	3	0	8	11%
Administration	3	3	0	0	2	1	1	0	5	7%
Markets	1	0	0	1	4	0	3	1	5	7%
Lending	11	4	7	0	12	4	7	1	23	30%
Business advice	0	0	0	0	0	0	0	0	0	0%
Documentation	4	0	2	2	6	0	0	6	10	13%
Regulatory FSA - total	34	10	21	3	42	9	21	12	76	100%
Adequacy of accounting system	13	1	11	1	48	4	38	6	61	22%
Segregation of duties	13	2	8	3	38	6	27	5	51	18%
Administration	14	2	11	1	21	2	19	0	35	12%
Markets	10	0	8	2	22	1	19	2	32	11%
Lending	20	4	13	3	38	2	34	2	58	21%
Business advice	5	1	3	1	6	1	5	0	11	4%
Documentation	1	0	0	1	32	0	18	14	33	12%
Audit -total	76	10	54	12	205	16	160	29	281	100%

Table 3 - Recommendations FSA and Audit classified by priority and nature of weakness

Comparing the recommendations referenced “Regulatory FSA” with those referenced “Audit”, the regulatory part has a higher share in the areas of “Adequacy of accounting system” and “Lending”. These two areas relate to the quality of reporting required by FSA and impairment of loans. This result is not surprising, since following the financial crisis, FSA has paid much attention to the value of the loan portfolio (Rangvid, 2013). On the contrary, segregation of duties, administrative procedures and markets are all areas initiated by IAF.

The review of the management letters also covered the management comments, including a deadline for when specific risks will be mitigated. There are some examples that mitigating actions are delayed compared to the initial plan. The main explanation is that a number of recommendations are used as input to the implementation of a new system, which might result in a redesign of supporting processes and internal controls. Based on a review of the database of recommendations maintained by IAF, all issues have, however, been closed or are in a planned process of being closed by an implementation project.

In summary, an average of 20 new controls are implemented annually in direct response to the auditor's recommendations. This indicates that management letters and thereby internal control audits affect internal controls. Another finding is that approx. 30% of recommendations for new controls are justified by regulatory requirements, and 65% by IAF's professional judgment without reference to any specific requirement.

6. Interaction between internal audit and client

In order to understand how and why internal control audits affect internal control, the interaction in the management letter process between auditor and client has been analysed. The result is presented in two sub-sections:

6.1 - Core interaction – “how” does internal control audits affect internal controls?

6.2 - Contextual features – “why” does internal control audits affect internal controls?

6.1. Core interaction – “how” does internal control audits affect internal controls?

The analysis focuses on five interactions at different stages in the management letter process, see appendix 1:

1. Meeting about initial observations
2. Meeting about recommendations
3. Meeting about draft audit memo
4. Meeting about draft management summary
5. Meeting about draft long form audit report

6.1.1. Meeting about initial observations

The audit typically results in a number of observations which are documented in the appendix to the audit memo. An observation is the most detailed level in the management letter process and is the subject of the first interaction between auditor and client. The objective of this interaction is to get a common understanding of the observations. The basis for this agreement is that the audit manager sends a draft of the appendix to the client staff who has been involved in the audit. If necessary, a meeting is held between the parties in order to clarify any misunderstandings and if needed to prepare adjustments to the description in order to make it as precise as possible. Depending on the observation, the presentation typically starts with the auditor saying:

- *“We have been informed that ...”*
- *“We have observed that ...”*
- *“Based on test of controls we have identified a variation from the standard procedures ...”*

The auditors’ objective of the meeting is to verify the written presentation of the observation. Based on a review of changes to the draft appendices, working papers, memos, mails and supporting interviews with audit staff, no unsolved disagreements were identified regarding the description of the observations. Neither have I been able to identify any “differing preferences” (Salterio, 2012) which were not solved by the presentation of facts. I did not identify any indications of an insisting behaviour from the auditors. This is supported by two managers representing different business units who jointly expressed the interaction with the auditors as follows:

“If they (internal audit) have got a wrong impression of a procedure – they are willing to listen to valid arguments”.

If there are different views, it is up to the client to present further documentation to support adjustments. Therefore the meeting is an argumentative exchange of information supporting, adjusting or rejecting the observation, and the outcome a joint product.

6.1.2. Meeting about recommendations

When the observation has been agreed upon, IAF prepares a risk evaluation and recommendation which is included in the appendix to the audit memo. The recommendations that are the issue of the second interaction is sent to the same client staff who previously agreed on the observation.

From an audit perspective, the objective of the recommendations is to improve the level of internal controls and thus obtain audit evidence from test of controls when the improvement is implemented (Eilifsen et al., 2010). IAF prepares the recommendation, but according to an audit manager they are open to changes:

“Regarding the recommendations it is of less importance how the issue is solved. When we have agreed on an observation, it is up to the client to suggest a solution – as long as it works. But the recommendation should mitigate the risk – otherwise we must try again. We need to close the observation, how it happens is actually of minor importance.”

This view is supported by the head of IAF:

“There is no point in preparing a recommendation if the client has no practical options for implementing an improvement. Then it is better to suggest another solution as long as the risk is mitigated”.

This practical approach is also illustrated by the way the client handles the recommendation. Since it is the client’s responsibility at a later stage to implement a solution, the client staff often goes back to local management to agree on a solution.

Both the audit and client nature of interaction can primarily be classified as argumentative. There are, however, indications that the auditors could insist if necessary. The statement *“... the recommendation should mitigate the risk”*

indicates minimum requirements to the solutions. The combined behaviour is, however, still a discussion aimed at describing a recommendation and a solution which can be implemented and fulfil the audit requirements. Therefore the outcome of the interaction is a joint product, since both parties take part in a co-operative manner.

6.1.3. Meeting about draft audit memo

When the recommendations are agreed upon, the appendix is finalised. This includes a prioritisation of observations. There are no formally defined criteria for the prioritisation, and according to the head of IAF it is based on “professional judgment”³. The prioritisation is of interest, since priority 1 recommendations are always reported in the LFAR, together with some priority 2 observations. Furthermore, IAF prepares a draft audit memo, which is a summary of observations and recommendations included in the appendix. This document is the issue of the third interaction. The prioritisation is essential for the local management, and it is the main item on the agenda for the draft audit memo interaction (meeting). The situation is clearly stated by the head of IAF:

“The local managers don’t mind our recommendations, and they prefer to have well-controlled business processes. If we are reasonable with our recommendations, they comply. They do, however, not like priority 1 observations. Being exposed to the board of directors and FSA is not seen as a desirable situation”.

A local manager agrees:

“It is obvious that priority 1 recommendations can lead to reactions from the board of directors, which may cause unnecessary turmoil in the organisation – a situation we want to avoid for obvious reasons; but in general, the recommendations from internal audit are reasonable.”

A detailed review of draft and final audit memos indicates that the number of priority 1 recommendations is reduced as a result of the interaction. IAF

³ “Auditor’s professional judgment” is also used by IFAC as a guideline for ranking findings (IFAC, 2009).

sometimes encounters a desire from local management to change the priorities. The head of IAF explained that:

“... we might sometimes agree on a priority 2 instead of 1. It is, however, a bargaining situation - if we change priority from 1 to 2, we could perhaps agree to speed up the deadline for the implementation”.

The “deadline for implementation” refers to the final element of the appendix, which is the management comment. In this section, local management comments on the observations and recommendations and commits to a deadline. The deadline for mitigating the risk is important, since IAF follows up on the agreed deadlines on an ongoing basis.

The behaviour by both auditor and client is classified as argumentative in the direction towards insisting, and the combined nature as a negotiation. This is mainly due to the potential exposure to the board of directors and FSA. This can be seen as an example of “Tone from the top”, indicating that the board of directors seeks well-controlled processes (Sarens et al., 2009). When the management comments have been finalised, the audit memo is signed by both parties, and due to the active interaction the outcome is a joint product.

6.1.4. Meeting about draft management summary

Based on the audit memos, IAF prepares a management summary. This document is the fourth interaction issue and is presented at a meeting with the executive board. An example is included in appendix 3.

As part of the case study, draft and final management summaries for the period 2008 – 12 were compared. Only a very few changes were made, and they all concerned how to prioritise the various implementation projects aiming at mitigating the identified risks. Since the executive board has a consolidated view on these projects, this might have an impact on the solutions and the deadlines agreed with local management. According to head of IAF:

“It is a management decision how to prioritise the resources – and it is clearly not our job to be involved in this process. We accept the decisions and plan our audit accordingly”.

This is seen as a permissive attitude based on a professional understanding of roles and responsibilities, including potential independence issues (IESBA, 2013).

The final management summary is the outcome of the interaction. Since the only changes to the draft management summary are the result of management decisions, the outcome is classified as a client product.

6.1.5. Meeting about draft long-form audit report

The fifth issue is the LFAR report, which includes a description of all priority 1 and some priority 2 recommendations from the management summaries. This document is sent to the audit committee and presented at a meeting (interaction). At the meeting, internal audit presents the LFAR, which includes other issues besides observations from the internal control audit (BEK, 2013).

According to the head of IAF, the meeting with the audit committee is of a formal nature, and the document is owned by IAF:

“It is our document and our professional responsibility. Further, we have been involved in the whole process and therefore it is not acceptable if the audit committee changes our professional judgment.”

We see this as an indication that the behaviour of the auditors is argumentative in the direction of being insisting, and the meeting should be classified as an exchange of information. A review of draft and final LFARs revealed no substantive changes. This indicates that the behaviour by the audit committee regarding the LFAR is permissive and of a rather ceremonial nature (Beasley et al., 2009). This can also be explained by the fact that the audit committee is involved in the management letter process at a rather late stage where all other parties have agreed on the details.

The outcome is the final LFAR, which is signed by the board of directors. The document is an audit product, since the directors have both the formal (BEK, 2013) and the actual responsibility.

6.2. Contextual features – “why” does internal control audits affect internal controls?

The analysis of the contextual features will examine “why” internal control audits affect internal control. The combined interaction model (figure 1) has three contextual features that can explain the impact on the core audit/client interaction: 1) “regulatory / legal”, 2) “general interaction” and 3) “audit/client”.

Regulatory / legal context

All activities in the Group are subject to mandatory inspections by FSA. An inspection normally covers a business area, and a total of 4 – 6 inspections are carried out annually. The reports from FSA must be published on the Group’s homepage (BEK, 2013b). As a consequence of the regular inspections, all business managers are familiar with the procedures and consider them “necessary but time-consuming and burdensome exercises”. The regulatory legal context and the fear of being caught (Fearnley et al., 2011) also have an impact on the client behaviour in relation to internal control audits. It is a generally held view that proper internal controls can help ensure compliance with regulatory requirements. A client manager explained that:

“FSA is at present not as flexible as in the old times, so we might as well keep things in a good shape”.

This view is also supported by the head of it-security (2nd line defence function), who also serves as an internal consultant in relation to internal control issues:

“1st line functions prefer to develop solutions that are reasonable secure - that way they avoid potential problems with internal audit, us or FSA at a later stage”.

It seems that there is a general concern regarding FSA. A client manager expressed it very clearly:

“They (FSA) hang like a black cloud over us. There are virtually no limits to what they can ask for and what they demand in terms of material - we must surely hope that it is useful.”

The inspection reports from FSA regarding internal controls are of a general nature and often without any description of specific weaknesses. Therefore I suggested the view that there might be confusion between internal controls and reporting requirements. The client manager’s reply to this was:

“No matter how we look at it we need to have the necessary internal controls in place to protect us against inspections by the FSA”.

The issue regarding protection and the value of being prepared for FSA inspection is also related to knowledge-sharing with other financial institutions. A 2nd line manager explained the situation:

“It is a well-known fact that FSA copies the same orders and recommendations between companies when they are on inspections. We know that from colleagues in other financial institutions.”

In order to measure the value of the improved or new internal controls, 10 significant recommendations were evaluated by representatives from internal audit, 2nd lines of defence and local management. The evaluation included a classification of the recommendations as “high”, “medium” and “low” depending on the internal controls’ ability to mitigate audit and business risks. Examples of the recommendations are included in appendix 3.

The evaluation of the audit value was based on a discussion with the head and deputy of IAF. They explained that 9 of the recommendations were the result of internal control audits executed according to the annual audit plan, and 1 audit was an ad-hoc request from the board of directors. All audits were performed according to standard audit instructions, but for 50%, additional work was performed due to requirements from FSA. The head of IAF explained:

“Due to information from various sources including network groups we pay more attention to areas which we know that FSA is aware of. If for example another bank has struggled with FSA regarding real estate loans, we use additional resources to ensure that all risks are mitigated. You might say that the audit serves both a traditional audit purpose and at the same time as a kind of defence against FSA. We should avoid being in a situation where we have performed an audit with no findings if FSA at a later stage identifies major weaknesses in the same area. After all, we prefer to have a good reputation and working relations with FSA – it makes things much easier”.

These comments lead to a question about the extent of this extra work related to internal controls initiated by FSA. The head of IAF summarised the discussion:

“It is impossible to measure how much extra work we perform due to this kind of pressure from FSA. It is also quite difficult to isolate the effect of FSA, but all the 10 significant recommendations would have been included in the management letters if the audit had been performed in a situation where we don’t have to consider regulatory requirements. The only difference is that 2 recommendations – those we evaluate as “low”- would most likely not have been included in the LFAR”.

IAF’s evaluation of the audit value resulted in an average classification of “high/medium”. This evaluation supports the statement that recommendations would have been included in the management letters independent of the regulatory requirements and that they add value seen from an audit perspective.

The business value of the internal controls was discussed with local management based on the same 10 recommendations. The evaluation revealed an average of “medium” in the ability to mitigate business risks. The main reason for a lower average score compared with IAF is that some recommendations are evaluated as being rather formalistic. It is recognised that the related internal controls mitigate business risks, but the supporting formalistic documentation is mainly seen as a defence against FSA and does not serve a business purpose. A business manager explained regarding a specific recommendation (appendix 3 no. 5):

“This is a typical recommendation primarily for the benefit of FSA. The control is performed as expected, but not documented according to requirements from FSA. From a business perspective it makes no difference – but we accept the recommendation and see it as a defence when we have inspections from FSA.”

The recommendations were also discussed with a representative from 2nd line who has both professional audit and business experience. In general he agreed on both the audit and client evaluation and summarised the situation as follows:

“It is recommendations which FSA would no doubt report - most likely as orders – and with good reason. However, we should have proper internal controls in place in these areas no matter what FSA might say.”

Regarding a specific recommendation (appendix 3 no. 1) he was even clearer:

“The recommendation and our mitigation of the risk is totally independent of whether FSA exists or not. The issue is too important from both an audit and a business perspective to be affected by FSA’s assessment. Of course it would have resulted in an order if they had identified the issues before we did.”

Based on these discussions it seems that both 1st, 2nd and 3rd line functions recognise pressure from FSA and try to establish a defence by having well-controlled business processes. These initiatives take place regardless of the fact that it seems difficult to have an inspection from FSA without a recommendation or an order. A client manager expressed his experiences with FSA:

“Inspections from FSA have always been a burden - they simply continue until they find something”.

The deputy head of IAF supports this:

“I have only experienced once that FSA issued a report without orders or recommendations. They keep searching until they find something – at least some minor formalistic details”.

Even though the pressure from FSA is mentioned repeatedly, the improved or new internal controls seem to add value from both an audit and a business perspective.

General interaction context

The risk of being caught also reflects the “tone from the top”, and compliance with financial legislation has a high priority for the board of directors. Without it being stated in a formal policy, the board does not find it acceptable if there are problems complying with FSA requirements. Both company and personal issues are involved in this view. One of the board members explained that:

“Those who are on several financial services boards are more risk adverse. They tend to be very careful not to be exposed to FSA”.

The issue of being exposed is related to the fact that both the internal and external LFAR, addressed to the board of directors, must be forwarded to FSA. Furthermore, FSA has issued an executive order on the content, which includes the requirement that the auditors must follow up and report on recommendations and orders issued by FSA and report the result in the LFAR (BEK, 2013). If critical matters are included, it should be expected that FSA will request further information, e.g. the supporting management letters and minutes from board meetings. These requests are formally addressed to the board of directors. As a consequence of this practice, problems related to internal control, identified by both IAF and/or FSA, are transparent to the audit committee and the board of directors (BEK, 2013b).

The deputy head of IAF explained that:

“Sometimes we use informal statements from the board of directors when arguing for a recommendation”.

Another example of this internal pressure was described by the head of IAF:

“An unexpected negative report from FSA might be quite painful to explain to the audit committee”.

Even though the behaviour of the audit committee regarding the LFAR seems to be of a rather ceremonial nature (Beasley et al., 2009), this statement indicates a substantial general impact, and it is an objective of IAF to have good relations with the committee. A client manager explained an example of informal verbal communication from one of the board members:

“I got a very clear message from a board member: “We don’t want loans that exceed the collateral – none at all.” Needless to say, this gave rise to an internal review and a general clarification of the requirements to the employees.”

From an overall perspective there is a pressure from the board of directors, and the root cause can be explained by a desire to comply with the requirements imposed by the FSA. This also indicates that even though there is no formal policy regarding compliance with regulatory requirements, the “tone from the top” has an impact on both the client and IAF. The fact that the recommendations for new or improved internal controls add value from a business perspective indicates that the business staff, despite complaints about FSA, hold respect for internal controls (Ashby et al., 2012) and the mitigation of business risks.

Audit/client context

The audit/client context is based on a working relation of mutual respect, at both the personal and the professional level. The interviews with both audit and client members describe the working relations as good. This is supported by the annual customer satisfaction survey, in which IAF in summary is evaluated as: *“Excellent working relations – a constructive and objective partner”*. The summary is supported by high scores in a number of areas including: “Meet expectations”, “do things right the first time”, “responsibility” and “understanding of the customer (client)”. These evaluations describe a high quality of relationship between IAF and client. This is also supported by the length of the relationship, since both the head of IAF, the deputy and a number of key staff members have a seniority of more than 10 years in the Group. In addition, the head of IAF and the deputy are state-authorized auditors and have for a number of years been professionally active in IIA, Danish Auditors, and have taught auditing at Copenhagen Business School. These qualifications provide IAF with authority and ease the way in which observations and recommendations are recognised by the client - and the client is willing to listen. It seems that the positive working relations affect the interaction in the management letter process and they help explain why all recommendations

result in improvement of existing or implementation of new internal controls. A client manager explained that:

“We have only a very few examples of the recommendations from internal audit which seem unreasonable. We always ask for - and get - an explanation. In general the recommendations are reasonable.”

The analysis of 10 significant recommendations indicates that they add business value, which supports the view that recommendations in general are reasonable.

It seems that IAF also seeks to strike a balance between the potential improvement of internal controls and the total number of recommendations. One statement from an audit manager indicates a balanced approach:

“If we get a reasonable result (mitigation of risk), there is no need to go further. There is also the future working relation to consider”.

This indicates that the auditors consider when “enough is enough” with the aim of supporting the long-term relationship (Stefaniak et al., 2012). In a discussion with the head of IAF about the specific interaction context it was mentioned that:

“We don’t report minor details, it will just irritate the business and we will most likely have trouble getting through with the important issues. I believe that this approach explains why you don’t see examples of withdrawn recommendations.”

It seems that the balanced approach regarding the number of recommendations, which results in issues with minor impact being excluded from the reporting, affects the interaction and helps explain why the client accepts all the recommendations included in the management letters.

7. Conclusion and discussion

Based on a single case study, the management letters from IAF and the supporting process in a large financial institution were analysed. In the case study, IAF is organised and staffed and working in such a way that EA can rely

on the work delivered (Bame-Aldred et al., 2013). IAF only does auditing and is not involved in any other roles (Arena and Sarens, 2015). This clear role definition is both supported by local regulatory requirements and recognised as agreed local practice (BEK, 2013; DR and IIA, 2013). Consequently, IAF complies with independence and ethical requirements (IESBA, 2013) and delivers a quality of internal control audits at at least the same level as EA (Stefaniak et al., 2012).

As part of the study, a detailed review of the management letter reporting of the internal control audits for 2008 – 12 was conducted. The review clarified the extent to which management letters affect internal control. Based on an analysis of their wording, the recommendations were divided into a number of groups describing the nature of the information (Manson et al., 2001). The most important division was between new and existing controls. In total, 30% of the observations result in recommendations for implementation of new controls. The remaining 70% relate to improvements of existing controls including documentation. Independent of the nature of the recommendations, they are without exception implemented, both regarding new and existing controls. Viewed in isolation, the review of management letters does thus support the anecdotes that auditors are to blame for the growing number of internal controls.

As a basis for the analysis, a description of the management letter process was established, including a number of instances of interaction (appendix 1 and 2). In order to contribute to an understanding of how and why internal control audits impact internal controls, this interaction was analysed based on the theories of audit/client interaction (Fearnley et al., 2011; Salterio, 2012).

How do internal control audits through the management letter process affect internal controls? The results of the analysis of the interaction are presented in table 4:

Meeting regarding:	Behaviour			Outcome
	Auditor (IAF)	Client	Combined	
1) Initial observations	Argumentative	Argumentative	Exchange of information	Joint product
2) Recommendations	Argumentative / insisting	Argumentative	Discussion	Joint product
3) Draft audit memo	Argumentative / insisting	Argumentative/ insisting	Negotiation	Joint product
4) Draft management summary	Permissive	Argumentative/ insisting	Exchange of information	Client product
5) Draft long form audit report	Argumentative / insisting	Permissive	Exchange of information	Audit product

Table 4 – Summary of the nature of interaction viewed through the combined model (Figure 1)

IAF seems to be argumentative in the direction towards insisting and the client on average argumentative when making decisions regarding internal control audits. These examples of mixed behaviour are as expected (Muningham and Bazerman, 1990). The combined behaviour is primarily an exchange of information where issues are presented at the meetings between auditor and client, and the quality of information decides the outcome of the interaction. There are, however, two exceptions, namely the overall prioritisation of the resources required to improve existing or implementing new controls and the LFAR. The prioritisation of resources is a management responsibility and thus a client product, and the auditors fully respect the authority of the executive board (BEK, 2010). The LFAR is the auditors' responsibility, and their report to the board of directors (BEK, 2013), and consequently it is an audit product. Further, it seems that the board of directors respect the management letter process, since in all material aspects they take note of the LFAR as presented. This could be

explained by the fact that the audit committee is involved after all other parties have agreed to mitigate the risks identified by IAF. It might also be seen as a result of a management letter process with strong internal controls. The board of directors have an impact on the process through “tone from the top” (Lail et al., 2015) based on a desire to have well-controlled business processes (Sarens et al., 2009).

The outcome of the audit/client interaction is the decision on implementation of new or improvement of existing controls based on cooperation and should be considered a joint product. This joint product and understanding has been established by a detailed management letter process where disagreements are settled before the next step is started. The joint understanding between auditor and client has also been seen for a number of years regarding the annual report (Antle and Nalebuff, 1991). Consequently, this may indicate that the total, integrated financial and internal control audit (Kinney et al., 2013) could be seen as a joint product. This conclusion does not support the anecdotes about the roles of the auditors and the claim that they are to blame for the growing number of internal controls. Further, the conclusion regarding cooperation is different from that of a study by Hellman (2006), where the clients were more aggressive towards the auditors. This may be a consequence of differing case-study settings, but it should also be noted that the two studies were conducted on either side of the financial crisis. The change in behaviour in a financial institution may have been influenced by the financial crisis (Van der Stede, 2011). It is also noted that the recommendations in the management letters are based on a strict internal control evaluation (Eilifsen et al., 2010), including compliance with regulatory requirements, and that less than 5% classified as “business advice”. This may be explained by the fact that IAF in the case study is only allowed to perform auditing (BEK, 2013).

Why do internal control audits affect internal controls through the management letter process?

The analysis of the contextual features indicates that FSA is an issue and that auditor/client cooperate to deal with the regulatory regime and mitigate the risk of being caught (Fearnley et al., 2011). This conclusion is no surprise, since the summarised result of the management letter process is reported to FSA in the

LFAR. If critical matters are reported, it should be expected that FSA will request further information, i.e. the supporting management letters. Therefore it seems a logical consequence to establish a defence to comply with the regulatory requirements (Van der Stede, 2011). However, this view is also a convenient explanation of why it is necessary to spend considerable resources on improving existing and implementing new controls. Based on the case study it seems that both the improvement of existing and the implementation of new controls add significant audit and business value, and that this would have been initiated independent of FSA.

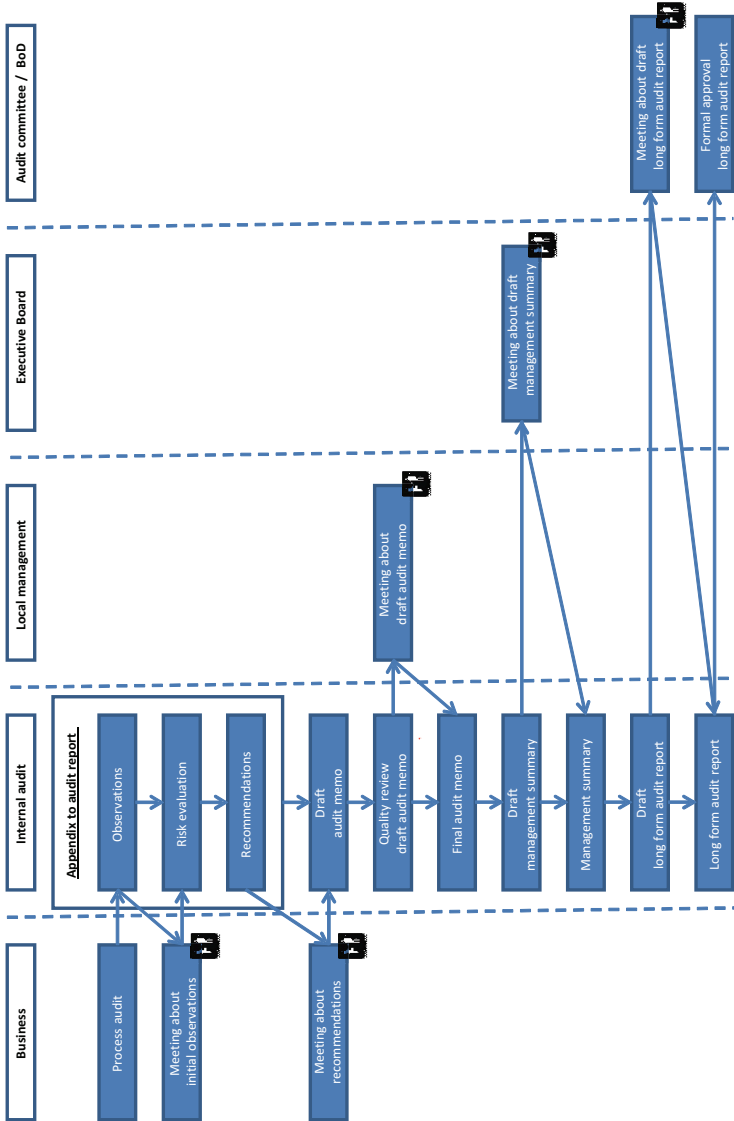
FSA has an impact on the management letter process, but not on the detailed level. Instead it seems that informal information from other financial companies, e.g. internal auditors sharing experiences regarding FSA, has a significant impact on the scope of the internal control audit. This finding could indicate that regarding internal controls, FSA should focus on a principle-based regulation rather than the longstanding practice of seeking to establish more detailed rules (Franks et al., 1997; Ho et al., 2013). This change in the regulatory approach could also be supported by the observation that the client, despite complaints about FSA, respects internal controls, which is supported by the “tone from the top” (Lail et al., 2015).

IAF has indicated that they use additional resources due to pressure from FSA, but that it is difficult to measure. Despite this view it could be of interest for future research to explore the nature and magnitude of the burden imposed by the FSA. One area could be to analyse how much additional work FSA requires from IAF in excess of what is needed to mitigate the audit risk (Eilifsen et al., 2010). At the company level it could also be of interest to explore whether the burden is primarily related to implementation of new or improved internal controls or to management accounting and controls issues, including liquidity, capital and reporting requirements. For both areas it could be of interest to isolate the effect of the financial crisis, which may have impacted the behaviour of both the regulatory regime, IAF and the financial companies (Van der Stede, 2011).

There are some weaknesses in and limitations to the study. The analysis of “how” and “why” is based on an analysis of a specific set of interactions

between auditor and client and the auditor is an IAF in a major financial institution. The management letter process, including the interactions, and the co-operation between IAF and external audit might be different in other companies. These limitations notwithstanding, the study has contributed to an understanding of the extent, how and why internal control audits affect internal controls.

Appendix 1 – Management letter process – internal control audit – overview



Auditor / client interaction

Appendix 2 – Management letter process – internal control audit – supporting description

Below is a description of the key documents in the management letter process (appendix 1):

Audit memo

The most detailed document in the management letter process is the audit memo, which describes the result of the internal control audit, focusing on the identified weaknesses. The main purpose is to communicate the result of the audit, mainly to the staff responsible for the reviewed processes. The appendix to the audit memo (see appendix 3) includes the following headings in a table format:

- Observation
- Risk evaluation
- Recommendation
- Local management's comments

A prioritisation (1 – 3) of the observation is also included.

The internal control audit is based on test of controls, observations and interviews with staff responsible for performing the detailed process tasks. In order to avoid any misunderstandings, the appendix with the detailed observations is forwarded to the client staff. The first interaction in the management letter process is a meeting between the audit manager and client staff, in which the observations are presented and adjusted if necessary. The overall aim is to establish an objective description of the observation. In appendix 1, this interaction is described as “meeting about initial observations” and marked with a handshake figure.

The next step for the auditor is to prepare a description of the potential risk resulting from the identified weakness. The risk description is the auditor's evaluation of the risk before any mitigating actions are initiated, e.g. improvement of existing or implementation of new controls. Further, the risk evaluation is based on a practical approach aiming at addressing the following questions (Apostolakis, 2004):

- What can go wrong?
- How likely is it?
- What are the consequences?

Based on the finding and the risk evaluation, a recommendation for mitigating the weakness is prepared. The second interaction is a meeting about the recommendation, which to some extent has been prepared by the client staff responsible for the process. This is done because the main objective is to mitigate the identified risk. Consequently, the recommendation should describe potential actions which can be executed and thus avoid suggesting activities which cannot realistically be implemented. From a business perspective this will ensure that after the necessary improvements have been implemented, the process will mitigate the risk identified. From an audit perspective, the primary objective is to ensure that the evaluation of internal controls will mitigate the audit risk going forward.

When the above steps have been finalised, including an internal quality review, a draft report with observations, risk evaluation and recommendations will be forwarded to local management. The main objective is for the local management to prepare comments to the observations. These comments should include a description of specific actions which have been or will be executed in order to mitigate the identified risks. The actions should also include deadlines for the implementation. The third interaction is a meeting between local management and internal audit, in which the draft audit memo is presented. Besides aiming at agreeing on the description of the observations, actions, deadlines etc., an important issue is prioritisation of the observations. This issue is important, since all priority 1 and some priority 2 observations are included in the LFAR, which is forwarded to FSA.

After the local management and IAF have agreed, the audit memo is finalised and signed by both parties.

Management summary

Based on the signed audit memos, IAF prepares a management summary to the executive board covering the 2nd, 3rd and 4th quarter. The 1st quarter is dedicated to reporting regarding the audit of the financial statement. The management summary provides an overview of the observations from the audit memos, including prioritisation and a status (open/closed) on the action items from the local management comments. The fourth interaction is a meeting in which the draft management summary is presented to the executive board. At this meeting, the executive board comment on the conclusion, but the main issue is the open action items and a potential prioritisation of them at group level. Following an agreement between the executive board and IAF, the management summary is finalised and signed by both parties.

Long form audit report

Every quarter, IAF prepares a draft LFAR for the board of directors (audit committee). The report at an overall level describes the audit performed and provides a summary of the results, including all priority 1 observations and some priority 2 observations. There is no specific rule for the selection of priority 2 observations, but observations related to compliance with FSA regulations are often included in the LFAR. The fifth interaction is a meeting with the same structure as those held with the executive board, but the reports presented are the signed management summary and the draft LFAR. Upon agreement, the LFAR is finalised and ready for the board of directors. Since the audit committee members are also part of the board, the presentation is considered a formality, where the LFAR is signed by the board members and thus formally approved.

Appendix 3 – Management letter – example

Group
Internal audit

Group

Management Summary 6th May 20xx

Meeting - Audit Committee
dd month yyyy

Group

Internal audit

1. Introduction

As part of the planned audit for 20xx we have completed or initiated the process audit in a number of areas. Since the process audit is an integrated part of the audit of the financial statement the audit can not be considered finalized at this time. At the conclusion of each process audit, we prepare an audit report describing observations and recommendations to the findings. We have discussed the content with local management and their responses are included in the audit report.

In this Management Summary we have included a compilation of observations from the audit reports finalized in the past quarter. The main objective is to provide the executive board with an overview of the work performed. In the attached appendix we have included observations, risks, recommendations and management response from the individual audit reports. The appendix can be used as a reference if further details are needed. The Management Summary will also be submitted to the Audit Committee and presented at its next meeting.

2. Summary

As part of the ongoing audit of the financial statement for 20xx we have performed audits according to the audit plan approved by the Audit Committee. The purpose of the process audit is to assess the reliability of the records underlying the financial statements. The audit includes an assessment of business risks, policies and guidelines, general management controls, management reports and business processes.

The enclosed appendix includes the following audit reports:

- _____
- _____
- _____
- _____

As part of the audit we have identified areas where improvements should be made. The most important observations includes the following weaknesses:

- Compliance with legal requirements
- Access to Group systems
- Calculation of individual impairment
- Trade Confirmation on derivatives
- Valuation of property – real estate loan

Local management have initiated actions to mitigate all the weaknesses identified. If these improvements are implemented as planned it is our opinion that the internal controls covering the areas included in the audit reports in all material aspects are satisfactory. As part of the audit we have also performed a follow-up on planned actions from previous audits. All issues identified in previous audits are closed or in an agreed plan of being closed by the implementation of the required improvements.

Group
Internal audit

3. Appendix – Most important observations

No.	Prio.	Observation	Risk evaluation	Recommendation	Management comments
1	1	<p>Compliance with legal requirements</p> <p>Failure to comply with requirements for handling customer information as a number of employees in company A through a common IT system have access to customer information in company B.</p>	<p>There is a risk of not complying with FSA's requirements for management of information, and failure to comply with FSA's requirements for double employment of employees.</p>	<p>We recommend that you ensure that customer information is handled in accordance with FSA's requirements, possibly by establishing a system based access control. We also recommend that the employment status are reviewed in order to ensure that only employees with a work-related needs will have double employment.</p>	<p>There are in all units of the group focus on compliance with regulatory requirements. This includes the requirements regarding double employment.</p> <p>Before 1 October 20xx we will make a detailed assessment of a potential system based solution. There will also be a review of double employment to ensure that FSA's requirements are met.</p>
2	1	<p>Access to Group systems</p> <p>Lack of maintenance of users as a number of employees in the bank have unrestricted access rights. Further a number of employees in the IT department have access to systems and data without a work-related need.</p>	<p>There is a risk that the required segregation of duties is not maintained.</p>	<p>We recommend that the Bank conducts a critical review of granted access.</p>	<p>We agree with the observation. We will make a critical analysis of the granted access. This review is scheduled before September 30, 20xx. We have also requested the bank's management to allocate resources to a clarification of how the issue going forward can be solved with the involvement of relevant stakeholders, including IT. The management have indicated that they support the plan. Expected clarification by 31 March 20xx.</p>

Group
Internal audit

No.	Prio.	Observation	Risk evaluation	Recommendation	Management comments
3	1	<p>Calculation of individual impairment</p> <p>Inadequate testing of an external developed IT system, as a review of impairment September 30 20xx showed a number of errors. For example, the system calculates impairment on loans, independent of a guarantee and does not use updated values of other securities.</p>	<p>The lack of testing of applications prior to implementation entails a risk that the error is not discovered and corrected.</p>	<p>We recommend that the company establishes procedures to ensure that applications are always tested before they are implemented. We also recommend a critical review of "the system" in order to correct the above and any other errors.</p>	<p>We agree with the observation. We have emphasized the requirement for testing before implementation. We have also conducted a critical review of "the system" and made the necessary corrections. Finally, we have established a review of the quarterly depreciation calculations.</p>
4	1	<p>Trade Confirmation on derivatives</p> <p>Lack of change of procedure for obtaining trade confirmations, despite that you in 20xx lost a lawsuit concerning an agreement where the previous procedure was followed. The observation is based on X trades where confirmation is not obtained.</p>	<p>The current procedure involves a risk of loss.</p>	<p>We recommend that the procedure for obtaining trade confirmations is reassessed. Furthermore, we recommend an assessment of how the bank should relate to the X trades where confirmation has not been received.</p>	<p>We agree with the observation. We will work with 2nd line to design the future set-up. We will again try to obtain confirmation of the X trades and assess how to proceed if confirmations are not received. Expected deadline December 1 20xx.</p>
5	1	<p>Valuation of property – real estate loan</p> <p>Failure to comply with FSA's requirement that the property must be assessed and the assessment documented according to FSA's requirements. Further FSA's loan limits must be respected. A review of xx loans showed xx cases where compliance was not documented.</p>	<p>There is a risk of non-compliance with FSA's loan limits.</p>	<p>We recommend a review of real estate loans to ensure compliance with FSA's loan limit.</p>	<p>We agree with the observation. Through the project "Quality in real estate loans" and ongoing monitoring we will ensure the required quality in loan management. Further we will prepare a report of all loans and perform a total review. Deadline end of Q4 20xx.</p>

Appendix 4 – Interview guide

The interviews were conducted as responsive interviews (Rubin and Rubin, 2012) based on a number of key questions. During the case study I discussed issues with both audit and client staff, and several staff members were interviewed more than once. As part of the introduction to the first interview I made a brief presentation of the project and the research question. This included an introduction to the overview of the management letter process (appendix 1) and the combined audit/client interaction model (figure 1). The introduction also included a clarification of the confidentiality issue.

After the introduction the discussion started. Depending on area, the interview was focused on either “how” or “why” questions:

Main “how” questions

1. Based on the description of the management letter process, where do you see yourself?
2. What is your role in the process (or interaction)?
3. How would you describe your working relation with internal audit (or the client)?
4. Could you give examples of how you interact with internal audit (or the client)?
5. I have established a graduation of the behaviour of internal audit (or the client) – see figure 1. Where do you see internal audit (or the client)?
6. The part of the process you are involved in – what is the outcome?
7. Do you have an impact on the outcome, and could you give some examples?
8. I have established a graduation of the outcome. You can see that in figure 1. How would you classify the outcome?

The discussion could be supported by specific examples of recommendations (appendix 3) if required.

Main “why” questions

The interviews regarding the “why” questions were done after the conclusion of the “how” part had been established. Consequently, the introduction included a brief summary of the result of this work (joint product based on objective arguments).

1. I have established 4 categories of contextual features (figure 1). Do you think that any of these have an impact on your cooperation with internal audit in the management letter process?
2. As part of the “how” questions – I asked about the working relation with internal audit. Do you think that this has an impact?
3. In your view, what is the impact of the board, i.e. “tone from the top”, and the behaviour of the management in general?
4. Can you provide examples of how the board or management has intervened in the process or has otherwise had an indirect impact?
5. In your view, what is the impact of FSA?
6. Can you provide examples of how FSA has intervened in the process or has otherwise had an indirect impact?
7. Which one (management of FSA) do you consider to be the most important – and why?
8. Regarding the specific meeting – are there examples that the agreement on one issue could have an impact on the rest of the issues to be discussed?

Some of the interviews included an evaluation of the audit and business impact of 10 significant internal controls. The evaluation was supported by the following template:

#	Year	Description of recommendation	Reason for audit					Mitigation of risk			
			Auditplan	FSA	BoD	Professional evaluation	Ad hoc	High	Medium	Low	N/A
1	2008	Compliance with legal requirements									
2	2008	Confidential									
3	2009	Confidential									
4	2010	Access to Group systems									
5	2010	Calculation of individual impairment									
6	2011	Confidential									
7	2011	Trade Conformation on derivatives									
8	2012	Valuation of property - real estate loan									
9	2012	Confidential									
10	2012	Confidential									

At the end of each meeting it was agreed that I could come back and ask further questions, including clarification of issues.

References

- Abbott, Lawrence J., Susan Parker, and Gary F. Peters. "Serving two masters: The association between audit committee internal audit oversight and internal audit activities." *Accounting Horizons* 24.1 (2010): 1-24.
- AICPA, 2008. Communicating Internal Control Related Matters Identified in an Audit. Statement on Auditing Standards No. 115. AICPA, New York.
- Antle, Rick, and Barry Nalebuff. "Conservatism and auditor-client negotiations." *Journal of Accounting Research* 29 (1991): 31-54.
- Apostolakis, George E. "How useful is quantitative risk assessment?" *Risk Analysis* 24.3 (2004): 515-520.
- Arel, Barbara. "The influence of litigation risk and internal audit source on reliance decisions." *Advances in Accounting* 26.2 (2010): 170-176.
- Arena, Marika, and Kim K. Jeppesen. "The jurisdiction of internal auditing and the quest for professionalization: the Danish case." *International Journal of Auditing* 14.2 (2010): 111-129.
- Arena, Marika, and Gerrit Sarens. "Editorial: Internal Auditing: Creating Stepping Stones for the Future." *International Journal of Auditing* 19.3 (2015): 131-133.
- Ashby, Simon, Palermo, Tommaso and Power, Michael (2012) *Risk culture in financial organisations: an interim report*. Centre for Analysis of Risk and Regulation and the University of Plymouth, London, UK.
- Ashbaugh-Skaife, Hollis, Daniel W. Collins, and Ryan LaFond. "The effect of SOX internal control deficiencies on firm risk and cost of equity." *Journal of Accounting Research* 47.1 (2009): 1-43.
- Bame-Aldred, Charles W., et al. "A summary of research on external auditor reliance on the internal audit function." *Auditing: A Journal of Practice & Theory* 32.sp1 (2012): 251-286.

Bank for International Settlements (BIS). The internal audit function in banks. – June 2012.

Beasley, Mark S., et al. "The Audit Committee Oversight Process*." *Contemporary Accounting Research* 26.1 (2009): 65-122.

Beattie, Vivien, Stella Fearnley, and Richard Brandt. "Behind the audit report: A descriptive study of discussions and negotiations between auditors and directors." *International journal of auditing* 4.2 (2000): 177-202.

Beattie, Vivien, Stella Fearnley, and Richard Brandt. "A Grounded Theory Model of Auditor-Client Negotiations." *International Journal of Auditing* 8.1 (2004): 1-19.

BEK nr 1024 af 21/08/2013 "Bekendtgørelse om revisionens gennemførelse i finansielle virksomheder m.v. samt finansielle koncerner".

BEK (b) nr 307 af 23/03/2013 "Bekendtgørelse om finansielle virksomheders mv. pligt til at offentliggøre Finanstilsynets vurdering af virksomheden m.v.".

BEK nr 1325 af 01/12/2010 "Bekendtgørelse om ledelse of styring af pengeinstitutter m.fl."

Brown, Helen L., and Arnold M. Wright. "Negotiation research in auditing." *Accounting Horizons* 22.1 (2008): 91-109.

Brown-Liburd, Helen L., and Arnold M. Wright. "The effect of past client relationship and strength of the audit committee on auditor negotiations." *Auditing: A Journal of Practice & Theory* 30.4 (2011): 51-69.

Carcello, Joseph V., Dana R. Hermanson, and Kannan Raghunandan. "Factors associated with US public companies' investment in internal auditing." *Accounting Horizons* 19.2 (2005): 69-84.

Carney, William J. "Costs of Being Public after Sarbanes-Oxley: The Irony of Going Private, The." *Emory LJ* 55 (2006): 141.

Danske Revisorer and The Institute of Internal Auditors – Denmark. "ISA 610 (ajourført) – Anvendelse af interne revisorer's arbejde – Arbejdsnotat om ændringer i ISA 610".

- Eilifsen, A., Messier, William F., Steven M. Glover, and Douglas F. Prawitt. *Auditing and assurance services*. McGraw-Hill Higher Education, 2010.
- Eisenhardt, Kathleen M. "Building theories from case study research." *Academy of management review* 14.4 (1989): 532-550.
- Eisenhardt, Kathleen M., and Melissa E. Graebner. "Theory building from cases: opportunities and challenges." *Academy of management journal* 50.1 (2007): 25-32.
- Fearnley, Stella, Vivien Beattie, and Tony Hines. *Reaching key financial reporting decisions: how directors and auditors interact*. Wiley, 2011.
- Franks, Julian R., Stephen M. Schaefer, and Michael D. Staunton. "The direct and compliance costs of financial regulation." *Journal of Banking & Finance* 21.11 (1997): 1547-1572.
- Gibbins, Michael, Steven Salterio, and Alan Webb. "Evidence about auditor–client management negotiation concerning client’s financial reporting." *Journal of Accounting Research* 39.3 (2001): 535-563.
- Gulliver, Philip Hugh, and Philip H. Gulliver. *Disputes and negotiations: A cross-cultural perspective*. New York: *Academic Press*, 1979.
- Hatfield, Richard C., et al. "The effect of magnitude of audit difference and prior client concessions on negotiations of proposed adjustments." *The Accounting Review* 85.5 (2010): 1647-1668.
- Hellman, Niclas. "Auditor–client interaction and client usefulness—a Swedish case study." *International journal of auditing* 10.2 (2006): 99-124.
- Ho, Thomas SY, Miguel Palacios, and Hans R. Stoll. "Dynamic Financial System: Complexity, Fragility and Regulatory Principles." *Financial Markets, Institutions & Instruments* 22.1 (2013): 1-42.
- IESBA, 2013 Handbook of the Code of Ethics for Professional Accountants.
- IFAC, 2009. International Auditing and Assurance Standards Board (IAASB), International Standard on Auditing 265, Communicating Deficiencies in Internal Control to Those Charged with Governance and Management.

ISA 610 (Revised 2013), "Using the Work of Internal Auditors and Related Conforming amendments", International Standards on Auditing 610, available at: [http://www.ifac.org/sites/default/files/publications/files/ISA-610-\(Revised-2013\).pdf](http://www.ifac.org/sites/default/files/publications/files/ISA-610-(Revised-2013).pdf)

Keating, Patrick J. "A framework for classifying and evaluating the theoretical contributions of case research in management accounting." *Journal of management accounting research* 7 (1995): 66.

Kinney Jr, William R., Roger D. Martin, and Marcy L. Shepardson. "Reflections on a Decade of SOX 404 (b) Audit Production and Alternatives." *Accounting Horizons* 27.4 (2013): 799-813.

Lail, Bradley, et al. "The Influence of Regulatory Approach on Tone at the Top." *Journal of Business Ethics* 126.1 (2015): 25-37.

Lin, Shu, et al. "The role of the internal audit function in the disclosure of material weaknesses." *The Accounting Review* 86.1 (2011): 287-323.

Maijoor, Steven. "The internal control explosion." *International Journal of Auditing* 4.1 (2000): 101-109.

Manson, Stuart, Sean McCartney, and Michael Sherer. "The value of management letters to unlisted companies." *The British Accounting Review* 33.4 (2001): 549-568.

Murnighan, J. Keith, and Max H. Bazerman. "A perspective on negotiation research in accounting and auditing." *Accounting Review* (1990): 642-657.

Parker, Lee D., and Deryl Northcott. "Qualitative generalising in accounting research: concepts and strategies." *Accounting, Auditing & Accountability Journal* 29.6 (2016): 1100-1131.

Power, Michael. "The risk management of everything." *Journal of Risk Finance*, The 5.3 (2004): 58-65.

Power, Michael. "The invention of operational risk." *Review of International Political Economy* 12.4 (2005): 577-599.

- Power, Michael. "Organized uncertainty: Designing a world of risk management." *OUP Catalogue* (2008).
- Rangvid, J. 2013. *The Financial Crisis in Denmark - causes, consequences and lessons* Copenhagen Ministry of Business and Growth, Denmark.
- Rubin, Herbert J., and Irene S. Rubin. *Qualitative interviewing: The art of hearing data*. Sage Publications, 2012.
- Salterio, Steven E. "Fifteen years in the trenches: Auditor–client negotiations exposed and explored." *Accounting & Finance* 52.s1 (2012): 233-286.
- Laura F. Spira, Michael Page, (2003), "Risk management: The reinvention of internal control and the changing role of internal audit", *Accounting, Auditing & Accountability Journal*, Vol. 16 Iss: 4 pp. 640 – 66.
- Sarens, Gerrit, Ignace De Beelde, and Patricia Everaert. "Internal audit: a comfort provider to the audit committee." *The British Accounting Review* 41.2 (2009): 90-106.
- Stefaniak, Chad M., Richard W. Houston, and Robert M. Cornell. "The effects of employer and client identification on internal and external auditors' evaluations of internal control deficiencies." *Auditing: A Journal of Practice & Theory* 31.1 (2012): 39-56.
- Tellis, Winston. "Application of a case study methodology." *The qualitative report* 3.3 (1997): 1-17.
- Van der Stede, Wim A. "Management accounting research in the wake of the crisis: some reflections." *European Accounting Review* 20.4 (2011): 605-623.
- Yin, Robert K. *Case study research: Design and methods*. Vol. 5. Sage, 2009.

10. Financial crisis and administrative controls: An institutional theory perspective.

Presented at

MAR 2016 - Manufacturing Accounting Research Conference

Lisbon, Portugal, June 15 - 17, 2016

Leif Christensen and Carsten Rohde

Copenhagen Business School, Department of Accounting and Auditing,
Denmark

Pall Rikhardsson and Catherine E. Batt

Reykjavik University, School of Business, Iceland

Abstract

The financial crisis in Iceland was of an extraordinary magnitude, as all the banks went bankrupt. The return from bankruptcy to fully operational entities in 2008 is used in this paper to explore how administrative controls are part of the organisational response to financial crisis. Three Icelandic banks were compared with three Danish banks in order to separate the crisis-driven response from ordinary market-driven reactions. The responses have been explored in a comparable case study and evaluated through an institutional theory lens. The result shows that all the banks have introduced a number of formalised and visible changes which can be verified by audits and inspections from FSA. One significant difference is that the Icelandic banks have increased the risk management functions to a size five times as big as is the case in Denmark. Furthermore, all Icelandic banks established new values as an extraordinary action immediately after the financial crisis, and in Denmark this was done as part of the ordinary strategic process. The case study indicates that more detailed formalisation will not improve the effectiveness of controls. Consequently, further improvements have to rely on using cultural controls as a management tool.

1. Introduction

The financial crisis hit the financial sector hard globally, but in Iceland the crisis was of an extraordinary magnitude (IMF, 2014). All three banks in the country went bankrupt, and the banking system collapsed in the course of one week in October 2008. Immediately after the bankruptcy, the banks were re-established on the basis of their prior domestic operations in order to continue banking in the country (Thorgeirsson and Noord, 2013). The only immediate changes in connection with the re-establishment were replacement of the executive boards and boards of directors in all three banks. The new management did, however, face considerable challenges, since the market had lost trust and confidence in the banks (IMF, 2014; Jännäri, 2009). Further, the banks were facing a systemic risk exposure (IMF, 2008). However, re-establishment of the banks had to succeed due to their importance to the Icelandic economy. This transition from bankruptcy in 2008 to operational entities is a unique opportunity to explore how management controls have been used in a crisis situation.

Over the years, much has been written about management controls, but detailed studies are lacking in the banking sector (Gooneratne and Hoque, 2013). Furthermore, there is limited knowledge on how management controls have been changed in response to the financial crisis (Janke et al., 2014). According to one of the seminal articles, management control can be defined as: “The process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives.” (Anthony, 1965). Management controls are later also described as a process aiming at influencing the behaviour of employees (Flamholtz et al., 1985). This process involves a number of elements (Chenhall, 2003), which can be seen as a package of controls (Otley, 1980; Malmi and Brown, 2008). Administrative controls, which is a part of management controls, consist of: “Governance Structure”, “Organization Structure” and “Policies and Procedures” (Malmi and Brown, 2008). They are also the foundation of the “core control system”, which includes planning, cybernetic controls, and reward and compensation (Flamholtz et al., 1985). This means that administrative controls ensure the validity of information used to make management decisions (Simons, 1999). This is one reason why regulatory authorities focus on

administrative controls as an area of new requirements following a crisis (Wintoki, 2007; Basel, 2011). From a management perspective, administrative controls are also important tools when initiating and embedding substantive behavioural changes (Walker, 2009) or behavioural intentions (Coombs, 2007). They are used to direct employees' behaviour, since they enable managers to delegate responsibilities and monitor subordinates' performance (Marginson, 2002). This becomes particularly important when the organisation has to respond to financial crisis, and even more so in the financial sector due to the severity of the impact (Van der Stede, 2011). The banks were forced to "stop dancing" - meaning sources of liquidity dried up⁴ - which required a significant behavioural change (Erkens et al., 2012). In addition, an immediate, significant and sustained response was initiated from the regulatory regime (Van der Stede, 2011). The environmental and external contextual features, including the regulatory regime, are not mentioned in Malmi and Browns definition of management controls. However, according to Flamholtz et al., (1985) the external environment is regarded as an important element that sets the frame for and impacts on management controls. It is therefore an ongoing challenge to design the package of controls in such a way that they accommodate environmental changes and external stakeholder influence (Dowling and Pfeffer, 1975).

Given this importance of administrative controls in the banking sector in general, and in response to financial crisis in particular, the aim of this paper is to explore how they have been used as a response to the financial crisis of 2008 and the extent to which these changes are embedded in the organisation. This contributes to an understanding of how administrative controls can be used to respond to a crisis as well as an understanding of the nature of these changes and of how embedded they are in organisations. It thus adds to our limited knowledge of management control in banking (Gooneratne and Hoque, 2013).

Three Icelandic and three Danish banks were used as a basis for the case study to explore this issue. As a starting point for the case study, the individual

⁴ "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing." Citigroup CEO Chuck Prince - Financial Times, July, 2007. (<https://next.ft.com/content/80e2987a-2e50-11dc-821c-0000779fd2ac>)

elements of administrative controls were defined, and the regulatory requirements in Iceland and Denmark that govern these elements were identified. This served the purpose of distinguishing between what elements were governed by mandatory regulation and what elements were subject to voluntary management decisions. This was then studied further using semi-structured interviews in the six banks. Changes to the administrative controls were viewed through an institutional theory lens focusing on the sources and embeddedness of changes. The sources of the changes were analysed using the concepts of isomorphism; coercive, mimetic and normative change (DiMaggio and Powell, 1983), and the embeddedness of changes based on the stages of institutionalisation: encoding, enactment, reproduction and institutionalisation (Burns and Scapens, 2000).

The paper is organised as follows: Section 2 defines the elements of administrative controls and identifies those elements which are not restricted by regulatory requirements and thus can be changed by management initiatives. Section 3 presents the organising framework, and section 4 describes the research method. In section 5 the results of the case study are presented. The results are discussed and conclusions drawn in section 6.

2. Administrative controls in a banking environment

According to Malmi and Browns (2008) framework, administrative controls consist of three elements, “Governance Structure”, “Organizational Structure” and “Policies and Procedures”. In order to align Malmi and Brown’s definitions of these three elements with the regulatory requirements, a literature review was carried out (Webster and Watson, 2002). Based on this review, the administrative controls were divided in two groups: One group which the banks had to change due to mandatory legal or regulatory requirement, and one group which could be changed voluntarily based on management decisions. The voluntary group is shown in table 1.

The governance structure defines the structure of the board of directors and the formal lines of authority between the board of directors and the executive board (Abernethy and Chau, 1996). This includes the agenda for the board of

directors' meeting as well as cooperation with the executive board. The cooperation with employees is influenced by the "Tone at the Top" (Lail et al., 2015). Even though this may be affected by the regulatory requirements, it is still a management decision to define the "Tone at the Top". The "Tone at the Top" can be reflected in the code of conduct, which is a way of documenting and communicating boundaries to the organisation (Simons, 1994; Widener, 2007). Even though they are not part of the administrative controls, values that have been developed in the work environment are closely linked to the "Tone at the Top" (Birnberg and Snodgrass, 1988; Alvesson and Kärremann, 2004). Based on this, changes in governance structures focus on the "Tone at the Top", code of conduct and formal lines of authority.

The organisational structure is defined as the process of adapting the organisation to its environment and thereby enabling it to achieve its purposes (Otley and Berry, 1980). The design of the organisational structure is restricted by local company acts and more specifically by Financial Supervisory Authorities (FSA) requirements (e.g. BEK, 2010). According to local Icelandic and Danish banking requirements, the organisational structure is a traditional European two-tier model, and the boards of directors are not allowed to take part in the day-to-day management of the banks. Besides the traditional organisational chart, the "Three Lines of Defence Model" is used as a reference in both Denmark and Iceland by all the banks (BIS, 2012). This model defines a process and structure for managing risk and internal controls in a bank. The 1st line of defence is the business units responsible for managing risks and controls associated with the performance of their duties. The 2nd line of defence is support functions to the business units, including Compliance, Risk Management and Accounting. The 3rd line function is Internal Audit. There are a number of regulatory minimum requirements regarding staffing, activities and tasks. These requirements, which have been defined by local practices following inspections from FSA, are primarily related to 2nd and 3rd defence line functions. Additions to these minimum requirements are subject to management decisions. Therefore, this study focuses on changes to activities and staffing above the minimum legal requirement.

The establishment of a formal set of policies is a mandatory requirement for banks (Basel, 1997). The extent and content of the policies and how they are

communicated to the organisation are, however, a result of the design of management controls. Procedures – also a mandatory requirement (Basel, 1997) - are a detailed decomposition of policies describing operating procedures and practices (Macintosh and Daft, 1987). The specific content and communication of the procedures is, however, subject to management decision and is therefore also a result of the design of management controls. Internal controls are an important part of the procedure element of administrative controls. In general, there is a pressure on companies to establish internal controls (Ashbaugh-Skaife et al., 2009; Power, 2004; Power 2005), and in banks it is a mandatory requirement (BIS, 2012). The specific design of the internal controls and their operation is, however, a result of management decisions. According to Simons (1994), internal controls are designed to ensure data integrity, and it is assumed that they are in place before management controls are implemented. Consequently, this study focuses on the changes in design and use of policies, procedures and internal controls.

Table 1 summarises the above and shows the elements of administrative controls that managers can influence beyond basic regulatory requirements:

Administrative Controls		
Governance Structure	Organisation Structure	Policies and Procedures
“Tone at the Top” and organisational values	1 st line structure	Design of policies, procedures and internal controls
Code of conduct	Activities and tasks of functions	Operation of policies, procedures and internal controls
Formal lines of authority	Staffing above regulatory minimum requirements	

Table 1: Administrative controls elements the designs of which depend on voluntary management decisions

3. Conceptualising changes in administrative controls

In order to conceptualise changes in administrative controls, the study draws on institutional isomorphism (DiMaggio and Powell, 1983) to analyse the sources of changes in administrative controls and the process of institutionalisation (Burns and Scapens, 2000) to describe the embeddedness of change.

In conceptualising sources of change, DiMaggio and Powell define three types of institutional isomorphism: “1) Coercive isomorphism that stems from political influence and the problem of legitimacy; 2) Mimetic isomorphism resulting from standard responses to uncertainty; and 3) Normative isomorphism, associated with professionalization.” (DiMaggio and Powell, 1983, p. 150).

Researchers have applied these concepts in studying change in the financial sector. Munir et al. (2011) include all three types of isomorphisms in their study of changes to performance management systems. They see coercive isomorphism as driven by “regulatory control” and “financial legislation”; mimetic isomorphism as driven by “modeling successful banks” and normative isomorphism as driven by “professionals”, “top management” and “corporate culture”. All three types of isomorphism are also used in a post-financial crisis study of regulatory compliance in the area of IT (Gozmann and Currie, 2014). Further institutional theory has also been utilised to analyse a bank where the three major catalysts for change were financial losses, major regulatory change and appointment of new management (Munir et al., 2013). The understanding of institutional theory in all these studies is aligned with DiMaggio and Powell’s version of institutional theory (Munir et al., 2011; Gozmann and Currie, 2014; Munir et al., 2013).

Based on the above and for the purposes of the study, the sources of change are defined as:

- Coercive isomorphism is change-driven by a pressure to comply with formal legal and regulatory requirements, including reporting requirements. It also includes complying with informal pressures from other organisations and societal expectations. An example would be pressure to comply with regulations from FSA.

- Mimetic isomorphism is change-driven by uncertainty. To deal with uncertainty, an organisation copies other organisations which they see as role models, or rely on advice from consulting firms. An example would be copying best practice models from other banks.
- Normative isomorphism is change-driven by professionalization. This means that employees have the power to define conditions and methods of their work, based on their formal education, technical skills and professional networks. An example would be increased influence of risk management and internal auditing professionals.

The different types of isomorphism can be combined to create a change (Ribeiro and Scapens, 2006). For example regulatory requirements issued by FSA can be supported by internal auditors and risk management professionals.

The level of embeddedness of the changes can be conceptualised by the four phases of institutionalisation described by Burns and Scapens (2000). This model includes the relations between actions and institutions that lead to four levels of embeddedness: The first one - “Encoding” - are the establishment of rules and routines. In relation to administrative controls, an example would be that policies and procedures have been formally documented. The second level - “Enactment” – means that rules have become actual routines applied in the organisation. The third level – “Reproduction” – means that the routines have been used for a period of time. When the routines become a taken-for-granted behaviour or the unquestioned way of doing things, they reach the fourth level which is “Institutionalization” (Burns and Scapens, 2000). If a behaviour is deeply institutionalised – has been the unquestioned way of doing things for a longer period – it should be expected that there will be resistance to changes (Burns and Scapens, 2000). This might also explain why it is difficult to implement acknowledged changes to management controls (Zoni et al., 2012). Rules are important to drive the emergence of routines, but the importance of formal rules is reduced as participants gain experience in performing the “routines”, which indicates that experience reduces the need for formalised rule-based descriptions (Van der Steen, 2011).

The analysis framework is illustrated in figure 1:

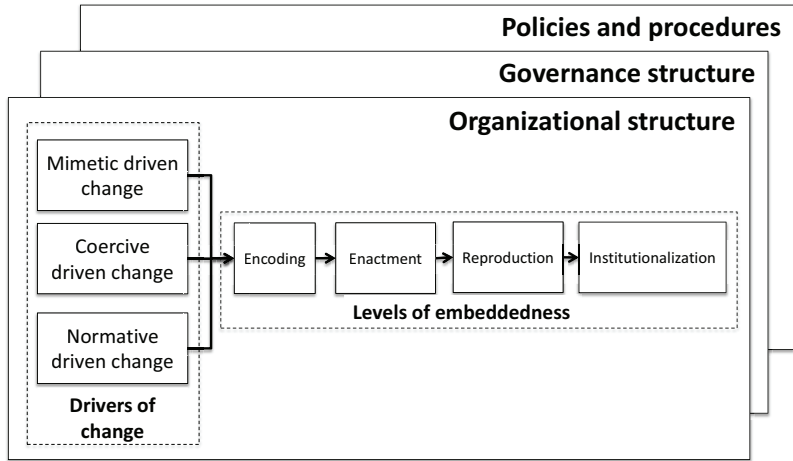


Figure 1: Institutional lens – sources and embeddedness of changes

4. Method

A comparative case-study (Eisenhardt, 2007) was used to explore how administrative controls can be used to respond to a crisis. This method is appropriate, since the focus is on a real-life situation aiming at answering how and why questions (Yin, 2009). The case study will seek to illustrate the actual changes in the administrative controls by means of institutional theories (Keating, 1995). The empirical data was collected using semi-structured interviews in six banks in Iceland and Denmark (Kvale and Brinkmann, 2009). The result of the interviews in the three Icelandic and the three Danish banks were grouped and considered as two case units. This formed the basis for a comparative case study between Iceland and Denmark, aiming at identifying similarities and differences between the two countries (Yin, 2009). This approach is considered appropriate for analysing changes (Van de Ven et al., 1990).

A study of banks in both Iceland and Denmark was chosen in order to separate the crisis-driven changes to the administrative controls from ordinary market-driven reactions. The reason why Danish banks were selected for comparison is

the common historical background of Icelandic and Danish banking systems. Icelandic banks were established on the basis of Danish law and practice, since Iceland was a part of Denmark until 1944. After the independence, the close link with the Danish banking system has continued (MoU, 2003; CBI, 2015). The Icelandic Banks were matched with the Danish banks using several key variables based on the paired comparison method (Gisselquist, 2014). When selecting the Danish banks, the most important criteria was that they had managed the financial crisis without being dependent on specific governmental support. From this group, three banks were selected which matched the Icelandic banks with respect to a number of key variables. This included similar numbers of employees (approx. 1,000) and similar levels and nature of activities. This match was based on an analysis of the 2013 annual reports and public information available on the homepages. None of the six banks were listed on any stock market.

An important element in the case study is the design of the semi-structured interview, as these were the primary source of generating the empirical evidence (Kvale and Brinkmann, 2009). As a basis for the interviews, an interview guide was developed that focused on identifying the elements of administrative controls as well as the changes made to them as a result of the financial crisis in 2008 (Malmi and Brown, 2008). The interview guide is shown in Appendix 1. Some of the questions aimed at getting an assessment of the perceived value of various elements of the administrative controls. It is, however, not only the assessment, but also the underlying arguments, descriptions and stories of the respondents that are important. Therefore the semi-structured interview approach was supported by a responsive element (Rubin and Rubin, 2012). This approach requires that the researcher has detailed knowledge about management controls, administrative controls and the banking industry (Morse and Field, 1995; Richards and Morse, 2012). To fulfil this requirement, at least two researchers took part in each interview. This also helped mitigating the risk that the information cannot be trusted, since the answers may immediately be evaluated based on the interviewer's experiences (Kvale, 1994).

The information generated is considered confidential by the banks. Due to the confidentiality agreements we were not allowed to remove information (except

the recorded interviews) from the premises. To deal with the confidentiality requirement and to get sufficient evidence that the observations and quotes used in the paper fairly represents the informants' attitudes, relevant sections were reviewed by the respondents. This procedure aims at ensuring that any misunderstandings are corrected and minimises the risk of biased data collection (Eisenhardt and Graebner, 2007).

A total of 26 interviews each lasting 45 – 75 minutes were conducted between June and August 2015. The respondents were members of the executive board and employees with significant controls responsibilities (Merchant and Van der Stede, 2007). Most of these employees have worked with the bank for many years and have knowledge of practices before the crisis. The recorded interviews were transcribed and coded to reflect the changes to the administrative controls viewed through the institutional “lens” described in section 3. Most of the changes are subject to audit, and they were confirmed by interviews with internal audit. Further, an interview with the Icelandic FSA and reviewed of inspection reporting from the Danish FSA confirmed the changes.

5. Changes in administrative controls in response to the financial crisis

In the following sub-sections – drawing on the elements in table 1 - the actual changes to the administrative controls are described.

Governance structure

The “Tone at the Top” is primarily defined by the board of directors and communicated on a daily basis to employees by the executive board. Even though “values” are not part of the administrative controls as defined by Malmi and Brown (2008), in all the banks they are closely linked to the “Tone at the Top”. When the Icelandic banks were re-established, new CEOs were hired to drive the restructuring phase. One of the primary roles of the CEO was to encourage the employees to move on after an event which was described by some in terms such as: “chaos”, “panic”, “turmoil” and “shock”. An example of this situational crisis response (Coombs, 2007) was to identify new values that

would enable the banks to distance themselves from the practices of the old banks (Jännäri, 2009). For example:

“In the beginning of 2009 the CEO set up meetings where all the employees were invited. People thought the CEO was crazy, as most employees were concerned with putting out fires and had no time for thinking about strategy. We counted about 700 employees at that meeting. One of the tasks of the meeting was to define new values. It was a very democratic approach and actually very good for the bank.” (Icelandic Manager)

Organisational values are often presented in the form of “value statements” and are often summarised in single words. Examples of words that the Icelandic banks wanted to distance themselves from were “Smart” and “Fast”, which had been used by some of the pre-crisis banks. Instead they introduced new values that were represented by words such as: “Listen”, “Learn” and “Serve”. All the words describing the values are closely related to the expected behaviour of the employees and are developed in the work environment (Birnberg and Snodgrass 1988). To emphasise the importance and to support the institutionalisation, the values are included in training courses for new employees.

The involvement of employees in defining values has also been seen in the Danish banks. It was, however, part of the ordinary strategic process and only included employees at manager level and above. This strategic process is driven by a desire to meet best practice (mimetic).

In all the banks, the “Tone at the Top” and the organisational values have become more important after the financial crisis as a tool for influencing employee behaviour:

“When we introduced the new values, we said that it is how you act (as an employee), that is the cornerstone, regarding the values. In effect, it governs how you will develop within the company. So if you do not relate to the values, then maybe you are not in the right place”. (Icelandic CFO)

The overall objective seems to be the same in all the banks, the aim to drive the behaviour of the employees:

“This is about being proud of what you deliver – then you can go home and say – I delivered my best today – based on my prerequisites, and the skills I got.” (Danish HR manager)

There was a strong coercive pressure in Iceland that things should change (Jännäri, 2009). The Icelandic banks sought to deal with this pressure by establishing new values a few months after the re-establishment. Since the maintenance of values in Iceland is not part of the strategic process, they might not be institutionalised but they are recognised by all groups of employees (enactment). This strong coercive pressure did not exist for the Danish banks, but the respondents including management (“Tone at the Top”) emphasised the importance of the values and the desire to have them institutionalised.

The behaviour of the employees is also guided by the code of conduct, which in all banks have been documented and formally introduced to the employees after the financial crisis. However, there is a sceptical attitude:

“This code of conduct is just some compliance thing. If you want to do something, then you should do it the right way. If you want to live by it, it is not enough just to publish it on the intranet. I have never experienced a business which has done a proper implementation of a code of conduct.” (Danish audit manager)

During the interviews, the employees were asked if they were aware of the code of conduct and to what extent it had had an influence on behaviour:

“Well...it is the “Tone from the Top” – it is the signal from the management – and what they do. I don’t think that many employees – now that you ask – have read the code of conduct – but it is there.” (Danish internal audit manager)

The Icelandic response was the same: *“We have a code of conduct – in my opinion it is a weak tool.” (Icelandic manager)* The sceptical attitude is also seen at employee level. One of the Icelandic banks established a sign-off procedure, and the employee response was in general: *“You want me to sign this – what is that supposed to change?” (Icelandic manager)*

The implementation of a code of conduct in all the banks may be classified as a result of a mimetic pressure (DiMaggio and Powell, 1983), since no

environmental or regulatory requirements have been identified. Despite the fact that the code of conduct is formalised, it is apparent that many employees have not read it and it may therefore not be embedded (Burns and Scapens, 2000).

The last element in the governance structure is the formal lines of authority between the board of directors and the executive board (Abernethy and Chua, 1996). After the financial crisis, the FSA in both countries have issued formal orders governing both management levels and the formal lines of authority (e.g. BEK, 2010). One of the Icelandic managers explained the situation:

“The regulatory pressure on banking is extreme, and it is a global phenomenon. And it is very much the responsibility of the board of directors to make sure that those requirements are met. But it is not just the boards, it is the whole system that is more aware of the regulation. It is much stricter now. The employees and the management are really careful. We have always been careful to comply – but now it is much more than ever before.” (Icelandic manager)

The boards uses checklists with *“all the regulatory issues that they have to be concerned with” (Icelandic manager)*, since the requirements are both subject to inspection from FSA and a mandatory area for internal audit. The situation is the same in Denmark, and many of the board members see the changes in the regulatory requirements following the financial crisis as an administrative burden. Internal audit does, however, see it as an advantage supporting their work:

“It is good for us – no doubt – it has made things more structured. The regulatory requirements are quite good in supporting the establishment of structured lines of authority.” (Danish audit manager)

The similar responses in both Iceland and Denmark are a combination of coercive (regulatory) and normative (internal audit) pressure (Ribeiro and Scapens, 2006). Even though management sees these changes as *“too much time is spent on ticking the boxes”* and resistance should be expected, the combined pressure has resulted in a reproduction (Burns and Scapens, 2000) complying with regulatory requirements.

Organisational structure

As a consequence of the same underlying legal and regulatory requirements (Basel, 1997), the organisational structure is basically the same in all banks:

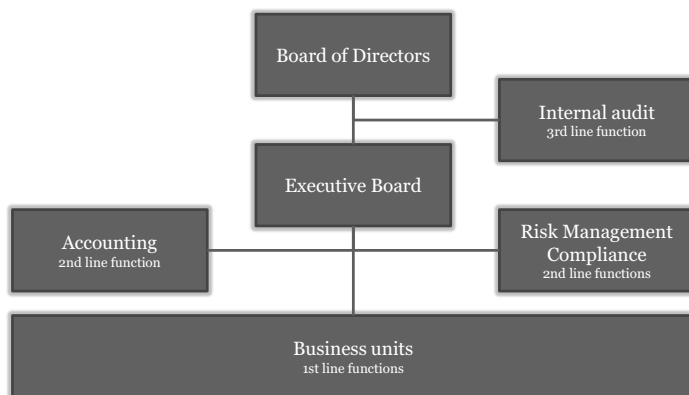


Figure 2: Basic organisational structure

Internal audit (3rd line of defence) reports to the board of directors, and risk management and compliance (2nd lines of defence), together with the other support functions, report to the executive board. In all the banks in the case study, the business units in the 1st line are structured as a “flat” organisation. This means that the executive board - primarily due to the size of the banks - has what they describe as “real involvement” in the business operations. This situation has been stable since the financial crisis, and only minor organisational changes have been introduced in the business units during that period.

Since the financial crisis, IT has gained increasing attention. Before the crisis, all of the Danish banks had outsourced the operation of their core banking systems. The argument for doing this is related to the cost of operation and maintenance of systems:

“I don’t think that it is possible for a bank of our size to operate IT. We get the operations much cheaper and we are not – considering the present regulatory requirements – capable of keeping up operations alone. That will cost a fortune.” (Danish manager)

The reference to the regulatory requirements addresses both the ongoing and future changes in the liquidity and capital requirements (Basel, 2014). The Danish banks only have small IT departments with approximately 25 employees, and in-house they operate some of the more specialised systems, e.g. risk management applications.

In contrast, all the Icelandic banks have always operated the core banking systems in-house. As a consequence, the IT departments have an additional 75 – 100 employees compared to the Danish banks. Further, the level of support to the business units initiated by the changes in the regulatory reporting requirements after the financial crisis is lower in Iceland. As a result, the Icelandic banks use more resources on generating this reporting. This was illustrated by a statement from one of the Icelandic risk managers:

“We also do all reporting for the Icelandic FSA, the Icelandic central bank ... so I think that more or less 8 people are full-time reporting employees.”
(Icelandic risk manager)

The difference in IT service levels also has an effect on the staffing in other functions. As an example, one of the planning and analysis departments in one Icelandic bank has hired five additional employees with IT capabilities to manage the changes in reporting requirements.

Even though the regulatory requirements date before the financial crisis, the implementation of the compliance function began after the financial crisis (Basel, 2005). Therefore the establishment of these functions can be seen as a reactive coercive response to regulatory requirements, and they seem to have become institutionalised. In compliance with the Basel requirements, activities and tasks are identical in Denmark and Iceland, as is the number of employees – on average 5 full time employees.

The risk management functions perform the same tasks and activities in Denmark and Iceland, a fact which is directly linked to the regulatory requirements (Basel, 2011). Regarding staffing there is, however, a significant difference. In Iceland the risk management functions employ on average 30 full-time employees. The average number in Denmark is 5 employees. Due to regulatory requirements and practice, the risk management functions are subject

to ongoing review by internal audit and FSA including an evaluation of the staffing. In both countries, internal audit made no significant findings regarding the quality of work delivered or the staffing. The Danish evaluation is supported by the inspection reports from FSA, which, due to local practice, are available on the banks' homepages. No orders or recommendations for additional staffing were reported.

The number of employees in the Danish risk management functions has been stable since the financial crisis. The huge difference in size is explained by an increase in the Icelandic banks after the crisis. In addition, there have been a number of changes in how risk management is carried out in Iceland. Compared with the Danish banks, risk management functions in Iceland have worked more on formalisation of the function. As part of this process, the board of directors in one of the banks asked the risk management function to propose a framework for how they should work:

“A lot of the work and proposal for the framework came from us, the risk management professionals.” (Icelandic manager)

The proposals were accepted by the board of directors and the risk management functions established accordingly. This way, the normative pressure from the professionals materialised as board decisions (DiMaggio and Powell, 1983).

The size of the Icelandic risk management functions was discussed with one of the Danish CEOs. He was asked if it would be possible to reduce the number of employees from 30 to 5 employees, which would be the typical size in a similar Danish bank:

“The more employees you have, the more power, and it is difficult to remove power. At the same time, the people in the 2nd line are very reluctant to move outside their comfort zone. They would rather change a decimal figure on page 249 than be placed in the 1st line and asked to prepare a PowerPoint of 4 pages with a strategy and then do the implementation.” (Danish CEO)

Further, he believed that it would be very difficult to get acceptance from FSA for such a huge reduction. We then asked whether the consequences of increasing external pressure in combination with shifting power balance would

be that the size of the function should be considered permanent - the answer to that was: “*Yes!*” (*Danish CEO*). Based on these comments, which are supported by combined pressure from both internal audit and FSA (Ribeiro and Scapens, 2006), the risk management functions in both countries have reached a level where they have become institutionalised.

In Denmark, the accounting functions responsible for bookkeeping, external and internal reporting (management reporting) employ on average 10 full-time employees. Even though there has been pressure on the accounting functions after the financial crisis due to a rise in the regulatory reporting requirements, the number of employees has remained almost stable. The Icelandic accounting functions employ three times as many employees, i.e. an average of 30. It should be mentioned that as part of the accounting function, the Icelandic banks have IT staff, an average of 5 employees, to assist with the reporting. The Danish banks do not have such IT people, since IT has been outsourced. No other elements that might explain the difference in staffing were identified, since both the Danish and the Icelandic accounting functions cover the same type of activities. It should be mentioned that the number of employees in the Icelandic accounting functions has remained at a stable level after the financial crisis. The changes in the external reporting requirements (Basel, 2014) following the financial crisis is a coercive pressure, which is mainly managed by the well-established and institutionalised accounting functions.

In all banks, the internal audit functions have the same structure and perform the same activities. They report to the audit committees, and there is an agreed level of cooperation with external audit. This means that it is an integrated financial and internal control audit (Kinney et al., 2013). In all the banks, internal audit’s primary activity is the internal control audit and the related management reporting (Manson et al., 2001), whereas external audit primarily focuses on the financial statement. This uniform sharing of work between internal and external audit also explains why the staffing of internal audit in all banks are at the same level, namely 5 – 9 employees. The development of internal audit since the financial crisis has also been the same in all the banks, driven by the regulatory requirements and practice (Basel, 2011). The internal audit functions in all the banks are institutionalised:

“We have a very good sparring with the head of internal audit. What we are trying to do is to turn legal requirements into practical tools and business tools in such a way that it is not just implementation of requirements but a new way to operate the business.” (Danish CEO)

Another example illustrating the integration is the working relations between risk management and internal audit:

“Our working relations are not formalised as in policies, but we understand that we need close cooperation, like for example I look at what they do in operations areas, credit risk areas and risk management areas, (the internal auditor) also looks at our reporting, and we discuss and we try to meet as much as possible.” (Icelandic risk manager)

Policies and procedures

Formalised policies and procedures are a regulatory requirement, and therefore they should be present in all the banks. To some extent it is the pressure from the regulatory regime which has initiated that internal audit has driven the formalisation of policies and procedures, and the pressure has been increasing after the financial crisis:

“Yes – but I would say that it is primarily due to our work – the things regarding segregation of duties and all this. It is internal audit who has driven this, where before the crisis you had one focus – sell, sell, and sell. The issues regarding control were boring.” (Icelandic audit manager)

It is a common situation for all the banks that policies and procedures have become more important as a management tool after the financial crisis:

“The importance has increased in recent years. And the board of directors has promoted good corporate governance and sent the “Tone at the “top” down to management and the staff to comply with rules and so on.” (Icelandic audit manager)

It is, however, a balance between compliance with regulatory pressure and practical considerations:

“Sometimes you may prepare a procedure just to prepare one. We miss this and we miss that – then we write a procedure. Then we miss that.” (Danish audit manager)

In Denmark, more policies and procedures were formalised at the beginning of the financial crisis. Icelandic banks, on the other hand, had to increase the level of formalisation and have therefore spent a substantial amount of resources on reaching a level that may be comparable to the Danish banks:

“We obviously have more rules, we have more work processes that we have tried to nail everything down.” (Icelandic head of internal audit)

Based on the discussions with Icelandic heads of internal audit, it seems that the level of compliance with the formalised policies and procedures can still be improved due to a lack of awareness regarding responsibility for internal control in the 1st line of defence. We then asked if the 1st line of defence works as it did before the financial crisis:

“No they do not, but it is a bit like raising children. You tell them the rules and the boundaries – but you have to check if they respect the boundaries – and act as they are not. You have to give your employees feedback. They have to be aware that it is not a negative control, it is a supporting control.” (Icelandic head of internal audit)

The comment regarding “raising of children” indicates that the Icelandic banks have some difficulties moving the level from enacting to reproduction. Even though there is a combined pressure (Ribeiro and Scapens, 2006), any resistance might be explained by the short timeframe the Icelandic banks use for the implementation of these major changes.

Regarding the external pressure for formalised policies and procedures, the situation is the same in all the banks. Further, the procedure for preparation, approval and implementation of both policies and procedures are also uniform in all the banks in both countries. The procedure includes a formal approval by the board of directors and roll-out to the employees. The use of policies and procedures is also assessed by internal audit:

“We audit everything. We audit all significant areas where a policy is required according to the “Executive order on management”. In all these areas, we audit the policy approved by the board of directors – and report back to them.” (Danish head of internal audit)

In the same bank, the CEO explained a situation where compliance with policies and procedures imposed an unintended restriction on business development:

“In 2014 we had an objective of getting more business customers and to lend more money to small and medium-size business customers – but we have not fully succeeded. When we analysed this, the reason was that we had complied with our risk policies. We have a number of risk measures. If they are not met, they suppress our growth objectives.” (Danish CEO)

It was also during the interview process questioned whether the implementation of policies and procedures was seen as a reactive or a proactive process:

“It is a proactive process. It is a desire to do this. We want these things in a proper condition. And this has been discussed at meetings with the employees – and everybody agreed that the more we have formalised – the easier it is for all parties.” (Danish Head of internal audit)

Further, policies and procedures are used as a management tool:

“We have it because it works. It is not the situation that we write a policy and lock it in a closet – just in order to be able to present them to FSA – and then do something different on a daily basis. That’s not how it works. There we are in a pretty good shape. We use this as a management tool – definitely.” (Danish audit manager)

In Denmark, most of the policies and procedures were documented prior to the financial crisis, and it seems that routines (reproduction) are established. However, there seems to be a downside to this, since the changes in regulatory requirements (coercive pressure) have resulted in a situation where formal procedures are encoded as a mechanical response without a clear business-driven need. The Danish employees are experienced in performing the routines, which has reduced the need for formalised descriptions (Van der Steen, 2011).

When evaluating the importance of policies and procedures, a Danish audit manager made the following comment:

“Now I will try not to give a complicated explanation. I think that the issue with the strongest impact on an employee’s behaviour is culture. Of course procedures are important – but a process alone does not do anything. It is the focus from the management and management’s involvement and our input – since we look at it from the perspective of whether they fulfil the requirements stated in the processes. It is very much culture and environment that have an impact on these issues. But the short answer is that – yes, it is important, but it is not the most important factor.” (Danish audit manager)

The administrative controls are considered both a necessity and a burden due to the ongoing changes in the regulatory requirements, which has been a long lasting situation in the financial industry (Franks et al., 1997; Van der Stede, 2011). The banks seek a balance between compliance with the regulatory requirements, the business-driven need for having proper administrative controls, and the resources spent:

“One of the things that we have discussed - and this relates back to the regulatory environment - is that there is less time at board level spent on strategy and more time spent on ticking the boxes...in a way, too much time is sort of spent on ticking the boxes and making sure that we comply with the regulatory environment. Fine, that has to be done. But as a proportion of all tasks it takes up too much time. And in many ways, the board’s time would be better spent on more important issues” (Icelandic CFO)

6. Discussion and conclusion

The re-establishment of the Icelandic banks included a replacement of the executive board and the board of directors in all banks. The new managements decided to implement a number of changes to administrative controls (Malmi and Brown, 2008), assisted by other employee groups (Merchant and Van der Stede, 2007). The changes identified in Iceland and Denmark can be summarised as follows:

	Denmark		Iceland		Additional actions in Iceland
	Drivers of change	Level of embeddedness	Drivers of change	Level of embeddedness	
Administrative controls element "Tone at the Top" and values	Mimetic	Institutionalised	Coercive	Enactment	Extraordinary re-definition
Code of conduct	Mimetic	Encoding	Mimetic	Encoding	None
Formal lines of authority	Coercive Normative	Reproduction	Coercive Normative	Reproduction	None
Operation of IT	Coercive	Institutionalized	Coercive	Institutionalised	Additional staffing due to in house operation
Compliance function	Coercive	Institutionalized	Coercive	Institutionalised	None
Risk Management function	Coercive Mimetic	Institutionalized	Coercive Mimetic Normative	Institutionalised	Additional staffing supported by normative pressure
Policies and procedures	Coercive Normative	Reproduction	Coercive Normative	Enactment	Fundamental change to reach Danish level of formalisation

Table 1: Changes to administrative controls and additional action in Iceland

The areas with significant additional management initiated actions in Iceland are: "Tone at the Top" (values), risk management, and policies and procedures:

Almost immediately after the re-establishment of the Icelandic banks, the new managements initiated the implementation of new values. Based on the interviews it seems that the new values in Icelandic banks, supported by the "Tone at the Top", have initiated a behavioural change (Walker, 2009; Erkens et al., 2012). This is also supported by observations during our visits to the Icelandic banks; the headquarters as well as the branches gave the impression of conservative banking, which is rather distant from the image portrayed prior to the financial crisis (IMF, 2014). However, compared with Denmark, the maintenance of values is not a part of the ordinary strategic process and has at present not reached a level of reproduction (Burns and Scapens, 2000).

Another significant difference between Iceland and Denmark was within risk management. Even though banks in both countries are governed by the same regulatory requirements and perform the same tasks (Basel, 2011), the risk management function in Iceland have grown from an average of 5 to 30 fulltime employees since the financial crisis. In Denmark, the average number of employees is 5, which have been almost stable since the financial crisis. Both countries respond to the coercive pressure from FSA supported by a mandatory review by internal audit. Further, they copy the other banks and thus expose themselves to a mimetic pressure. In addition, the Icelandic risk management professionals have managed to establish a normative pressure since the board of directors followed their recommendations regarding the establishment and staffing. In both countries, this combined pressure (Ribeiro and Scapens, 2006) has led to a situation where the risk management functions are institutionalised (Burns and Scapens, 2000). As a consequence it seems that "...it is difficult to remove power" (*Danish CEO*) and that the staffing levels should be considered permanent. Consequently, the additional staffing should be considered a fixed expense going forward. This is supported by the view that institutionalised functions are difficult to change (Burns and Scapens, 2000).

Policies and procedures is an area where there have been significant changes to the regulatory requirements (Van der Stede, 2011). The formalisation of policies and procedures had different starting points in the Icelandic banks than

in the Danish banks. At present, the Icelandic banks seem to have difficulties in moving from enacting to reproduction. The difficulties can be explained by the fact that fundamental changes are more difficult than evolutionary changes (Zoni et al., 2012). Resistance can also be explained by the short timeframe the Icelandic banks use for the implementation of major changes (Burns and Scapens, 2000). In Denmark, most of the policies and procedures were documented prior to the financial crisis. However, there is a downside to this. In the Danish banks, the changes in regulatory requirements have resulted in a situation where formal procedures are encoded as a mechanical response without a clear business-driven need, which leads to ineffective solutions (Munir et al., 2013). Another interesting observation is that the need for encoded rules seems to be replaced by employees' experience in some of the Danish banks (Van der Steen, 2011). This is an indication of institutionalisation of procedures (Burns and Scapens, 2000). In both countries, policies and procedures are seen as a management tool (Flamholtz et al., 1985; Margison, 2002). Although the literature on management controls sees policies and procedures as important for changing behaviour, the managers interviewed saw culture and values as being even more important. This indicates that the use of administrative controls as a management tool should be combined with the use of cultural controls. It also indicates that there might be limitations as to how much reliance can be put on policies and procedures to change behaviour, both from a business and an audit perspective (Eilifsen et al., 2010).

In the area of IT, the operational models in Iceland and Denmark have been different and unchanged since before the financial crisis. The Icelandic banks have operated IT in-house, whereas the Danish banks have chosen to outsource their core banking systems. The changes to the external reporting requirements (Basel, 2014) following the financial crisis have had an impact on the banks. The Icelandic banks seem to experience challenges with the required IT support and have, as a response, hired additional staff, whereas the Danish banks have outsourced these services.

Formal lines of authorities have undergone significant changes caused by the regulatory requirements, since FSA in both countries issued formal orders governing the management of the banks. Furthermore, FSA issued orders to internal audit on mandatory reviews in this area. The responses in both

countries, are seen as a combination of coercive (regulatory) and normative (internal audit) pressure (Ribeiro and Scapens, 2006). Even though both management and employees see these changes as “*too much time is spent on ticking the boxes*” and resistance should be expected, the combined pressure has resulted in a reproduction (Burns and Scapens, 2000) complying with regulatory requirements.

There are two areas with the same changes in both countries, namely code of conduct and increased as well as more formalised compliance processes. It should be expected that pressure can lead to ineffective solutions or difficulties (Munir et al., 2013; Zoni et al., 2012). The implementation of code of conduct is an example of that. Since all the banks have implemented a code of conduct, it may be a result of a mimetic pressure (DiMaggio and Powell, 1983). Despite the fact that it is formalised, it is obvious that many employees have not read it, and it may therefore be considered as a minor encoding (Burns and Scapens, 2000).

In summary, the crisis of 2008 led to administrative control responses in the Icelandic banks, including a definition of new values based on a new “Tone at the Top”, implementation of large risk management functions, formalisation of policies and procedures, and hiring additional IT staff to handle the regulatory reporting. In addition, banks in both countries have responded to a coercive pressure by establishing restructured compliance functions and formalising the lines of authority. Even though the actions have been initiated by changes in the regulatory requirements, they have led to solutions which can be classified as reproduction. All the banks have also implemented a code of conduct based on a normative pressure, but these changes have had a minor impact.

This contributes towards an understanding of how administrative controls have been used to respond to the financial crisis. The changes in the administrative controls excluding values are of a mimetic nature, where the banks provided the necessary resources to implement the required solutions. Further, they are documented, which is a prerequisite for auditing and inspection by FSA. The response is visible and can be seen an example of compliance with changes to the regulatory requirements (Van der Stede, 2011; Franks et al., 1997). Viewing the changes to the administrative controls through an institutional lens (figure

1), these responses can, however, also be seen as a prerequisite for establishing a taken-for-granted behaviour (Burns and Scapens, 2000). In relation to Malmi and Brown's (2008) definition of management controls, this institutionalisation of administrative controls can also be seen as complimentary to and supportive of changing the cultural controls (Walker, 2009; Erkens et al., 2012).

All the banks have changed their values in response to the financial crisis. Except for the actual wording of values, these changes are not visible and are therefore more difficult to audit or review by FSA. To succeed with the changes to the values developed in the banks (Birnberg and Snodgrass 1988), the employees should have established a taken-for-granted behaviour (Burns and Scapens, 2000). Following this view, the response to the administrative controls can be seen as a management tool aiming at supporting the changes to the cultural controls rather than a compliance exercise with regulatory requirements.

There are some implications of the findings in relation to the response from the regulatory regime which for a long time has been composed of more rule-based and "box-ticking" formalisation (Franks et al., 1997). When the level of embeddedness reaches reproduction, the need for more formalised rules seems to be replaced by employees' experience (Van der Steen, 2011). As a consequence, further formalisation will only be an administrative compliance burden without adding to the quality of controls. This could have implications for how the regulatory requirements should be defined and how FSA and auditors should ensure compliance. Further, it is important for the banks to know when to focus on administrative controls as a management tool and when to use other management controls. The banks seek to balance compliance with regulatory requirements, a business-driven need for satisfactory controls and an optimisation of the resources used. It could therefore be of interest for further research to analyse how the configuration of management controls can be optimised. As a basis for this research it might be beneficial to gain an understanding of how the total package of management controls (Malmi and Brown, 2008) has been used as a response to the financial crisis

There are some weaknesses in and limitations to our study. The analysis is based on interviews, and the actual use of the administrative controls has not

been reviewed. Further, the identification of changes to the controls after the financial crisis covers a period of more than seven years. In addition, some of the respondents have not been employed for the entire period and therefore they rely on information gained from their colleagues. These limitations notwithstanding, our study has contributed to an understanding of how administrative controls have been used to respond to the financial crisis.

Appendix 1 – Interview guide

Governance structure

- 1.1. How many members are there in the Board of Directors?
- 1.2. How many are male vs. female
- 1.3. What is the average experience as a board member?
- 1.4. How often does the board meet?
- 1.5. How does the board meet?
- 1.6. Who participates in the meetings: Always or periodically?
- 1.7. What main regulatory/best practice requirements does the board have to comply with?
- 1.8. Does the board of directors perform an annual self-assessment? What does it contain?
- 1.9. How is responsibility divided between the board of directors and executive board/c-level?
 - Approval of loans
 - Investments
 - Other exposures
- 1.10. How does internal auditing review the governance process?
- 1.11. Have there been major changes in governance structures? If so which?

Organisational structure

- 2.1. How is the bank structured?
- 2.2. How is the accounting function organised?
 - Management accounting/reporting (function/person)
 - Public reporting (function/person)
 - Regulatory reporting (function/person)

2.3. How many employees does the accounting function have?

2.4. Do you have an internal audit function or a dedicated person responsible for internal audit?

- How many employees if a department?
- How is it organised?

2.5. Is your IT function in house or outsourced?

- How many employees if a department?
- How is it organised?

2.6. Do you have a risk management function or dedicated risk manager?

- How many employees if a department?
- How is it organised?

2.7. Do you have a compliance function or a dedicated compliance manager?

- How many employees if a department?
- How is it organised?

2.8. How are projects managed in the bank?

2.9. What level of change has these projects introduced?

2.10. Have there been major changes in organisational structure? If so which?

Policies and procedures

3.1. As a tool for influencing employee behaviour (management control tool), how important do you perceive:

- Organisational design - roles and responsibilities including management supervision?
- Policies defining overall requirements?
- Procedures and rules?

3.2. To what extent does the bank rely on written company-wide codes of conduct, policies or similar statements to influence the behaviour of employees?

3.3. Are there written policies and procedures for:

- Segregation of duties
- Authorising activities
- Planning reviews
- Ethical conduct
- Risk taking
- Others

3.4. Describe the process for creating these?

- Who prepares them?
- Who approves them?
- Who implements them?

3.5. How is compliance with codes of conduct, policies and procedures monitored? (ref: Basel)

- Compliance function
- Controller function
- Internal audit
- External audit
- FSA
- Are FSA reports publically available?

3.6. Is there a formal procedure (at least annual) for reporting on compliance to different stakeholders? Please describe.

3.7. Are there areas where the bank relies on informal procedures and processes to influence employee behaviour?

3.8. Have there been major changes in the way policies and procedures are initiated, implemented and controlled. If so, which?

References

Abernethy, Margaret A., and Wai Fong Chua. "A Field Study of Control System "Redesign": The Impact of Institutional Processes on Strategic Choice*." *Contemporary Accounting Research* 13.2 (1996): 569-606.

Alvesson, Mats, and Dan Kärreman. "Interfaces of control. Technocratic and socio-ideological control in a global management consultancy firm." *Accounting, Organizations and Society* 29.3 (2004): 423-444.

Anthony, Robert Newton. *Planning and Control Systems: A Framework for Analysis*. Harvard University, 1965.

Ashbaugh-Skaife, Hollis, Daniel W. Collins, and Ryan Lafond. "The effect of SOX internal control deficiencies on firm risk and cost of equity." *Journal of Accounting research* 47.1 (2009): 1-43.

Bank for International Settlements (BIS). The internal audit function in banks. June 2012.

Basel Committee on Banking Supervision. Core Principles for Effective banking Supervision. September 1997.

Basel Committee on Banking Supervision. Compliance and the compliance function in banks. April 2005.

Basel Committee on Banking Supervision. Principles for the Sound Management of Operational Risk and the Role of Supervision. June 2011.

Basel Committee on Banking Supervision. Capital requirements for bank exposures to central counterparties. April 2014.

BEK nr 1325 af 01/12/2010 "Bekendtgørelse om ledelse og styring af pengeinstitutter m.fl."

Birnberg, Jacob G., and Coral Snodgrass. "Culture and control: a field study." *Accounting, Organizations and Society* 13.5 (1988): 447-464.

- Burns, John, and Robert W. Scapens. "Conceptualizing management accounting change: an institutional framework." *Management accounting research* 11.1 (2000): 3-25.
- Carney, William J. "Costs of Being Public after Sarbanes-Oxley: The Irony of Going Private, The." *Emory LJ* 55 (2006): 141.
- Chenhall, Robert H. "Management control systems design within its organizational context: findings from contingency-based research and directions for the future." *Accounting, organizations and society* 28.2 (2003): 127-168.
- Central Bank of Iceland, History and premises, <http://www.cb.is/about-the-bank/central-bank-of-iceland/history-and-premises/> - 2015.
- Coombs, W. Timothy. "Protecting organization reputations during a crisis: The development and application of situational crisis communication theory" *Corporate reputation review* 10.3 (2007): 163-176.
- COSO. Internal control—an integrated framework. The Committee of Sponsoring Organizations of the Treadway Commission; 1992.
- DiMaggio, Paul, and Walter W. Powell. "The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields." *American Sociological Review* 48.2 (1983): 147-160.
- Dowling, John, and Jeffrey Pfeffer. "Organizational legitimacy: Social values and organizational behavior." *Pacific sociological review* (1975): 122-136.
- Eilifsen, A., Messier, William F., Steven M. Glover, and Douglas F. Prawitt. *Auditing and assurance services*. McGraw-Hill Higher Education, 2010.
- Eisenhardt, Kathleen M. "Building theories from case study research." *Academy of management review* 14.4 (1989): 532-550.
- Eisenhardt, Kathleen M., and Melissa E. Graebner. "Theory building from cases: opportunities and challenges." *Academy of management journal* 50.1 (2007): 25-32.

Erkens, David H., Mingyi Hung, and Pedro Matos. "Corporate governance in the 2007–2008 financial crisis: Evidence from financial institutions worldwide." *Journal of Corporate Finance* 18.2 (2012): 389-411.

Franks, Julian R., Stephen M. Schaefer, and Michael D. Staunton. "The direct and compliance costs of financial regulation." *Journal of Banking & Finance* 21.11 (1997): 1547-1572.

Flamholtz, Eric G., T. K. Das, and Anne S. Tsui. "Toward an integrative framework of organizational control." *Accounting, organizations and society* 10.1 (1985): 35-50.

Gisselquist, Rachel M. "Paired Comparison and Theory Development: Considerations for Case Selection." *PS: Political Science & Politics* 47.02 (2014): 477-484.

Gooneratne, Tharusha N., and Zahirul Hoque. "Management control research in the banking sector: A critical review and directions for future research." *Qualitative Research in Accounting & Management* 10.2 (2013): 144-171.

Gozman, Daniel, and Wendy Currie. "The role of Investment Management Systems in regulatory compliance: a Post-Financial Crisis study of displacement mechanisms." *Journal of Information Technology* 29.1 (2014): 44-58.

International Monetary Fund – IMF Country Report No. 08/368. "Iceland – Financial System Stability Assessment - Update". December 2008.

International Monetary Fund – IMF Country Report No. 14/257. "Iceland – Report on observance of standards and Codes (ROSE)". August 2014.

Janke, Robert, Matthias D. Mahlendorf, and Jürgen Weber. "An exploratory study of the reciprocal relationship between interactive use of management control systems and perception of negative external crisis effects." *Management Accounting Research* 25.4 (2014): 251-270.

Jännäri, Kaarlo. "Report on Banking Regulation and Supervision in Iceland: past, present and future." Report commissioned by the Icelandic government as part of its Stand-By Arrangement with the International Monetary Fund 30 (2009).

- Keating, Patrick J. "A framework for classifying and evaluating the theoretical contributions of case research in management accounting." *Journal of management accounting research* 7 (1995): 66.
- Kinney Jr, William R., Roger D. Martin, and Marcy L. Shepardson. "Reflections on a Decade of SOX 404 (b) Audit Production and Alternatives." *Accounting Horizons* 27.4 (2013): 799-813.
- Kvale, Steinar. "Ten standard objections to qualitative research interviews." *Journal of phenomenological psychology* 25.2 (1994): 147-173.
- Kvale, Steinar, and Svend Brinkmann. *Interviews: Learning the craft of qualitative research interviewing*. Sage, 2009.
- Lail, Bradley, et al. "The Influence of Regulatory Approach on Tone at the Top." *Journal of Business Ethics* 126.1 (2015): 25-37.
- Macintosh, Norman B., and Richard L. Daft. "Management control systems and departmental interdependencies: an empirical study." *Accounting, Organizations and Society* 12.1 (1987): 49-61.
- Malmi, Teemu, and David A. Brown. "Management control systems as a package—Opportunities, challenges and research directions." *Management accounting research* 19.4 (2008): 287-300.
- Manson, Stuart, Sean McCartney, and Michael Sherer. "The value of management letters to unlisted companies." *The British Accounting Review* 33.4 (2001): 549-568.
- Marginson, David EW. "Management control systems and their effects on strategy formation at middle-management levels: evidence from a UK organization." *Strategic management journal* 23.11 (2002): 1019-1031.
- Memorandum of Understanding (MoU) between the central banks of Denmark, Finland, Iceland, Norway and Sweden. Governors of the Nordic central banks, Stykkishólmur, June 2003.

Merchant, Kenneth A., and Wim A. Van der Stede. Management control systems: performance measurement, evaluation and incentives. Pearson Education, 2007.

Morse, Janice M., and Peggy-Anne Field. *Nursing research: The application of qualitative approaches*. Nelson Thornes, 1995.

Munir, Rahat, Sujatha Perera, and Kevin Baird. "An analytical framework to examine changes in performance measurement systems within the banking sector." *Australasian Accounting, Business and Finance Journal* 5.1 (2011): 93-115.

Rahat Munir Kevin Baird Sujatha Perera, (2013), "Performance measurement system change in an emerging economy bank", *Accounting, Auditing & Accountability Journal*, Vol. 26 Iss 2 pp. 196 – 233

Otley, David T. "The contingency theory of management accounting: achievement and prognosis." *Accounting, organizations and society* 5.4 (1980): 413-428.

Otley, David T., and Anthony J. Berry. "Control, organization and accounting." *Readings in Accounting for Management Control*. Springer US, 1992. 28-48.

Power, Michael. "The risk management of everything." *Journal of Risk Finance*, The 5.3 (2004): 58-65.

Power, Michael. "The invention of operational risk." *Review of International Political Economy* 12.4 (2005): 577-599.

Ribeiro, João A., and Robert W. Scapens. "Institutional theories in management accounting change: contributions, issues and paths for development." *Qualitative Research in Accounting & Management* 3.2 (2006): 94-111.

Richards, Lyn, and Janice M. Morse. *Readme first for a user's guide to qualitative methods*. Sage, 2012.

Rubin, Herbert J. and Irene S. Rubin. *Qualitative interviewing: The art of hearing data*. Sage Publications, 2012.

- Simons, Robert. "How new top managers use control systems as levers of strategic renewal." *Strategic management journal* 15.3 (1994): 169-189.
- Simons, Robert. "How risky is your company?" *Harvard Business Review* 77.3 (1999): 85-94.
- Thorgeirsson, Thorsteinn, and Paul van den Noord. "CENTRAL BANK OF ICELAND No. 62." (2013).
- Van der Stede, Wim A. "Management accounting research in the wake of the crisis: some reflections." *European Accounting Review* 20.4 (2011): 605-623.
- Van de Ven, Andrew H., and Marshall Scott Poole. "Methods for studying innovation development in the Minnesota Innovation Research Program." *Organization science* 1.3 (1990): 313-335.
- van der Steen, Martijn. "The emergence and change of management accounting routines." *Accounting, Auditing & Accountability Journal* 24.4 (2011): 502-547.
- Walker, D. (2009) A Review of Corporate Governance in UK Banks and Other Financial Industry Entities: Final Recommendations (HM Treasury, UK), available at www.hm-treasury.gov.uk/walker_review_information.htm.
- Webster, Jane, and Richard T. Watson. "Analyzing the past to prepare for the future: Writing a." *MIS quarterly* 26.2 (2002): 13-23.
- Widener, Sally K. "An empirical analysis of the levers of control framework." *Accounting, organizations and society* 32.7 (2007): 757-788.
- Wintoki, M. Babajide. "Corporate boards and regulation: The effect of the Sarbanes–Oxley Act and the exchange listing requirements on firm value." *Journal of Corporate Finance* 13.2 (2007): 229-250.
- Yin, Robert K. *Case study research: Design and methods*. Vol. 5. Sage, 2009.
- Laura Zoni , Andrea Dossi & Marco Morelli (2012) Management accounting system (MAS) change: field evidence, *Asia-Pacific Journal of Accounting & Economics*, 19:1, 119-138, DOI: 10.1080/16081625.2012.668062

11. Disclosure materiality: An analysis of stakeholders' perception

Leif Christensen and Thomas Ryttersgaard

Copenhagen Business School, Department of Accounting and Auditing,
Denmark

Abstract

This paper explores the quantitative and qualitative factors associated with how preparers and auditors perform materiality assessments of note disclosures in the annual report. Drawing on a series of interviews with experienced professionals, the study illuminates the way preparers and auditors assess disclosure materiality, which is compared to the way users view it. The study finds that both preparers and auditors tend to consider assessment of disclosure materiality in the same way as materiality of misstatements. This assessment style is misaligned with current initiatives among standard-setters. Furthermore, preparers and auditors appear to be uncoordinated with the way in which users view disclosure materiality. These findings indicate confusion and operational difficulties in relation to the concept of materiality. These difficulties have to be managed by standard-setters if their aspirations about encouraging assessments of materiality and cutting the clutter out of disclosures are to be realised.

1. Introduction

Materiality is one of the most critical terms in accounting because it determines which items end up being disclosed in the annual report (Brennan and Gray, 2005). Despite its importance, there seems to be a lack of common understanding and use of the concept “materiality” (Barker et al., 2013). The basic meaning of materiality is “that there is no need to be concerned with what is not important or with what does not matter” (Bernstein, 1967), which means that the annual report should not include information that is not important or does not matter to users (IAS 1.31). Seen from the user’s perspective, materiality decisions are made behind closed doors, and only little information is available on how these judgements are made and how they affect the users (Fearnley et al., 2011; Messier et al., 2005). These decisions are made by preparer⁵ and auditors, and the users only see the final result of this assessment, which is the annual report (Brennan and Gray, 2005; Acito et al., 2009). The primary users are identified as existing and potential investors, and one of the most advanced groups of users is sell-side financial analysts (Brown et al., 2015). Consequently, together with preparer and auditors the financial analysts can be considered the primary stakeholders of the annual report.

There are two types of materiality: Materiality regarding misstatements and materiality regarding omissions. Misstatements are normally related to amounts in the primary financial statement (Hussain et al., 2014). Materiality of misstatements is measured on predetermined aggregated amounts (Eilifsen and Messier, 2014). Omissions can relate to both amounts and other types of information, including text sections. If a disclosure is considered immaterial, it can be omitted. Since decisions regarding materiality are judgmental, the risk of omitting material information can be mitigated by adding disclosures; however, this might lead to information overload, which can be a problem for users (Lawrence, 2013). Information overload is a recognised problem, and EFRAG (2012) has suggested a framework for disclosures which could help align the contents of the notes in the annual report with users’ needs. While Barker et al (2013) do not agree with the perception of disclosure overload, they do,

⁵ We refer to preparers of financial statements as “preparers” throughout the paper. The term refers to employees in mid- to high-level management positions with significant influence on the preparation of annual reports.

however, support a call for guidance on disclosure materiality. Thresholds guiding materiality for the primary financial statement cannot automatically be applied to disclosures in the notes (Eilifsen et al., 2014). To add further aspects to the understanding of the concept it is therefore of interest to explore how materiality regarding disclosures is perceived by different stakeholders. This is important since additional disclosures have accounted for a substantial part of the total growth in both volume and complexity of the annual report. A better understanding of the differences in the perception of materiality between preparers, auditors and users can improve guidance on the subject and lead to more focused financial reporting.

The Association of Chartered Certified Accountants (ACCA) reports an increasing trend in the size of annual reports for UK firms, and the notes alone accounted for an average of 55 pages in the FTSE 100 companies 2014 annual reports (ACCA, 2012; PwC, 2015). In response to this tendency of increasing size and complexity, in 2009 the UK Financial Reporting Council published the “Louder than Words: Principles and actions for making corporate reports less complex and more relevant”, which suggested guiding principles for corporate reporting and calls for action (FRC, 2009). Since this publication, interest in improving the readability of financial reports has grown, and the complexity of disclosures and regulatory requirements has been questioned (FRC, 2011; NZCA and ICAS, 2011; EFRAG, 2012). Based on the number of pages in the annual report, these initiatives do not, however, seem to have had much impact. Preparers, auditors and users of annual reports are aware of the perceived problems, but effective solutions solving the paradox of how to increase transparency without adding length and complexity to the disclosures have not been yet identified (EFRAG, 2012).

We have explored preparers’ and auditors’ methods and approaches to assessment of disclosure materiality in the annual report. This assessment has been compared with the ways users view disclosure materiality, which we find entirely different. The empirical material for the analysis has been collected on the basis on a multiple-case study including three groups of respondents: senior members of the staff preparing the annual report, Big 4 audit partners with IFRS experience, and sell-side analysts. A total of 36 interviews were conducted covering 12 non-financial companies listed on the OMX Nasdaq Copenhagen in

Denmark who prepare annual reports according to the International Financial Reporting Standards (IFRS). Each interview was based on the notes in the company's annual report, which the respondent had analysed prior to the interview. This analysis and the interview provided information about the individual respondent's perception of materiality regarding disclosures.

The result of the case study shows that preparers' and auditors' perception of disclosure materiality is based on a frequency of three steps. The first step uses the size of the amounts as thresholds, which is similar to an assessment of misstatements. The second step considers the changes to the disclosure compared with previous year. In the final step, it is assessed whether the disclosure adds value for the user. This last assessment includes an evaluation of whether the disclosure is read and understood by the user. Users' evaluation is different, as they primarily consider if the information is relevant as input to a financial analysis. Even though preparers and auditors claim that they consider users' needs, they miss the target since they do not consider these analyses. Consequently, there is a gap between preparers' and auditors' perception of users' needs and the actual need for this information. This indicates that the actual understanding and use of materiality does not address the long-standing key requirements including "influence" on users "judgement" (Kohler, 1957; Barker et al., 2013; EFRAG, 2012; IASB, 2015).

This paper contributes by adding further details to the understanding of preparers' and auditors' approach to disclosure materiality and users' assessment of the result, which are the notes presented in the annual report. The result of the case study also supports the opinion that too much immaterial information is disclosed (EFRAG, 2012) and that clarification regarding the practical use of disclosure materiality is needed (ISAB, 2015). By taking the differences in perception into account, standard setters can improve guidelines on disclosure materiality by addressing preparers' and auditors' misalignment with users' perception.

The paper is organised as follows: Section 2 defines and discusses the elements of materiality, and section 3 describes the research method. In section 4, the result of the case study is presented. Finally, in section 5 the results are discussed, and section 6 presents the conclusions.

2. Disclosure materiality

Disclosure materiality is a sub-component of materiality and is related to omissions of information (IASB, 2015). A decision can either result in the disclosure or the omission of an individual piece of information. Unlike errors in amounts recognised in the primary financial statements, errors related to omission of disclosures cannot be measured in the same way as misstatements, since the disclosure might not contain amounts or have any effect on the reported profit.

Materiality is one of the most critical terms in accounting because it determines which items end up being disclosed in the annual report (Brennan and Gray, 2005). It is a component of accounting quality relevance (IASB, 2010). In the area of auditing and accounting, materiality has been subject to academic research for more than 100 years, both the recognised figures and the supporting disclosures. According to Dicksee (1907), “an account is not primarily a collection of figures, the narration (or wording) is as least as material as the figures themselves”. 60 years later Bernstein (1967) stated that: “The concept of materiality is part of the wisdom of life.” His basic meaning was that there is “no need to be concerned with what is not important or with what does not matter”. He raised the key question: “What is material?”, and his own answer includes: “... lack of guidance is due to the fact that the assessment of materiality is purely a matter of judgment”. A guideline was, however, defined suggesting a border zone of 10 – 15% of net income after taxes. This guideline, which only relates to quantitative evaluations, defines the threshold of materiality. Since then a large number of academic papers have analysed various aspects of materiality. Most research on materiality has been done from the perspective of recognition and measurement due to its direct impact on reported net income, assuming that only one level of materiality applies to one set of financial statements. One of the first definitions of materiality was published in 1957:

“The characteristic attaching to a statement, fact, or item whereby its disclosure or the method of giving it expression would be likely to influence the judgment of a reasonable person” (Kohler, 1957).

Even though this could be seen as a broad definition, until the 1970s almost all materiality decisions were based on quantitative measures. In the 1970s, the Securities and Exchange Commission (SEC) introduced the notion of qualitative materiality. As a consequence of the initiative, one of the most cited legal contributions regarding materiality is a Supreme Court decision from 1976, which is referenced in a paper on “Qualitative materiality” (Fedders, 1998), and later by PCAOB in 2010 (PCAOB, 2010). According to this decision, a fact is material if there is:

”A substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the “total mix” of information made available”.

Except for the fact that the statement relates to an “omitted fact”, the decision does not provide much guidance regarding materiality. According to Fedders (1998), the SEC initiative regarding qualitative materiality “died at the bar of common sense. It’s intended beneficiaries – investors – ignored corporate qualitative disclosures.”

According to the International Financial Reporting Standards (IFRS), companies are required to meet all disclosure requirements in the standards if these disclosures are “material” (IAS 1.31). They do not need to apply specific disclosure requirements if the related information is not material. A piece of information is material if omitting or misstating it could influence decisions that users make based on financial information about a specific reporting entity. IASB asserts that materiality is entity-specific and is based on the nature and/or magnitude of the items to which the information relates in the context of a financial report. They explicitly state that they “cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation” (IASB, 2010). This is because materiality is a judgmental decision, and when deciding if a disclosure is material, the preparer needs to make some assumptions about the users and their use of the annual report as a whole and that specific piece of information in particular.

Primary users are identified as existing and potential investors, lenders and other creditors who are expected to have reasonable knowledge of business and economic activities, and who review and analyse the information diligently. The

types of decisions users' make based on financial statements involve buying, selling or holding equity and debt instruments, and providing or settling credit. The information they relate to is expected returns, future cash flows, resources and the extent to which management has discharged its responsibilities (IASB, 2010). Because the users have different information needs, the preparers cannot reasonably be expected to meet all the needs of all of the entity's primary users (EFRAG, 2012). Cascino et al. (2014) find that there is significant variety in different capital providers' information needs, and different sources of information sometimes compete. One reason for this is that financial reporting has two different roles; financial decision-making and stewardship. Information required for financial decision-making is mainly ex-ante oriented with the purpose of supporting valuations. Stewardship information is ex-post oriented with the purpose of monitoring management's use of capital after it has been invested in the company.

IASB has initiated a project on materiality, which seeks "to help preparers, auditors and regulators to use judgment when applying the concept of materiality." It is mentioned in the project objectives that: "How the concept of materiality is applied in practice is seen by many as a major cause of the 'disclosure problem'. Not making appropriate materiality judgments can result in both the disclosure of too much irrelevant (i.e. immaterial) information and not enough relevant (i.e. material) information."⁶ In October 2015, IASB proposed a draft practice statement on the application of the concept of materiality about disclosure of information. The draft practice statement provides guidance on how to apply the concept of materiality when making decisions about presenting and disclosing information, as well as on how to assess whether omissions and misstatements are material. They consider both quantitative and qualitative factors and see quantitative factors as "a helpful tool" that "provide[s] the basis for a preliminary assessment that an amount is likely to be material or immaterial; for example if it is below a specified percentage of profit or net assets". This is elaborated by: "However, a materiality assessment also requires consideration of the nature of the item and the entity's circumstances" (IASB, 2015), which indicates that qualitative

⁶ <http://www.ifrs.org/Current-Projects/IASB-Projects/Disclosure-Initiative/Pages/Disclosure-Initiative.aspx>

factors play a prominent role in determining materiality for omission of disclosures. IASB are, however, sparse when it comes to suggesting which qualitative factors need to be considered when deciding if a disclosure is material.

The definition of materiality is divided into two distinct types; misstatements and omissions. Misstatements are mainly quantitative and often relate to errors in the reported amounts in the primary financial statements, e.g. net profit (Hussain et al., 2014). Because of the quantitative nature, auditors can add the sum of identified misstatements to determine if they are above or below a predetermined aggregated materiality level (Eilifsen and Messier, 2014).

Omissions and misstatements regarding disclosures, which are supporting information displayed in the notes (Schipper, 2007), have no impact on the primary financial statements. Consequently, quantitative benchmarks for misstatements cannot be used when evaluating materiality of omissions of disclosures (Eilifsen et al., 2014). Disclosure literature suggests that additional disclosures in the annual report will reduce the information gap between a company's management and its shareholders and thereby reduce the cost of capital. While previous research indicates that more disclosure reduces information asymmetry, it has, however, been difficult to measure disclosure and reporting outcome (Leuz and Wysocki, 2015). Research on the omission aspect of disclosure materiality is scarce and has focused on individual disclosure areas, e.g. environmental, social and governance (Szabo, 2012; Amel-Zadeh, 2015), postretirement benefits (Liu and Mittelstaedt, 2002) or segment information (Doupnik and Seese, 2001). Their studies generally find that the level of disclosure (combination of volume and content) varies considerably across annual reports and that higher levels of disclosures are perceived positively. This is supported by a number of other studies which find that additional disclosures in the notes have a positive impact by reducing information asymmetry, investors' estimation risk and companies' cost of capital (Botosan and Plumlee, 2006; Leuz and Verrecchia, 2000; Botosan, 2006).

The opposite of omissions is information overload (Eppler and Mengis, 2004). In the publication "Towards a Disclosure Framework for the Notes" (EFRAG,

2012), it is stated that: “Disclosure requirements should be principle-based and detailed rules should be avoided” and “Care should be taken in applying the materiality principle in practice, bearing in mind that disclosing immaterial information (and information on situations that do not apply in practice to the reporting entity) reduces the relevance and the understandability of disclosures.” This could indicate that a saturation point could exist, and that additional disclosures would increase the information asymmetry because the users have difficulties in finding relevant information. In a response to the paper, Barker et al., (2013) say that “if a disclosure overload problem exist, it may not be caused by the current standards within IFRS. Rather, it could be driven by the action of enforcement agencies and preparers”. This situation might be explained by the lack of clarity on the application of materiality especially for qualitative disclosures (EFRAG, 2012).

Standard setters have attempted to increase the level of transparency by adding further disclosure requirements. The resulting increased length of the notes has done little to improve the quality of information. On the contrary, it may decrease the quality due to information overload (FRC, 2009; FRC, 2011; EFRAG, 2012). To reduce information overload, EFRAG (2012) suggests that an assessment of disclosure materiality must be split into considerations regarding specific amounts and the materiality of each piece of information related to each of these amounts. If an amount is material, related disclosures are not necessarily material. They acknowledge that there is a risk that guidance on materiality can be interpreted as a checklist by preparers and auditors, and that too many scenarios, facts and circumstances might influence the assessment. On the other hand, they argue that lack of guidance makes it more difficult for entities to resist external pressure to comply with all requirements in the standards. They stress that the accounting literature is thin on the application of materiality, and they hope to advance the debate by proposing examples of different materiality indicators and types of information to be included in the notes if an item is material.

In summary of the above: the key issues in the definition of materiality over the past 50 years have been the “influence” on a “user” (person) related to a “decision” (judgment) based on the annual report. The decision on what information is material – and should be disclosed in the annual report – lies with

the companies (DCA, 2010). The decision is individual and should be based on the users' perception of financial reports and whether they would change their behaviour based on the information provided in the annual report. Auditors have the possibility of influencing the decision, but users can only rely on the outcome of this process (Brennan and Gray, 2005), namely the public annual report.

3. Method

The objective of this paper is to explore how materiality with respect to disclosures is perceived by different stakeholders. To explore this, we have conducted a multiple-case study (Eisenhardt, 1989). This method is appropriate, since the focus is on a real-life situation aiming at answering a how- and why-question (Yin, 2009). In order to address the objective of the paper, the case study will seek to illustrate how stakeholders use the concept of materiality and thereby add further aspects to the understanding of the concept (Keating, 1995).

The respondents representing the preparer were selected among the large-cap companies listed on the OMX Nasdaq Copenhagen. From this population we excluded companies in the financial service industry, as they are subject to special accounting regulations and inspection (FBA, 2011). We ended up with a population of 12 companies which were willing to participate in the study and used their 2014 annual reports as a basis for our analyses. All the annual reports had been prepared according to the IFRS regulations and must consequently meet the disclosure requirements of the standards if they were material (IASB, 2007).

To ensure that we generated adequate empirical evidence from the case studies, we used semi-structured interviews (Kvale and Brinkmann, 2009). For each company we interviewed three respondents; a preparer of the disclosures included in the annual report; an auditor and a user, all of whom take part in the materiality decision process (Brennan and Gray, 2005).

Even though the management of a company is ultimately responsible for the annual report (DCA, 2010), technical considerations regarding preparation of

disclosures are typically the responsibility of accounting function staff. Therefore, we interviewed a senior member of the accounting staff with detailed knowledge about preparation of financial statements including disclosures and the company's materiality decisions.

The issue of confidentiality restricted our access to auditors in their capacity as auditor for the specific company. They did, however, agree to participate in the study by analysing and discussing annual reports from companies that the auditing firm they represented had not audited. To ensure a consistent level of qualification, the respondents should be state-authorized auditors and partners in a Big 4 audit firm with experience in auditing listed companies. As part of a Big 4 audit firm, these auditors have to regularly undergo internal training in order to ensure continuously updated skills in IFRS regulations and requirements.

The users are represented by sell-side analysts covering the specific companies. They all represent multinational financial institutions and issue signed written reports regarding the company they are interviewed about. . Further they have technical capabilities at a level compliant with the requirements defined by CFA Institute.⁷ Sell-side financial analysts represent an important and advanced part of the users of financial information (Brown et al., 2015). This view was supported by responses from preparers and auditors who consider analysts the primary users of the annual report.

All respondents have more than 10 years of professional experience in financial reporting.

Due to the entity specific nature of materiality we found it necessary to discuss the concept in the context of a specific set of notes. Prior to all respondent interviews, we forwarded a copy of the 2014 notes for the company to be discussed to each respondent. The respondents were asked to prepare an evaluation of the materiality of the individual disclosures before the interview and mark them as follows:

- No marking – relevant and/or material information which should be included in the notes.

⁷ <https://www.cfainstitute.org/pages/index.aspx>

- Yellow marking – information which is relevant and/or material but should be presented differently (e.g. too complicated or too detailed).
- Red marking – information which is irrelevant and/or immaterial.

In addition, preparers and auditors were instructed to evaluate the notes without considering the regulatory requirements, but only focusing on their professional opinion about materiality. The evaluated notes were used as a basis for the interviews. The purpose of these evaluations was to identify specific details at disclosure level that determine the individual respondent's perception of materiality.

To support the discussions, an interview guide was developed aiming at clarifying the underlying arguments for the respondents' evaluation. The interview guide is shown in appendix 1, and an overview of the respondents is found in appendix 2. Since the notes are different across companies, and the respondents are different with respect to both qualifications and level of detail in the evaluation, the semi-structured interviews were supported by a responsive element in order to clarify the underlying arguments (Rubin and Rubin, 2012).

36 interviews, each lasting 30-40 minutes, were conducted between July 2015 and January 2016. They were recorded, transcribed and coded together with the individual respondent's analysis of the notes. The coding was supported by NVivo and performed according to the organising framework described below. The transcribed interviews and the respondent's colour-marked evaluation of the notes provided information about the individual perception of materiality regarding disclosures, and form the basis for the analysis. Based on the analysis common details at disclosure level forming the generalized perception of materiality were identified for each group of respondents.

For the FTSE 100 companies' 2014 annual reports in the UK, the notes accounted for an average of 55 pages (ACCA, 2012; PwC, 2015). In the annual reports of the 12 Danish companies included in the case study, the notes accounted for an average of 46 pages, ranging from 29 – 75 pages. The average number of total pages in the annual reports is 120, of which the notes account for 38%. The ratio of notes pages to total number of pages in the case-study annual reports is illustrated below:

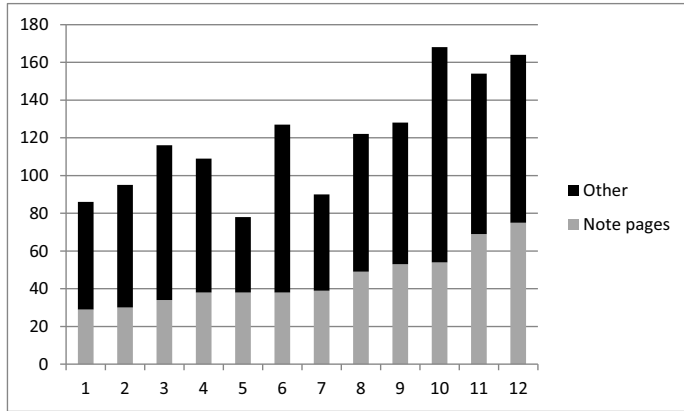


Figure 1 – Note pages and total number of pages in the 2014 annual reports

Prior to the case study, we performed a literature review (Webster and Watson, 2002) in order to clarify the current understanding of materiality regarding disclosures and thresholds related to both quantitative and qualitative issues. The search included academic papers, practice literature and publications by standard-setters. This information has been used to describe the current understanding in academia and practice of materiality regarding disclosures related to both quantitative and qualitative issues. It has furthermore been used to identify elements in the organising framework.

The information from each respondent consists of the transcribed interviews and the marked notes (white, yellow and red) from the 2014 annual report. In order to structure the coding and thus establish the foundation for the analysis, the information has been organised according to the following model:

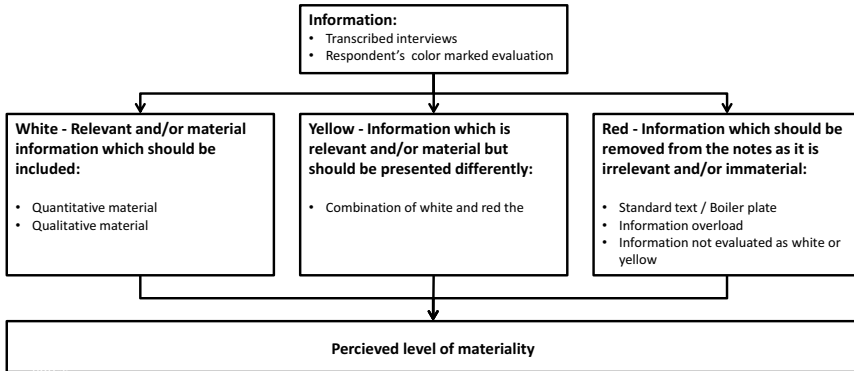


Figure 2 – Organising framework – perceived level of materiality

The definitions of quantitative and qualitative materiality are primarily used to explain why disclosures have been assessed as “white”. The understanding of quantitative and qualitative materiality is based on the definition provided in section 2 above.

In the “red” column of the framework, the information is classified as “standard text” or “information overload”. In the interviews, “standard text” is perceived as synonymous with “boilerplate”. “Standard text” is defined as information that has been copied from other sources, e.g. a reproduction from regulatory requirements. “Boilerplate” is defined as standardised disclosures or part of a disclosure that is so prevalent that it is unlikely to be informative (Lang and Stice-Lawrence, 2015). “Information overload” is defined as a situation where the user has to process more information than required (Eppler and Mengis, 2004).

4. Findings - Perceived level of materiality

Following the analytical framework presented in figure 2, below we have mapped common traits regarding the perception of disclosure materiality within each of the three stakeholder groups interviewed. These traits include whether the respondents’ views are in accordance with IASB’s definition of materiality, the balance between qualitative and quantitative factors, the order in which the

factors are considered, and key words or phrases used when arguing in favour of disclosure materiality. By considering both the arguments for why some disclosures are material and some are not, we are able to produce a comprehensive picture of perception of materiality. Finally, we have compared the three groups with each other to identify similarities and differences.

Preparers of the annual report

Without exception, all preparers in the case study consider the users of the annual report when making decisions regarding materiality. This is in accordance with the present requirements and practice (IASB, 2015). When preparers refer to users, they mention analysts as the primary group, and most of them also mention shareholders:

“I have written analysts and shareholders as the primary users since we are a listed company with a relatively high trading volume of our shares. Our second priority must be creditors and banks” (Company A - Preparer)

Preparers do not just consider the analysts at the overall level, but also when preparing the individual disclosures. There is, however, not a direct link between preparers and users, since questions from analysts go through the investor relations department:

“Sometimes investor relations ask if we could include some additional information since they always get questions from the analysts in that area. Actually - perhaps not that much when we prepare the annual report but more often regarding our quarterly reports. But it happens.” (Company H - Preparer)

If investor relations cannot provide an answer themselves, they consult the accounting department. The accounting department gives the information to investor relations, but the staff do not reflect on why the analysts have requested it. In some cases, disclosures are added because of these requests, and they may remain in the notes in subsequent years without any reflection on their purpose. None of the respondents indicated the opposite reaction where they were told that there were too many disclosures and that they should leave out information.

This could indicate that it is easier to add than omit information and may help explaining why disclosures are increasing (Barker et al., 2013).

Quantitative factors

Without exception, the preparers' primary assessment of materiality is based on quantitative factors, more specifically the amounts that are used as thresholds. This approach of considering the size of the amounts is similar to how an auditor evaluates misstatements in primary financial statements. In contrast to the audit practice, the assessment of disclosure materiality is not based on standardised amounts or rates as used by the major accounting firms (Eilifsen and Messier, 2014). Instead, the assessment is based on individual considerations. The amounts can relate to the primary financial statement, the specific line item or the disclosure. An example of a threshold from the primary financial statement is a situation in which a preparer was considering omitting notes specifying employee cost, but decided to keep it with reference to a quantitative materiality threshold, even though the company did not operate with one:

“I decided to keep it because – you can't omit a note accounting for half of our costs. We exceed the thresholds for materiality. But I don't think that such a specification adds much value for the user.” (Company D - Preparer)

This preparer was considering whether the disclosure added value for the user, but the amount as the primary criterion overruled this consideration. These kinds of considerations, where the preparer assesses a disclosure as being material due to quantitative characteristics and disregards other considerations, are common. The amount of the related line item can also be decisive for including a specification:

“In principle this note about other liabilities should have been marked red. But it's difficult since it is x billion. There is something about the amount that says – ok – even if the note doesn't provide any valuable information.” (Company F - Preparer)

Even though most of the preparers' considerations regarding quantitative materiality are based on the primary financial statement and specific line items, the assessments can also include an isolated view on the notes:

"I decided to omit a note regarding sale of an activity in 2013, and we had nothing in 2014. It was a relatively insignificant amount in 2013 – obviously immaterial. Therefore we omitted it." (Company K - Preparer)

In this situation, the respondent had not been responsible for the 2013 annual report, and the decision to omit the 2014 disclosure was based on an evaluation of the amounts for both years.

The use of quantitative factors is prevalent and overrides the sparse indications that users are considered. This approach does not comply with the requirements and practice as described by the standard-setters (IASB, 2015).

Changes from previous year

The assessments of materiality are primarily based on a comparison between disclosures and amounts in the annual report for the current year. If the amounts are considered material, the disclosure is included in the annual report. They may, however, also be combined with developments from the previous year and expectations. When comparing an amount to the previous year, it is considered material if the development is unusual or significant. The size of the amount is secondary, which indicates that the preparer makes a qualitative assessment of the disclosure. In some cases, this is due to a change in trend, but in general it is similar to when an auditor considers trends in order to mitigate the risk of misstatements. The examples of qualitative considerations are, however, of an arbitrary nature, which may be explained by the sparse guidance from standard-setters (IASB, 2015). Furthermore, preparers rarely consider how a user would benefit from a disclosure and whether an omission would have any impact on the financial analysis.

Changes from previous year are primarily considered in the financial statement line, but the detailed disclosure level can also be decisive even when the totals are unchanged. In this example, we discussed a specification of changes to working capital:

“There are fairly small changes in our working capital. But I think that if you look at previous year, some rather big changes are hidden in the totals, and I think that it could be of interest to know if the total change can be explained by a rise in accounts receivable.” (Company I - Preparer)

There are several examples of assessments where changes compared to previous year were considered of interest at the specification level. This supports the view held by IASB and others that there is no uniform quantitative threshold for materiality of disclosures (IASB, 2010; EFRAG, 2012). When a line item follows an expected trend, the amount needs to be larger before the related disclosures are considered material. This assessment at the detailed disclosure level can also be combined with considerations regarding the users and what information they might need:

“Our warranty provision at first glance – perhaps they seem rather small. But we see it as a focal point, and we also get a number of questions from the analysts. Therefore, I think it is relevant to show the movements in our warranty provisions. It also gives an indication of how good we are at making estimates.” (Company K - Preparer)

Adding value for users

Besides the materiality assessments, which are entirely or partly based on quantitative elements, solely qualitative considerations are also taken by preparers. The case study provided many examples which were primarily characterised by referring to expectations of what users might need. A common example is the note where group companies are listed:

“And then we have this list of companies – I wonder who looks at that? We could tell in which countries we are present – but the names of the companies. I don’t see that this adds any value.” (Company I - Preparer)

Another general characteristic is that the preparer questions the use of boilerplate and standard text since this is perceived as adding no value for the users:

“When we look at accounting policies it is my assessment that it is redundant, since it is primarily a copy and paste of IFRS requirements.” (Company J - Preparer)

The preparers make a clear distinction between standard text and descriptions specifically related to the company. One example is sections in which companies include descriptions of specific accounting policy choices or decisions:

“The yellow markings are sections which I think could be of interest - it is critical accounting estimates. If we explain it in a decent manner and provide some specific information, then it would be a service to the users. But we have to be specific.” (Company D - Preparer)

The qualitative assessment also included considerations regarding how complicated the disclosures are and the number of pages used to describe the details. The preparers generally view it negatively if a note is too complicated or too comprehensive, and they identified three types of disclosures: financial instruments, share-based payment and defined benefit plans:

“Then there are financial instruments - it is yellow. I think that it is an important disclosure if you look at the contractual values, but I think that it takes up too many pages” (Company F - Preparer)

The preparers’ evaluation of share-based payment is the same:

“Share-based payment – it is important, but the level of detail describing what has been added to and withdrawn from the share pools – it is simply too much” (Company F - Preparer)

Previous-year figures were also mentioned as information that adds limited value for the users, since they already have these available in their Excel models.

Order of assessment

The preparers’ assessment of disclosure materiality is primarily based on quantitative measures and more specifically the size of the amounts. As a second priority, changes to the amounts are compared with previous year. The

amounts may relate to the primary financial statement, the specific line item or the specifications included in the disclosure. This assessment of disclosure materiality is based on the same approach as used when evaluating misstatements, but the thresholds are different. If after these assessments, the disclosure is not evaluated as material, then it is considered whether it adds value for the user. Adding value for users is the term used by preparers. It seems more appropriate to consider this as if the information seems to be requested by the users, since the preparers do not consider how the analysts use the information. This third level of assessment is based on qualitative characteristics similar to those proposed by EFRAG (2012). These qualitative elements included risk, uncertainties, expectations and to some extent stewardship. Such considerations may be summarised by the following example:

“If we cross the thresholds – and we are talking about amounts – then it is by definition material. But what if the information in the disclosure is not relevant? My assessment of these specifications is basically that they only add value for the users if there are significant changes compared with previous year.”
(Company D - Preparer)

Auditors

The auditors’ overall perception of disclosure materiality and definition of users are the same as the preparers’, and they claimed that they took a user perspective when making their judgments. Auditors also share the preparers’ view and consider analysts and shareholders as the primary users of financial information; however, some doubt that shareholders read the annual report:

“One of my clients has 80,200 users of the annual financial information. There are 200 professional users, primarily analysts, and 80,000 non-professionals, including shareholders, who only use the “light” version of the annual report”
(Company G - Auditor)

The view that ordinary shareholders only use the “light” version of the annual report was stated by several auditors.

At the overall level, one of the auditors added a comment regarding materiality and the more specific requirements regarding control notes:

“There are different kinds of materiality depending on whether you have to consider “true and fair view” and refer to the financial result or if you consider control notes. Control notes are not related to materiality, and they have nothing to do with the “true and fair view.” (Company G - Auditor)

Another auditor considered the control aspect of management’s remuneration from the users’ perspective and concluded that even though it is a control note, not all the required disclosures were automatically material. The respondent appreciated the overall information that the note contributes, but it includes too many details:

“Share-based payment is marked red. Four pages and I lost the overview. It is compliant with the requirements, but all that information – it is simply too much. From a governance perspective I simply just need to know how much they pay the management.” (Company A - Auditor)

Quantitative factors

As with preparers, the auditors also consider quantitative materiality as the primary factor when making decisions regarding disclosures. Even though the interviews were only intended to concern the notes, some of the auditors clearly indicated that the overall assessment of materiality of the full financial report should be considered when looking at the notes:

“Before I started, I thought that it would be nice to have an idea about the materiality level. I looked at the annual report and decided on a general level of materiality around x million. Just to have a place to start. I know that it is primarily the notes you asked me to look at, but I just want to get the overall relation to each line in the balance sheet.” (Company J - Auditor)

This materiality assessment is similar to the definition of thresholds used by auditors when evaluating misstatements (Eilifsen et al., 2014). While the respondent said that this threshold was not appropriate for considerations about disclosure, materiality was referred to several times during the interview. It was obvious that he could not depart from it in his assessment of disclosure

materiality. Apart from this example, none of the auditors indicated the use of a specific quantitative threshold for materiality when assessing the notes. Instead they referred to an undefined amount resulting in an individual judgment based on the assessment of the specific disclosure:

“When I leafed through the notes – most of them are specifications of line items. Since I am an auditor I generally like specifications – except when it is insignificant amounts.” (Company L - Auditor)

Auditors, like preparers, were not able to distinguish considerations regarding omissions from misstatements, and the use of amounts when assessing a disclosure was prevalent but not well-defined. This resulted in a number of situations where the auditors discussed with themselves as part of the process of assessing disclosure materiality:

“You can say that this note - financial income - should be included in the annual report – yes. But then – on reflection you might say that when the figures are as small as here – then it should be omitted since it is insignificant amounts.” (Company H - Auditor)

In total, the amounts included in the specification of financial income and assessed as “insignificant” accounted for less than 0.1% of the revenue and 3% of profit for the year.

Other assessments referred to the amounts of the specific note – in this case a specification of other receivables amounting to less than 3% of total assets and specifying the total in four items:

“I would have omitted this note – simply due to the size of the individual figures included in the specification.” (Company D - Auditor)

Thresholds in amounts are the primary assessment factor for auditors, but as in the case of preparers, there was some sparse indication that the users’ perception was considered when making disclosure decisions:

“And then we have other operating income – I would say that this note is only relevant if the amounts are material. It should only be included if it is assumed

that the amounts in the specification are material to the users.” (Company D - Auditor)

The auditor did not consider if the specification is actually material to the user, but compared with revenue it accounted for less than 3%. As with the preparers, the use of amounts is prevalent and does not comply with the requirements and practice as described by the standard-setters (IASB, 2015).

Changes from previous year

The alignment between auditors and preparers is also in evidence when the assessment of disclosure materiality is based on developments in amounts. The most commonly used elements relate to expectations and development:

“It is rather large amounts, but there are not really any surprises. Of course, they have some liabilities regarding employees, some accruals and VAT. But since there are no surprises, I don’t think that it adds any value.” (Company F - Auditor)

As with the preparers, it is difficult to generalise the use of combined quantitative and qualitative assessments. This can be illustrated by an example of opposite reasoning:

“I consider the amount – x millions - in relation to this company. It is completely immaterial. But since there might be a judgmental element, I think that it is important to know how the figures have developed.” (Company D - Auditor)

The notes assessed were trade receivables, and the development related to receivables past due date but not impaired. They accounted for less than 6% of trade receivables and less than 1% of total assets.

The development in figures is also important when identifying disclosures that should be improved:

“Looking at financial income in the primary financial statement you can see that they have more than doubled in a year. When this kind of things occur I would like to see maybe a little more explanation of the development trend in this note.” (Company A - Auditor)

The considerations regarding trends and previous-year figures are not consistent, and general use of previous-year figures is not considered as valuable and material information. This assessment is based on the assumption that users may require and have access to annual reports from previous years:

“I am looking at fixed assets - and for that matter also many other items - I've considered the comparative figures. I think that they can be omitted since it is fair to assume that the user has access to last year's annual report. However, whether they should include a full specification of last year's tangible assets – this I would question. If you are interested in the development, you can go back to last year's annual report. Then we come back to the question of materiality. I guess that it was just a general comment regarding previous year's figures.” (Company J - Auditor)

It seems that there is some element of bookkeeping and reconciliation skills involved in these assessments:

“Fixed assets including a full set of comparative figures – there is a limited use for that. But on the other hand, when I assess this I think that it is something that we as auditors believe should be included.” (Company D - Auditor)

These practitioner issues are an integrated part of the auditors' assessment, and they include the notion that figures should be reconciled. These considerations were expressed when discussions concerned fixed assets including previous-year figures:

“If you want to understand what is happening here, I think that both tangible and intangible fixed assets add value. Perhaps that is because of my bookkeeping gene, but I think that it adds value to see that figures are reconciled. I know that when we get to financial instruments, I have a different point of view. But here I really like it.” (Company H - Auditor)

The respondent referred to the specification of movements from beginning of the year to year-end.

Adding value for users

In parallel to the preparers' view, the auditors' qualitative assessments focused on the users as the third step. These assessments also considered how much information should be included and how to present the disclosures, and they addressed the expectations of users' needs. The themes were also the same, and the most significant was the use of boilerplate and standard text:

“Accounting policies, if you take an overall view, they are just a copy of the IFRS requirements. I don't think that anybody dares remove them, since it is a requirement to describe accounting policies, but standard text does not add any value. Company specific evaluations and decisions are of interest and should be described.” (Company L - Auditor)

This view is aligned with suggestions from EFRAG (2012), as considerations regarding materiality should be related to specific information in order to reduce information overload. Another example of this type of assessment, which is common for preparers and auditors, is the disclosures presenting group companies:

“What does the reader need? I think that they need to know which countries we are in - rather than the legal entities. Just again as an example - instead of displaying 700 subsidiaries – here are the 200 most important. The rest can be seen on the website” (Company G - Auditor)

Disclosures regarding financial instruments, share-based payment and pension are considered by the auditors as being too complicated and difficult for the users to understand. From a risk perspective, financial instruments are generally seen as important information. There is, however, a problem with the presentation:

“Financial instruments and especially derivatives are a potential risk for the company, and therefore I have difficulties in marking them red. But the notes are difficult to read, and there are very few users who understand it. My guess is that there are only 20 people in Denmark who really understand the details. There is a need to consider how to communicate this in an understandable way.” (Company F - Auditor)

This assessment clearly indicates that these notes include disclosures which should be classified as information overload (Eppler and Mengis, 2004).

Order of assessment

Auditors use the same order of assessment as preparers. First, they consider the absolute size of current-year amounts, then the changes to the amounts from previous year, and finally they evaluate if the information adds value for the user. The assessment of disclosure materiality based on the concept of misstatements (Eilifsen et al., 2014) is even more prevalent compared with that of the preparers.

Users of the annual report

When assessing disclosure materiality related to the annual report, preparers and auditors claim they consider users. Some of the auditors questioned who actually read the annual report, indicating that except for professional users, it seems there is a limited use. The analysts supported this view, and it seems that they also have a limited use of the annual report:

“Regarding this company all information is available prior to the release of the annual report. It is available in the quarterly statements.”

Then you don’t need the annual report?

“I can live without it.” (Company B - User)

Another analyst was very clear regarding the notes included in the annual report:

“I have not read the notes since the company was introduced on the stock exchange.” (Company I - User)

These remarkable statements by the primary users of annual reports could suggest that the notes to the annual report are completely redundant and could be abandoned all together without any impact at all on the assessment of the company. However, while the notes might be considered superfluous, the information they provide is still to a certain degree required by the analysts.

They told us that most of the information they require is available prior to the release of the annual report through company announcements, investor presentations or external sources. This does not mean that the information is considered immaterial but only that when it is presented in the annual report, it is already known by the users.

“If they have additions to share-based performance programmes, then I will get that from the annual report. Furthermore I need detailed notes regarding tangibles and intangibles and perhaps distressed debtors, including outstanding amounts; 30, 60 and 90 days. The rest is available in the quarterly announcements.” (Company I - User)

In order for an analyst to consider a disclosure material, it had to be required in their valuation model, either as direct input or as a moderator for developments in future periods. Information that does not contribute to this are considered immaterial. The analysts use Excel models, which they update on an ongoing basis. The intensive use of Excel also explains why - if they use the notes at all - they have marked most of them yellow. The analysts generally do not consider quantitative thresholds or qualitative factors when determining disclosure materiality. They only use the figures, whereas the text is generally not read, the assumption being that if it is important to disclose a certain piece of text, it would have been presented in the management's discussion and analysis. If an amount is required in their valuation it is considered material no matter the size. Most of the figures they need are drawn from the primary financial statement, including cash flows and changes in equity. This information is generally provided at a more aggregated level compared with a specification included in the notes.

Some of the companies provide the analyst with electronic data sheets which include all the figures from the annual report. This service helps explaining the statements made by some analysts that the annual report is not used at all.

While there are significant variety in what kinds of disclosure the different groups of stakeholders consider material, the users generally agree with the preparers and auditors in their assessment of which disclosures are immaterial:

“Regarding accounting policies I have not read that for many years. I only focus on changes.” (Company G - User)

This assessment is fully aligned with the assumption made by preparers and auditors on behalf of the users. Boilerplate and standardised text add no value, whereas changes to accounting policies are considered important by all analysts, even though they do not search for that information in the notes:

“Changes in accounting policies – if they are important – I am sure that they are presented in the first part of the annual report. Therefore - do I need to read the accounting policies – no. They might as well post it on the website.” (Company F - User)

Disclosures that can moderate developments in valuation models may include information about risk:

“The question we typically get from investors or our sales staff is – what happens if the US\$ fall 5% over night, and how will it impact on the estimates? The information in this disclosure – this specific table – is used as input to answer that question. But then again I would not say that it is required information in the annual report. Such information is only used by analysts and is discussed at analysts’ meetings with the company. It is also included in our Excel models.” (Company C - User)

This statement adds to the understanding of the importance of other sources of information than the annual report. Meetings with the companies are in general considered an important source of information for analysts (Barker et al., 2013).

The users agree with the assessment by preparers and auditors that disclosures covering share-based payment and pensions are too complicated. Regarding share-based payment, it seems that the most important information is whether liabilities are covered by treasury share:

“The important thing is whether it has a potential impact on the share price. Is it covered by treasury share or do they have to issue new shares? We just need to know the potential impact on the share price.” (Company B - User)

A general comment made by the analysts relates to previous-year figures, which are assessed as immaterial since they are already listed in the Excel models.

Even though the analysts gave the impression that they did not use the disclosures in the annual report, they were interested in information regarding the company and the specific line items:

“Intangible assets – that is marked red. Of course I am looking at intangible assets – but this disclosure – it never crossed my mind to use that note.”
(Company L - User)

When confronted with the fact that there would not be much left if all information marked red was omitted, an analyst replied:

“No, but you should remember that all those notes have no impact on the share price. Are we clear on that? It’s information overload! We have the insights from the balance sheet – the total figures. All these notes are unimportant.”
(Company L - User)

It seems that the primary financial statement, which is also included in the quarterly announcements, is an important source of information, but that the level of detail in the disclosures is of limited value to the analysts.

5. Discussion

While the annual report is the responsibility of the preparer (DCA, 2010), it is also the result of an interaction with the auditors (Brennan and Grey, 2005). A key issue in the assessment of the disclosures is if users would change their decisions depending on whether the information is omitted or not (IASB, 2010). In this respect, it is necessary to understand what decisions the information is used for, and to consider the thresholds. When preparers and auditors assess whether a disclosure adds value for the user, they do not consider the information as input to a financial analysis. While they claim they consider whether the information might be useful, this consideration does not include whether it could have an impact on buy, sell or hold decisions. Preparers’ and auditors’ considerations about users’ needs for information are different from

the actual needs. Consequently, preparers and auditors do not follow the long-standing key requirements regarding “influence” on “user’s decision” (Kohler, 1957; Barker et al., 2013; EFRAG, 2012; IASB, 2015). This is a contributing factor to the perception of information overload.

The professional relationship between preparers and auditors has lasted for years, and many of the respondents in the preparers’ accounting departments have at some point during their career worked as an auditor for one of the Big 4 audit firms. Consequently, it is no surprise that preparers and auditors generally have the same perception of disclosure materiality, including a common understanding of the users, where analysts are seen as the most important. This is as expected, since sell-side analysts are considered advanced users (Brown et al., 2015). Instead of considering users’ needs as the primary assessment criterion, preparers’ and auditors’ perception of disclosure materiality can be illustrated in the following steps:

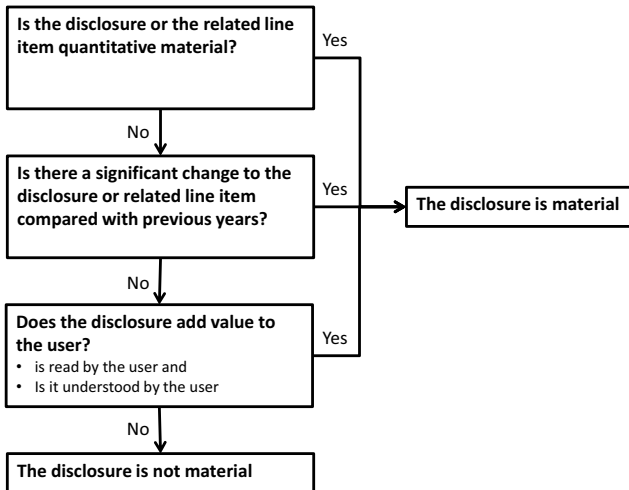


Figure 3 – Preparer’s and auditor’s perception of disclosure materiality

The primary assessment by both preparers and auditors is based on using the size of the amounts as thresholds. These thresholds can be based on the financial statement, the related line item or each line in a specification. The structure of this assessment is comparable with the approach used when

misstatements are evaluated. The difference is that evaluation of misstatements is based on standardised thresholds (Eilifsen et al., 2014), whereas assessments of disclosure materiality are context-specific and more judgmental.

Preparers and auditors assess disclosure materiality in stages, and the first stage is based on current-year figures. If this assessment does not result in a decision that the disclosure is material, respondents in the second stage compare the figures with previous year. This stage of the assessment is also judgmental and based on the same types of amounts as in the first stage. If the development deviates from an expected trend, it is more likely that the related disclosures are assessed as material. In a situation where the absolute change from previous year might be immaterial, a large relative change can be assessed as being material.

If the first and second steps do not result in a decision that the disclosure is material, a third step is considered. The third step includes qualitative characteristics, and the respondent assesses whether the disclosure adds value for the user. The qualitative characteristics consider a number of company-specific elements related to the entity's financial report. Examples are information about risks and uncertainties, accounting policy choices, expectations or stewardship. It is also considered whether the disclosure is read and understood by the user or if it is too complicated. As examples, preparers and auditors assess notes regarding financial instruments, share-based payment and pensions as valuable to the user, but they find the level of detail too complicated and believe that the users do not read them.

An important response from the analysts in our analysis is that they only to a limited extent use the disclosures as presented in the annual report. They have most of the required information available without reading the annual report. The main reason is that the required information is provided in the quarterly statements. These are available on the company's website or have been communicated directly at meetings with the companies, which is an important source of information. This practice is aligned with previous findings (Brown et al., 2015; Cole et al., 2009). We were, however, surprised that some of the analysts stated that they did not use the notes to the annual report at all, but only the primary financial statements.

When disregarding the annual report as a medium and focusing exclusively on the disclosed information – independent of what source it came from – the assessment made by the users is consistent: Users find disclosures that they use in their valuation models either directly or as modifiers of trends and numbers material. They find other disclosures immaterial. Because they use Excel to store information, calculate valuations and prepare reports, they focus on current year to update the figures. Standard text, boilerplate and previous-year figures are not useful. If the results of the financial analysis do not meet expectations, then the analysts assume that management will provide an explanation in the first part of the annual report, and not in the notes. At the detailed level they agree with the assessments made by preparers and auditors that disclosures regarding financial instruments, share-based payment and pensions are too complicated and not read.

6. Conclusion

This paper contributes by adding further aspects to the understanding of the perception of disclosure materiality, which for preparers and auditors takes place in three steps. Their assessment is based on tools for misstatements, which may be due to a lack of guidance in the area. Preparers representing listed multinational companies and auditors representing Big 4 audit firms are not aligned with the users of annual reports when assessing disclosure materiality. The users are financial analysts representing multinational financial institutions. Consequently, there are too many disclosures presented in the notes to the IFRS based annual report, indicating an information overload (EFRAG, 2012). This supports the view that clarification regarding the use of disclosure materiality is needed (IASB, 2015). The findings can be used when standard-setters develop guidance on application of disclosure materiality.

The paper also indicates that the annual report as a source of information competes with the company's website and investor relations (Brown et al., 2015). If analysts need additional information, they prefer to search the company's website or other sources rather than consult the annual report. In that respect, they consider information made available at the company's website as credible, even though it might not be subject to external audit.

Our case study supports the risk indicated by EFRAG (2012) that too much immaterial information in a note might obscure useful or relevant information (IAASB, 2014). Even though these considerations are relevant, this is, however, not seen as a major problem because the analysts simply do not use irrelevant disclosures. One of the analysts made this evaluation and stated that “... *all those notes have no impact on the share prices. It’s information overload.*” (Company L - User)

There are some important implications of these findings. First, it raises the question why companies prepare an average of 46 pages of disclosures when the use and value of this is limited? Furthermore, there seems to be a need for alignment between the users’ needs for information that is based on input to financial analysis, and preparers’ and auditors’ perception of disclosure materiality. IASB’s drafted practice statement (IASB, 2015) does not clearly address this difference. The annual report has a long tradition, and the auditors have seen it as the most important assurance object. If users primarily use other sources of information, preparers and auditors might consider if the companies’ websites should be the main focus of assurance services going forward. These implications could be of interest for further research. In relation to this, a quantification of the potential for cutting clutter (FRC, 2011) seems to be of immediate interest.

There are some obvious weaknesses in and limitations to the study. The analyses of the perception of materiality are based on a limited number of respondents, and users are only defined as sell-side analysts. Other user groups could be included in order to support the findings further. The analyses could also benefit from extending the population to include stakeholders from other countries. These limitations notwithstanding, the study contributes to the understanding of how disclosure materiality is perceived.

Appendix 1 – Interview guide

1. Assessment of relevance of disclosure for the user

- 1.1. Who do you consider to be the primary user of the annual report? (only preparers and auditors)
- 1.2. Which elements did you consider in your assessment?
- 1.3. Are there any differences in these elements depending on whether the disclosure is relevant to the user – and if so – which elements?
- 1.4. How do you balance the elements included in your assessment of materiality?

Appendix 2 – Respondents

Company	Preparer	Auditor	User
A	Female - Vice president	Males State Authorised Auditor Big 4 Partner	Males Senior Equity Analyst
B	Male - Vice president		
C	Male - Director		
D	Male - Director		
E	Male - Vice president		
F	Male - Senior manager		
G	Male - Director		
H	Male - Senior manager		
I	Female - Senior manager and Male - Vice president		
J	Female - Director		
K	Male - Vice president		
L	Male - Manager		

References

Acito, Andrew A., Jeffrey J. Burks, and W. Bruce Johnson. "Materiality decisions and the correction of accounting errors." *The Accounting Review* 84.3 (2009): 659-688.

Amel-Zadeh, Amir. "Materiality of Nonfinancial Information: Theoretical Foundations and Empirical Evidence." *Available at SSRN* (2015).

Association of Chartered Certified Accountants (ACCA) "Re-assessing the value of corporate reporting – January 2012". <http://www.accaglobal.com/content/dam/acca/global/PDF-technical/financial-reporting/reassessing-value.pdf>

Barker, Richard, et al. "Response of the EAA FRSC to the EFRAG/ANC/FRC Discussion Paper: Towards a Disclosure Framework for the Notes." *Accounting in Europe* 10.1 (2013): 1-26.

Bernstein, Leopold A. "The concept of materiality." *Accounting Review* (1967): 86-95.

Botosan, Christine A. "Disclosure and the cost of capital: what do we know?" *Accounting and business research* 36.sup1 (2006): 31-40.

Botosan, Christine A., and Marlene A. Plumlee. "A re-examination of disclosure level and the expected cost of equity capital." *Journal of accounting research* 40.1 (2002): 21-40.

Brennan, Niamh M., and Sidney J. Gray. "The impact of materiality: accounting's best kept secret." *Asian Academy of Management Journal of Accounting and Finance* 1 (2005): 1-31.

Brown, Lawrence D., et al. "Inside the "Black Box" of Sell-Side Financial Analysts." *Journal of Accounting Research* 53.1 (2015): 1-47.

Cascino, Stefano, et al. "Who uses financial reports and for what purpose? Evidence from capital providers." *Accounting in Europe* 11.2 (2014): 185-209.

- Cole, V., Branson, J., & Breesch, D. How to measure the comparability of financial statements? *International journal of managerial and financial accounting*, 1(4) (2009), 379-397.
- Danish Companies Act, re. Executive Order no. 172 of 22 February 2010. Available on https://danishbusinessauthority.dk/sites/default/files/danish_companies_act.pdf
- Dicksee, Lawrence Robert. *Auditing: a practical manual for auditors*. Gee, 1907.
- Doupnik, T. S. and Seese, L. P. (2001) "Geographical area disclosures under SFAS 131: materiality and fineness". *Journal of International Accounting, Auditing and Taxation*, 10(2) (2001), pp. 117–138.
- Eppler, Martin J., and Jeanne Mengis. "The concept of information overload: A review of literature from organization science, accounting, marketing, MIS, and related disciplines." *The information society* 20.5 (2004): 325-344.
- EFRAG, ANC and FRC (2012) *Towards a Disclosure Framework for the Notes (discussion paper)* (Brussels: EFRAG).
- Eilifsen, Aasmund, and William F. Messier, Jr. "Materiality guidance of the major public accounting firms." *Auditing: A Journal of Practice and Theory* (2014).
- Eilifsen, Aasmund, Messier, William F., Steven M. Glover, and Douglas F. Prawitt. "*Auditing and assurance services*." (2014).
- Eisenhardt, Kathleen M. "Building theories from case study research." *Academy of management review* 14.4 (1989): 532-550.
- Fearnley, Stella, Vivien Beattie, and Tony Hines. *Reaching key financial reporting decisions: how directors and auditors interact*. John Wiley & Sons, 2011.
- Fedders, John M. "Qualitative materiality: The birth, struggles, and demise of an unworkable standard." *Cath. UL Rev.* 48 (1998): 41.

FBA - Financial Business Act - Consolidating Act no. 885 of 8 August 2011. https://www.finanstilsynet.dk/en/Indberetning/~/_media/F0D5D6E2E50745A1A9B647D85A6896FD.ashx

FRC 2009. *Louder than words: principles and actions for making corporate reports less complex and more relevant*. Financial Reporting Council, London.

FRC 2011. *Cutting clutter: combating clutter in annual reports*. Financial Reporting Council, London.

Hussain, Alfiatul RM, et al. "Accounting misstatements and monitoring mechanisms: A literature review." *Asia Pacific Journal of Accounting and Finance* 3 (2014): 1.

International Accounting Standards Board (IASB). "*International Accounting Standards - IAS 1 - Presentation of Financial Statements*". 6 September 2007.

International Accounting Standards Board (IASB). "*The Conceptual Framework for Financial Reporting*". September 2010.

International Accounting Standards Board (IASB). Exposure draft - ED/2015/8. "*IFRS Practice Statement Application of Materiality to Financial Statements*".

International Auditing and Assurance Standards Board (IAASB). Exposure draft - May 2014. *Proposed Changes to the International Standards on Auditing (ISAs)*. Addressing Disclosures in the Audit of Financial Statements.

Keating, Patrick J. "A framework for classifying and evaluating the theoretical contributions of case research in management accounting." *Journal of management accounting research* 7 (1995): 66.

Kohler, 1957. *A Dictionary for Accountants*. Englewood Cliffs, Prentice Hall.

Kvale, Steinar, and Svend Brinkmann. *Interviews: Learning the craft of qualitative research interviewing*. Sage, 2009.

Lang, Mark, and Lorien Stice-Lawrence. "Textual analysis and international financial reporting: Large sample evidence." *Journal of Accounting and Economics* 60.2 (2015): 110-135.

- Lawrence, Alastair. "Individual investors and financial disclosure." *Journal of Accounting and Economics* 56.1 (2013): 130-147.
- Leuz, Christian, and Robert E. Verrecchia. "The economic consequences of increased disclosure (digest summary)." *Journal of accounting research* 38 (2000): 91-124.
- Leuz, Christian, and Peter D. Wysocki. "The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research." *Journal of Accounting Research* 54.2 (2016): 525-622.
- Liu, C.-S. and Mittelstaedt, H. F. "Materiality judgments and disclosure of retiree health care costs under SFAS No. 81". *Review of Accounting Studies*, 7(4) (2002), pp. 405–434.
- Messier Jr, William F., Nonna Martinov-Bennie, and Aasmund Eilifsen. "A review and integration of empirical research on materiality: Two decades later." *Auditing: A Journal of Practice & Theory* 24.2 (2005): 153-187.
- NZCA and ICAS, 2011. *Losing the Excess Baggage – Reducing Disclosures in Financial Statements to What’s Important*. Napier Edinburgh: New Zealand Institute of Chartered Accountants and The Institute of Chartered Accountants of Scotland.
- Public Company Accounting Oversight Board (PCAOB) – Release No. 2010-004, August 5, 2010.
- PwC (2015). "Searching for buried treasure" available at www.pwc.com
- Rubin, Herbert J., and Irene S. Rubin. *Qualitative interviewing: The art of hearing data*. Sage, 2011.
- Schipper, Katherine. "Required disclosures in financial reports." *The Accounting Review* 82.2 (2007): 301-326.
- Szabo, D. G. Nordic and European Company Law, LSN research paper series no.10–20 (2012).

Webster, Jane, and Richard T. Watson. "Analyzing the past to prepare for the future: Writing a literature review." *Management Information Systems Quarterly* 26.2 (2002): 3.

Yin, Robert K. *Case study research: Design and methods*. Vol. 5. Sage, 2009.

TITLER I PH.D.SERIEN:**2004**

1. Martin Grieger
Internet-based Electronic Marketplaces and Supply Chain Management
2. Thomas Basbøll
*LIKENESS
A Philosophical Investigation*
3. Morten Knudsen
*Beslutningens vaklen
En systemteoretisk analyse af moderniseringen af et amtskommunalt sundhedsvæsen 1980-2000*
4. Lars Bo Jeppesen
*Organizing Consumer Innovation
A product development strategy that is based on online communities and allows some firms to benefit from a distributed process of innovation by consumers*
5. Barbara Dragsted
*SEGMENTATION IN TRANSLATION AND TRANSLATION MEMORY SYSTEMS
An empirical investigation of cognitive segmentation and effects of integrating a TM system into the translation process*
6. Jeanet Hardis
*Sociale partnerskaber
Et socialkonstruktivistisk casestudie af partnerskabsaktørers virkelighedsopfattelse mellem identitet og legitimitet*
7. Henriette Hallberg Thygesen
System Dynamics in Action
8. Carsten Mejer Plath
Strategisk Økonomistyring
9. Annemette Kjærgaard
Knowledge Management as Internal Corporate Venturing
10. Knut Arne Hovdal
*De professionelle i endring
Norsk ph.d., ej til salg gennem Samfundslitteratur*
11. Søren Jeppesen
*Environmental Practices and Greening Strategies in Small Manufacturing Enterprises in South Africa
– A Critical Realist Approach*
12. Lars Frode Frederiksen
*Industriel forskningsledelse
– på sporet af mønstre og samarbejde i danske forskningsintensive virksomheder*
13. Martin Jes Iversen
*The Governance of GN Great Nordic
– in an age of strategic and structural transitions 1939-1988*
14. Lars Pynt Andersen
*The Rhetorical Strategies of Danish TV Advertising
A study of the first fifteen years with special emphasis on genre and irony*
15. Jakob Rasmussen
Business Perspectives on E-learning
16. Sof Thrane
*The Social and Economic Dynamics of Networks
– a Weberian Analysis of Three Formalised Horizontal Networks*
17. Lene Nielsen
Engaging Personas and Narrative Scenarios – a study on how a user-centered approach influenced the perception of the design process in the e-business group at AstraZeneca
18. S.J Valstad
*Organisationsidentitet
Norsk ph.d., ej til salg gennem Samfundslitteratur*

19. Thomas Lyse Hansen
Six Essays on Pricing and Weather risk in Energy Markets
20. Sabine Madsen
Emerging Methods – An Interpretive Study of ISD Methods in Practice
21. Evis Sinani
The Impact of Foreign Direct Investment on Efficiency, Productivity Growth and Trade: An Empirical Investigation
22. Bent Meier Sørensen
Making Events Work Or, How to Multiply Your Crisis
23. Pernille Schnoor
*Brand Ethos
Om troværdige brand- og virksomhedsidentiteter i et retorisk og diskursteoretisk perspektiv*
24. Sidsel Fabech
*Von welchem Österreich ist hier die Rede?
Diskursive forhandlinger og magtkampe mellem rivaliserende nationale identitetskonstruktioner i østrigske pressediskurser*
25. Klavs Odgaard Christensen
*Sprogpolitik og identitetsdannelse i flersprogede forbundsstater
Et komparativt studie af Schweiz og Canada*
26. Dana B. Minbaeva
Human Resource Practices and Knowledge Transfer in Multinational Corporations
27. Holger Højlund
*Markedets politiske fornuft
Et studie af velfærdens organisering i perioden 1990-2003*
28. Christine Mølgaard Frandsen
*A.s erfaring
Om mellemværendets praktik i en transformation af mennesket og subjektiviteten*
29. Sine Nørholm Just
The Constitution of Meaning – A Meaningful Constitution? Legitimacy, identity, and public opinion in the debate on the future of Europe
- 2005**
1. Claus J. Varnes
Managing product innovation through rules – The role of formal and structured methods in product development
2. Helle Hedegaard Hein
Mellem konflikt og konsensus – Dialogudvikling på hospitalsklinikker
3. Axel Rosenø
Customer Value Driven Product Innovation – A Study of Market Learning in New Product Development
4. Søren Buhl Pedersen
*Making space
An outline of place branding*
5. Camilla Funck Ellehave
*Differences that Matter
An analysis of practices of gender and organizing in contemporary work-places*
6. Rigmor Madeleine Lond
Styring af kommunale forvaltninger
7. Mette Aagaard Andreassen
Supply Chain versus Supply Chain Benchmarking as a Means to Managing Supply Chains
8. Caroline Aggestam-Pontoppidan
*From an idea to a standard
The UN and the global governance of accountants' competence*
9. Norsk ph.d.
10. Vivienne Heng Ker-ni
An Experimental Field Study on the

- Effectiveness of Grocer Media Advertising*
Measuring Ad Recall and Recognition, Purchase Intentions and Short-Term Sales
11. Allan Mortensen
Essays on the Pricing of Corporate Bonds and Credit Derivatives
12. Remo Stefano Chiari
Figure che fanno conoscere
Itinerario sull'idea del valore cognitivo e espressivo della metafora e di altri tropi da Aristotele e da Vico fino al cognitivismo contemporaneo
13. Anders McIlquham-Schmidt
Strategic Planning and Corporate Performance
An integrative research review and a meta-analysis of the strategic planning and corporate performance literature from 1956 to 2003
14. Jens Geersbro
The TDF – PMI Case
Making Sense of the Dynamics of Business Relationships and Networks
15. Mette Andersen
Corporate Social Responsibility in Global Supply Chains
Understanding the uniqueness of firm behaviour
16. Eva Boxenbaum
Institutional Genesis: Micro – Dynamic Foundations of Institutional Change
17. Peter Lund-Thomsen
Capacity Development, Environmental Justice NGOs, and Governance: The Case of South Africa
18. Signe Jarlov
Konstruktioner af offentlig ledelse
19. Lars Stæhr Jensen
Vocabulary Knowledge and Listening Comprehension in English as a Foreign Language
- An empirical study employing data elicited from Danish EFL learners*
20. Christian Nielsen
Essays on Business Reporting
Production and consumption of strategic information in the market for information
21. Marianne Thejls Fischer
Egos and Ethics of Management Consultants
22. Annie Bekke Kjær
Performance management i Process-innovation
– belyst i et social-konstruktivistisk perspektiv
23. Suzanne Dee Pedersen
GENTAGELSENS METAMORFOSE
Om organisering af den kreative gøren i den kunstneriske arbejdspraksis
24. Benedikte Dorte Rosenbrink
Revenue Management
Økonomiske, konkurrencemæssige & organisatoriske konsekvenser
25. Thomas Riise Johansen
Written Accounts and Verbal Accounts
The Danish Case of Accounting and Accountability to Employees
26. Ann Fogelgren-Pedersen
The Mobile Internet: Pioneering Users' Adoption Decisions
27. Birgitte Rasmussen
Ledelse i fællesskab – de tillidsvalgte fornyende rolle
28. Gitte Thit Nielsen
Remerger
– skabende ledelseskrafter i fusion og opkøb
29. Carmine Gioia
A MICROECONOMETRIC ANALYSIS OF MERGERS AND ACQUISITIONS

30. Ole Hinz
Den effektive forandringsleder: pilot, pædagog eller politiker?
Et studie i arbejdslederes meningstilskrivninger i forbindelse med vellykket gennemførelse af ledelsesinitierede forandringsprojekter
31. Kjell-Åge Gotvassli
Et praksisbasert perspektiv på dynamiske læringsnettverk i toppidretten
Norsk ph.d., ej til salg gennem Samfundslitteratur
32. Henriette Langstrup Nielsen
Linking Healthcare
An inquiry into the changing performances of web-based technology for asthma monitoring
33. Karin Tweddell Levinsen
Virtuel Uddannelsespraksis
Master i IKT og Læring – et casestudie i hvordan proaktiv proceshåndtering kan forbedre praksis i virtuelle læringsmiljøer
34. Anika Liversage
Finding a Path
Labour Market Life Stories of Immigrant Professionals
35. Kasper Elmquist Jørgensen
Studier i samspillet mellem stat og erhvervsliv i Danmark under 1. verdenskrig
36. Finn Janning
A DIFFERENT STORY
Seduction, Conquest and Discovery
37. Patricia Ann Plackett
Strategic Management of the Radical Innovation Process
Leveraging Social Capital for Market Uncertainty Management
2. Niels Rom-Poulsen
Essays in Computational Finance
3. Tina Brandt Husman
Organisational Capabilities, Competitive Advantage & Project-Based Organisations
The Case of Advertising and Creative Good Production
4. Mette Rosenkrands Johansen
Practice at the top
– how top managers mobilise and use non-financial performance measures
5. Eva Parum
Corporate governance som strategisk kommunikations- og ledelsesværktøj
6. Susan Aagaard Petersen
Culture's Influence on Performance Management: The Case of a Danish Company in China
7. Thomas Nicolai Pedersen
The Discursive Constitution of Organizational Governance – Between unity and differentiation
The Case of the governance of environmental risks by World Bank environmental staff
8. Cynthia Selin
Volatile Visions: Transactions in Anticipatory Knowledge
9. Jesper Banghøj
Financial Accounting Information and Compensation in Danish Companies
10. Mikkel Lucas Overby
Strategic Alliances in Emerging High-Tech Markets: What's the Difference and does it Matter?
11. Tine Aage
External Information Acquisition of Industrial Districts and the Impact of Different Knowledge Creation Dimensions

2006

1. Christian Vintergaard
Early Phases of Corporate Venturing

- A case study of the Fashion and Design Branch of the Industrial District of Montebelluna, NE Italy*
12. Mikkel Flyverbom
*Making the Global Information Society Governable
On the Governmentality of Multi-Stakeholder Networks*
 13. Anette Grønning
*Personen bag
Tilstedevær i e-mail som interaktionsform mellem kunde og medarbejder i dansk forsikringskontekst*
 14. Jørn Helder
*One Company – One Language?
The NN-case*
 15. Lars Bjerregaard Mikkelsen
*Differing perceptions of customer value
Development and application of a tool for mapping perceptions of customer value at both ends of customer-supplier dyads in industrial markets*
 16. Lise Granerud
*Exploring Learning
Technological learning within small manufacturers in South Africa*
 17. Esben Rahbek Pedersen
*Between Hopes and Realities:
Reflections on the Promises and Practices of Corporate Social Responsibility (CSR)*
 18. Ramona Samson
*The Cultural Integration Model and European Transformation.
The Case of Romania*
- 2007**
1. Jakob Vestergaard
*Discipline in The Global Economy
Panopticism and the Post-Washington Consensus*
 2. Heidi Lund Hansen
*Spaces for learning and working
A qualitative study of change of work, management, vehicles of power and social practices in open offices*
 3. Sudhanshu Rai
*Exploring the internal dynamics of software development teams during user analysis
A tension enabled Institutionalization Model; "Where process becomes the objective"*
 4. Norsk ph.d.
Ej til salg gennem Samfundslitteratur
 5. Serden Ozcan
*EXPLORING HETEROGENEITY IN ORGANIZATIONAL ACTIONS AND OUTCOMES
A Behavioural Perspective*
 6. Kim Sundtoft Hald
*Inter-organizational Performance Measurement and Management in Action
– An Ethnography on the Construction of Management, Identity and Relationships*
 7. Tobias Lindeberg
*Evaluative Technologies
Quality and the Multiplicity of Performance*
 8. Merete Wedell-Wedellsborg
*Den globale soldat
Identitetsdannelse og identitetsledelse i multinationale militære organisationer*
 9. Lars Frederiksen
*Open Innovation Business Models
Innovation in firm-hosted online user communities and inter-firm project ventures in the music industry
– A collection of essays*
 10. Jonas Gabrielsen
Retorisk toposlære – fra statisk 'sted' til persuasiv aktivitet

11. Christian Moldt-Jørgensen
Fra meningsløs til meningsfuld evaluering.
Anvendelsen af studentertilfredsheds-målinger på de korte og mellemlange videregående uddannelser set fra et psykodynamisk systemperspektiv
12. Ping Gao
Extending the application of actor-network theory
Cases of innovation in the telecommunications industry
13. Peter Mejlby
Frihed og fængsel, en del af den samme drøm?
Et phronetisk baseret casestudie af frigørelsens og kontrollens sam-eksistens i værdibaseret ledelse!
14. Kristina Birch
Statistical Modelling in Marketing
15. Signe Poulsen
Sense and sensibility:
The language of emotional appeals in insurance marketing
16. Anders Bjerre Trolle
Essays on derivatives pricing and dynamic asset allocation
17. Peter Feldhütter
Empirical Studies of Bond and Credit Markets
18. Jens Henrik Eggert Christensen
Default and Recovery Risk Modeling and Estimation
19. Maria Theresa Larsen
Academic Enterprise: A New Mission for Universities or a Contradiction in Terms?
Four papers on the long-term implications of increasing industry involvement and commercialization in academia
20. Morten Wellendorf
Postimplementering af teknologi i den offentlige forvaltning
Analysen af en organisations kontinuerlige arbejde med informations-teknologi
21. Ekaterina Mhaanna
Concept Relations for Terminological Process Analysis
22. Stefan Ring Thorbjørnsen
Forsvaret i forandring
Et studie i officerers kapabiliteter under påvirkning af omverdenens forandringspres mod øget styring og læring
23. Christa Breum Amhøj
Det selvskabte medlemskab om managementsstaten, dens styringsteknologier og indbyggere
24. Karoline Bromose
Between Technological Turbulence and Operational Stability
– An empirical case study of corporate venturing in TDC
25. Susanne Justesen
Navigating the Paradoxes of Diversity in Innovation Practice
– A Longitudinal study of six very different innovation processes – in practice
26. Luise Noring Henler
Conceptualising successful supply chain partnerships
– Viewing supply chain partnerships from an organisational culture perspective
27. Mark Mau
Kampen om telefonen
Det danske telefonvæsen under den tyske besættelse 1940-45
28. Jakob Halskov
The semiautomatic expansion of existing terminological ontologies using knowledge patterns discovered

- on the WWW – an implementation and evaluation*
29. Gergana Koleva
European Policy Instruments Beyond Networks and Structure: The Innovative Medicines Initiative
 30. Christian Geisler Asmussen
Global Strategy and International Diversity: A Double-Edged Sword?
 31. Christina Holm-Petersen
*Stolthed og fordom
Kultur- og identitetsarbejde ved skabelsen af en ny sengeafdeling gennem fusion*
 32. Hans Peter Olsen
*Hybrid Governance of Standardized States
Causes and Contours of the Global Regulation of Government Auditing*
 33. Lars Bøge Sørensen
Risk Management in the Supply Chain
 34. Peter Aagaard
*Det unikkes dynamikker
De institutionelle mulighedsbetingelser bag den individuelle udforskning i professionelt og frivilligt arbejde*
 35. Yun Mi Antorini
*Brand Community Innovation
An Intrinsic Case Study of the Adult Fans of LEGO Community*
 36. Joachim Lynggaard Boll
*Labor Related Corporate Social Performance in Denmark
Organizational and Institutional Perspectives*
- 2008**
1. Frederik Christian Vinten
Essays on Private Equity
 2. Jesper Clement
Visual Influence of Packaging Design on In-Store Buying Decisions
 3. Marius Brostrøm Kousgaard
*Tid til kvalitetsmåling?
– Studier af indrulleringsprocesser i forbindelse med introduktionen af kliniske kvalitetsdatabaser i speciallægepraksissektoren*
 4. Irene Skovgaard Smith
*Management Consulting in Action
Value creation and ambiguity in client-consultant relations*
 5. Anders Rom
*Management accounting and integrated information systems
How to exploit the potential for management accounting of information technology*
 6. Marina Candi
Aesthetic Design as an Element of Service Innovation in New Technology-based Firms
 7. Morten Schnack
*Teknologi og tværfaglighed
– en analyse af diskussionen omkring indførelse af EPJ på en hospitalsafdeling*
 8. Helene Balslev Clausen
Juntos pero no revueltos – un estudio sobre emigrantes norteamericanos en un pueblo mexicano
 9. Lise Justesen
*Kunsten at skrive revisionsrapporter.
En beretning om forvaltningsrevisionsens beretninger*
 10. Michael E. Hansen
The politics of corporate responsibility: CSR and the governance of child labor and core labor rights in the 1990s
 11. Anne Roepstorff
Holdning for handling – en etnologisk undersøgelse af Virksomheders Sociale Ansvar/CSR

12. Claus Bajlum
Essays on Credit Risk and Credit Derivatives
13. Anders Bojesen
The Performative Power of Competence – an Inquiry into Subjectivity and Social Technologies at Work
14. Satu Reijonen
*Green and Fragile
A Study on Markets and the Natural Environment*
15. Ilduara Busta
*Corporate Governance in Banking
A European Study*
16. Kristian Anders Hvass
*A Boolean Analysis Predicting Industry Change: Innovation, Imitation & Business Models
The Winning Hybrid: A case study of isomorphism in the airline industry*
17. Trine Paludan
De uvidende og de udviklingsparate Identitet som mulighed og restriktion blandt fabriksarbejdere på det aftayloriserede fabriksgulv
18. Kristian Jakobsen
Foreign market entry in transition economies: Entry timing and mode choice
19. Jakob Elming
Syntactic reordering in statistical machine translation
20. Lars Brømsøe Termansen
*Regional Computable General Equilibrium Models for Denmark
Three papers laying the foundation for regional CGE models with agglomeration characteristics*
21. Mia Reinholdt
The Motivational Foundations of Knowledge Sharing
22. Frederikke Krogh-Meibom
*The Co-Evolution of Institutions and Technology
– A Neo-Institutional Understanding of Change Processes within the Business Press – the Case Study of Financial Times*
23. Peter D. Ørberg Jensen
OFFSHORING OF ADVANCED AND HIGH-VALUE TECHNICAL SERVICES: ANTECEDENTS, PROCESS DYNAMICS AND FIRMLEVEL IMPACTS
24. Pham Thi Song Hanh
Functional Upgrading, Relational Capability and Export Performance of Vietnamese Wood Furniture Producers
25. Mads Vangkilde
*Why wait?
An Exploration of first-mover advantages among Danish e-grocers through a resource perspective*
26. Hubert Buch-Hansen
*Rethinking the History of European Level Merger Control
A Critical Political Economy Perspective*
- 2009**
1. Vivian Lindhardsen
From Independent Ratings to Communal Ratings: A Study of CWA Raters' Decision-Making Behaviours
2. Guðrið Weihe
Public-Private Partnerships: Meaning and Practice
3. Chris Nøkkentved
*Enabling Supply Networks with Collaborative Information Infrastructures
An Empirical Investigation of Business Model Innovation in Supplier Relationship Management*
4. Sara Louise Muhr
Wound, Interrupted – On the Vulnerability of Diversity Management

5. Christine Sestoft
Forbrugeradfærd i et Stats- og Livsformsteoretisk perspektiv
6. Michael Pedersen
Tune in, Breakdown, and Reboot: On the production of the stress-fit self-managing employee
7. Salla Lutz
Position and Reposition in Networks – Exemplified by the Transformation of the Danish Pine Furniture Manufacturers
8. Jens Forssbæck
Essays on market discipline in commercial and central banking
9. Tine Murphy
Sense from Silence – A Basis for Organised Action
How do Sensemaking Processes with Minimal Sharing Relate to the Reproduction of Organised Action?
10. Sara Malou Strandvad
Inspirations for a new sociology of art: A sociomaterial study of development processes in the Danish film industry
11. Nicolaas Mouton
On the evolution of social scientific metaphors: A cognitive-historical enquiry into the divergent trajectories of the idea that collective entities – states and societies, cities and corporations – are biological organisms.
12. Lars Andreas Knutsen
Mobile Data Services: Shaping of user engagements
13. Nikolaos Theodoros Korfiatis
Information Exchange and Behavior
A Multi-method Inquiry on Online Communities
14. Jens Albæk
Forestillinger om kvalitet og tværfaglighed på sygehuse
– skabelse af forestillinger i læge- og plejegrupperne angående relevans af nye idéer om kvalitetsudvikling gennem tolkningsprocesser
15. Maja Lotz
The Business of Co-Creation – and the Co-Creation of Business
16. Gitte P. Jakobsen
Narrative Construction of Leader Identity in a Leader Development Program Context
17. Dorte Hermansen
“Living the brand” som en brandorienteret dialogisk praksis: Om udvikling af medarbejdernes brandorienterede dømmekraft
18. Aseem Kinra
Supply Chain (logistics) Environmental Complexity
19. Michael Nørager
How to manage SMEs through the transformation from non innovative to innovative?
20. Kristin Wallevik
Corporate Governance in Family Firms
The Norwegian Maritime Sector
21. Bo Hansen Hansen
Beyond the Process
Enriching Software Process Improvement with Knowledge Management
22. Annemette Skot-Hansen
Franske adjektivisk afledte adverbier, der tager præpositionssyntagmer indledt med præpositionen à som argumenter
En valensgrammatisk undersøgelse
23. Line Gry Knudsen
Collaborative R&D Capabilities
In Search of Micro-Foundations

24. Christian Scheuer
*Employers meet employees
Essays on sorting and globalization*
25. Rasmus Johnsen
*The Great Health of Melancholy
A Study of the Pathologies of Performativity*
26. Ha Thi Van Pham
*Internationalization, Competitiveness
Enhancement and Export Performance
of Emerging Market Firms:
Evidence from Vietnam*
27. Henriette Balieu
*Kontrollbegrebets betydning for kausal-
tivalternationen i spansk
En kognitiv-typologisk analyse*
- 2010**
1. Yen Tran
*Organizing Innovation in Turbulent
Fashion Market
Four papers on how fashion firms create
and appropriate innovation value*
2. Anders Raastrup Kristensen
*Metaphysical Labour
Flexibility, Performance and Commitment
in Work-Life Management*
3. Margrét Sigrún Sigurdardóttir
*Dependently independent
Co-existence of institutional logics in
the recorded music industry*
4. Ásta Dis Óladóttir
*Internationalization from a small domestic
base:
An empirical analysis of Economics and
Management*
5. Christine Secher
*E-deltagelse i praksis – politikernes og
forvaltningens medkonstruktion og
konsekvenserne heraf*
6. Marianne Stang Våland
*What we talk about when we talk
about space:*
7. Rex Degnegaard
*Strategic Change Management
Change Management Challenges in
the Danish Police Reform*
8. Ulrik Schultz Brix
*Værdi i rekruttering – den sikre beslutning
En pragmatisk analyse af perception
og synliggørelse af værdi i rekrutterings-
og udvælgelsesarbejdet*
9. Jan Ole Similå
*Kontraktsledelse
Relasjonen mellom virksomhetsledelse
og kontraktshåndtering, belyst via fire
norske virksomheter*
10. Susanne Boch Waldorff
*Emerging Organizations: In between
local translation, institutional logics
and discourse*
11. Brian Kane
*Performance Talk
Next Generation Management of
Organizational Performance*
12. Lars Ohnemus
*Brand Thrust: Strategic Branding and
Shareholder Value
An Empirical Reconciliation of two
Critical Concepts*
13. Jesper Schlamovitz
*Håndtering af usikkerhed i film- og
byggeprojekter*
14. Tommy Moesby-Jensen
*Det faktiske livs forbindtlighed
Føroskratisk informeret, ny-aristotelisk
ἦθος-tænkning hos Martin Heidegger*
15. Christian Fich
*Two Nations Divided by Common
Values
French National Habitus and the
Rejection of American Power*

16. Peter Beyer
Processer, sammenhængskraft og fleksibilitet
Et empirisk casestudie af omstillingsforløb i fire virksomheder
17. Adam Buchhorn
Markets of Good Intentions
Constructing and Organizing Biogas Markets Amid Fragility and Controversy
18. Cecilie K. Moesby-Jensen
Social læring og fælles praksis
Et mixed method studie, der belyser læringskonsekvenser af et lederkursus for et praksisfællesskab af offentlige mellemledere
19. Heidi Boye
Fødevarer og sundhed i sen-modernismen
– En indsigt i hyggefænomenet og de relaterede fødevarerpraksisser
20. Kristine Munkgård Pedersen
Flygtige forbindelser og midlertidige mobiliseringer
Om kulturel produktion på Roskilde Festival
21. Oliver Jacob Weber
Causes of Intercompany Harmony in Business Markets – An Empirical Investigation from a Dyad Perspective
22. Susanne Ekman
Authority and Autonomy
Paradoxes of Modern Knowledge Work
23. Anette Frey Larsen
Kvalitetsledelse på danske hospitaler
– Ledelsernes indflydelse på introduktion og vedligeholdelse af kvalitetsstrategier i det danske sundhedsvæsen
24. Toyoko Sato
Performativity and Discourse: Japanese Advertisements on the Aesthetic Education of Desire
25. Kenneth Brinch Jensen
Identifying the Last Planner System
Lean management in the construction industry
26. Javier Busquets
Orchestrating Network Behavior for Innovation
27. Luke Patey
The Power of Resistance: India's National Oil Company and International Activism in Sudan
28. Mette Vedel
Value Creation in Triadic Business Relationships. Interaction, Interconnection and Position
29. Kristian Tørning
Knowledge Management Systems in Practice – A Work Place Study
30. Qingxin Shi
An Empirical Study of Thinking Aloud
Usability Testing from a Cultural Perspective
31. Tanja Juul Christiansen
Corporate blogging: Medarbejderes kommunikative handlekraft
32. Malgorzata Ciesielska
Hybrid Organisations.
A study of the Open Source – business setting
33. Jens Dick-Nielsen
Three Essays on Corporate Bond Market Liquidity
34. Sabrina Speiermann
Modstandens Politik
Kampagnestyling i Velfærdsstaten.
En diskussion af trafikcampagners styringspotentiale
35. Julie Uldam
Fickle Commitment. Fostering political engagement in 'the flighty world of online activism'

36. Annegrete Juul Nielsen
Traveling technologies and transformations in health care
37. Athur Mühlen-Schulte
Organising Development Power and Organisational Reform in the United Nations Development Programme
38. Louise Rygaard Jonas
Branding på butiksgulvet Et case-studie af kultur- og identitetsarbejdet i Kvickly
8. Ole Helby Petersen
Public-Private Partnerships: Policy and Regulation – With Comparative and Multi-level Case Studies from Denmark and Ireland
9. Morten Krogh Petersen
'Good' Outcomes. Handling Multiplicity in Government Communication
10. Kristian Tangsgaard Hvelplund
Allocation of cognitive resources in translation - an eye-tracking and key-logging study

2011

1. Stefan Fraenkel
Key Success Factors for Sales Force Readiness during New Product Launch A Study of Product Launches in the Swedish Pharmaceutical Industry
2. Christian Plesner Rossing
International Transfer Pricing in Theory and Practice
3. Tobias Dam Hede
Samtalekunst og ledelsesdisciplin – en analyse af coachingsdiskursens genealogi og governmentality
4. Kim Pettersson
Essays on Audit Quality, Auditor Choice, and Equity Valuation
5. Henrik Merkelsen
The expert-lay controversy in risk research and management. Effects of institutional distances. Studies of risk definitions, perceptions, management and communication
6. Simon S. Torp
Employee Stock Ownership: Effect on Strategic Management and Performance
7. Mie Harder
Internal Antecedents of Management Innovation
11. Moshe Yonatany
The Internationalization Process of Digital Service Providers
12. Anne Vestergaard
Distance and Suffering Humanitarian Discourse in the age of Mediatization
13. Thorsten Mikkelsen
Personlighedens indflydelse på forretningsrelationer
14. Jane Thostrup Jagd
Hvorfor fortsætter fusionsbølgen udover "the tipping point"? – en empirisk analyse af information og kognitioner om fusioner
15. Gregory Gimpel
Value-driven Adoption and Consumption of Technology: Understanding Technology Decision Making
16. Thomas Stengade Sønderkov
Den nye mulighed Social innovation i en forretningsmæssig kontekst
17. Jeppe Christoffersen
Donor supported strategic alliances in developing countries
18. Vibeke Vad Baunsgaard
Dominant Ideological Modes of Rationality: Cross functional

- integration in the process of product innovation*
19. Throstur Olaf Sigurjonsson
Governance Failure and Iceland's Financial Collapse
 20. Allan Sall Tang Andersen
Essays on the modeling of risks in interest-rate and inflation markets
 21. Heidi Tscherning
Mobile Devices in Social Contexts
 22. Birgitte Gorm Hansen
Adapting in the Knowledge Economy Lateral Strategies for Scientists and Those Who Study Them
 23. Kristina Vaarst Andersen
Optimal Levels of Embeddedness The Contingent Value of Networked Collaboration
 24. Justine Grøn bæk Pors
Noisy Management A History of Danish School Governing from 1970-2010
 25. Stefan Linder
Micro-foundations of Strategic Entrepreneurship Essays on Autonomous Strategic Action
 26. Xin Li
Toward an Integrative Framework of National Competitiveness An application to China
 27. Rune Thorbjørn Clausen
Værdifuld arkitektur Et eksplorativt studie af bygningers rolle i virksomheders værdiskabelse
 28. Monica Viken
Markedsundersøkelser som bevis i varemerke- og markedsføringsrett
 29. Christian Wymann
Tattooing The Economic and Artistic Constitution of a Social Phenomenon
 30. Sanne Frandsen
Productive Incoherence A Case Study of Branding and Identity Struggles in a Low-Prestige Organization
 31. Mads Stenbo Nielsen
Essays on Correlation Modelling
 32. Ivan Häuser
Følelse og sprog Etablering af en ekspressiv kategori, eksemplificeret på russisk
 33. Sebastian Schwenen
Security of Supply in Electricity Markets
- 2012**
1. Peter Holm Andreasen
The Dynamics of Procurement Management - A Complexity Approach
 2. Martin Haulrich
Data-Driven Bitext Dependency Parsing and Alignment
 3. Line Kirkegaard
Konsulenten i den anden nat En undersøgelse af det intense arbejdsliv
 4. Tonny Stenheim
Decision usefulness of goodwill under IFRS
 5. Morten Lind Larsen
Produktivitet, vækst og velfærd Industrirådet og efterkrigstidens Danmark 1945 - 1958
 6. Petter Berg
Cartel Damages and Cost Asymmetries
 7. Lynn Kahle
Experiential Discourse in Marketing A methodical inquiry into practice and theory
 8. Anne Roelsgaard Obling
Management of Emotions in Accelerated Medical Relationships

9. Thomas Frandsen
Managing Modularity of Service Processes Architecture
10. Carina Christine Skovmøller
*CSR som noget særligt
Et casestudie om styring og menings-skabelse i relation til CSR ud fra en intern optik*
11. Michael Tell
*Fradragsbeskæring af selskabers finansieringsudgifter
En skatterelig analyse af SEL §§ 11, 11B og 11C*
12. Morten Holm
*Customer Profitability Measurement Models
Their Merits and Sophistication across Contexts*
13. Katja Joo Dyppe
*Beskatning af derivater
En analyse af dansk skatteret*
14. Esben Anton Schultz
*Essays in Labor Economics
Evidence from Danish Micro Data*
15. Carina Risvig Hansen
"Contracts not covered, or not fully covered, by the Public Sector Directive"
16. Anja Svejgaard Pors
Iværksættelse af kommunikation - patientfigurer i hospitalets strategiske kommunikation
17. Frans Bévort
*Making sense of management with logics
An ethnographic study of accountants who become managers*
18. René Kallestrup
The Dynamics of Bank and Sovereign Credit Risk
19. Brett Crawford
*Revisiting the Phenomenon of Interests in Organizational Institutionalism
The Case of U.S. Chambers of Commerce*
20. Mario Daniele Amore
Essays on Empirical Corporate Finance
21. Arne Stjernholm Madsen
The evolution of innovation strategy Studied in the context of medical device activities at the pharmaceutical company Novo Nordisk A/S in the period 1980-2008
22. Jacob Holm Hansen
*Is Social Integration Necessary for Corporate Branding?
A study of corporate branding strategies at Novo Nordisk*
23. Stuart Webber
Corporate Profit Shifting and the Multinational Enterprise
24. Helene Ratner
*Promises of Reflexivity
Managing and Researching Inclusive Schools*
25. Therese Strand
The Owners and the Power: Insights from Annual General Meetings
26. Robert Gavin Strand
In Praise of Corporate Social Responsibility Bureaucracy
27. Nina Sormunen
*Auditor's going-concern reporting
Reporting decision and content of the report*
28. John Bang Mathiasen
*Learning within a product development working practice:
- an understanding anchored in pragmatism*
29. Philip Holst Riis
Understanding Role-Oriented Enterprise Systems: From Vendors to Customers
30. Marie Lisa Dacanay
*Social Enterprises and the Poor
Enhancing Social Entrepreneurship and Stakeholder Theory*

31. Fumiko Kano Glückstad
Bridging Remote Cultures: Cross-lingual concept mapping based on the information receiver's prior-knowledge
32. Henrik Barslund Fosse
Empirical Essays in International Trade
33. Peter Alexander Albrecht
*Foundational hybridity and its reproduction
Security sector reform in Sierra Leone*
34. Maja Rosenstock
*CSR - hvor svært kan det være?
Kulturanalytisk casestudie om udfordringer og dilemmaer med at forankre Coops CSR-strategi*
35. Jeanette Rasmussen
*Tweens, medier og forbrug
Et studie af 10-12 årige danske børns brug af internettet, opfattelse og forståelse af markedsføring og forbrug*
36. Ib Tunby Gulbrandsen
*'This page is not intended for a US Audience'
A five-act spectacle on online communication, collaboration & organization.*
37. Kasper Aalling Teilmann
Interactive Approaches to Rural Development
38. Mette Mogensen
*The Organization(s) of Well-being and Productivity
(Re)assembling work in the Danish Post*
39. Søren Friis Møller
*From Disinterestedness to Engagement
Towards Relational Leadership In the Cultural Sector*
40. Nico Peter Berhausen
Management Control, Innovation and Strategic Objectives – Interactions and Convergence in Product Development Networks
41. Balder Onarheim
*Creativity under Constraints
Creativity as Balancing 'Constrainedness'*
42. Haoyong Zhou
Essays on Family Firms
43. Elisabeth Naima Mikkelsen
*Making sense of organisational conflict
An empirical study of enacted sense-making in everyday conflict at work*
- 2013**
1. Jacob Lyngsie
Entrepreneurship in an Organizational Context
2. Signe Groth-Brodersen
*Fra ledelse til selvet
En socialpsykologisk analyse af forholdet imellem selvledelse, ledelse og stress i det moderne arbejdsliv*
3. Nis Høyrup Christensen
Shaping Markets: A Neoinstitutional Analysis of the Emerging Organizational Field of Renewable Energy in China
4. Christian Edelvold Berg
*As a matter of size
THE IMPORTANCE OF CRITICAL MASS AND THE CONSEQUENCES OF SCARCITY FOR TELEVISION MARKETS*
5. Christine D. Isakson
*Coworker Influence and Labor Mobility
Essays on Turnover, Entrepreneurship and Location Choice in the Danish Maritime Industry*
6. Niels Joseph Jerne Lennon
*Accounting Qualities in Practice
Rhizomatic stories of representational faithfulness, decision making and control*
7. Shannon O'Donnell
*Making Ensemble Possible
How special groups organize for collaborative creativity in conditions of spatial variability and distance*

8. Robert W. D. Veitch
*Access Decisions in a Partly-Digital World
Comparing Digital Piracy and Legal Modes for Film and Music*
9. Marie Mathiesen
*Making Strategy Work
An Organizational Ethnography*
10. Arisa Shollo
The role of business intelligence in organizational decision-making
11. Mia Kaspersen
The construction of social and environmental reporting
12. Marcus Møller Larsen
The organizational design of offshoring
13. Mette Ohm Rørdam
*EU Law on Food Naming
The prohibition against misleading names in an internal market context*
14. Hans Peter Rasmussen
*GIV EN GED!
Kan giver-idealiteter forklare støtte til velgørenhed og understøtte relationsopbygning?*
15. Ruben Schachtenhaufen
Fonetisk reduktion i dansk
16. Peter Koerver Schmidt
*Dansk CFC-beskatning
I et internationalt og komparativt perspektiv*
17. Morten Froholdt
*Strategi i den offentlige sektor
En kortlægning af styringsmæssig kontekst, strategisk tilgang, samt anvendte redskaber og teknologier for udvalgte danske statslige styrelser*
18. Annette Camilla Sjørup
*Cognitive effort in metaphor translation
An eye-tracking and key-logging study*
19. Tamara Stucchi
*The Internationalization of Emerging Market Firms:
A Context-Specific Study*
20. Thomas Lopdrup-Hjorth
*"Let's Go Outside":
The Value of Co-Creation*
21. Ana Alačovska
*Genre and Autonomy in Cultural Production
The case of travel guidebook production*
22. Marius Gudmand-Høyer
*Stemningsindssygdommens historie i det 19. århundrede
Omtydningen af melankolien og manien som bipolære stemningslidelser i dansk sammenhæng under hensyn til dannelsen af det moderne følelselivs relative autonomi.
En problematiserings- og erfarings-analytisk undersøgelse*
23. Lichen Alex Yu
*Fabricating an S&OP Process
Circulating References and Matters of Concern*
24. Esben Alfort
*The Expression of a Need
Understanding search*
25. Trine Pallesen
*Assembling Markets for Wind Power
An Inquiry into the Making of Market Devices*
26. Anders Koed Madsen
*Web-Visions
Repurposing digital traces to organize social attention*
27. Lærke Højgaard Christiansen
BREWING ORGANIZATIONAL RESPONSES TO INSTITUTIONAL LOGICS
28. Tommy Kjær Lassen
*EGENTLIG SELVLEDELSE
En ledelsesfilosofisk afhandling om selvledelsens paradoksale dynamik og eksistentielle engagement*

29. Morten Rossing
Local Adaption and Meaning Creation in Performance Appraisal
30. Søren Obed Madsen
*Lederen som oversætter
Et oversættelsesteoretisk perspektiv på strategisk arbejde*
31. Thomas Høgenhaven
*Open Government Communities
Does Design Affect Participation?*
32. Kirstine Zinck Pedersen
*Failsafe Organizing?
A Pragmatic Stance on Patient Safety*
33. Anne Petersen
*Hverdagslogikker i psykiatrisk arbejde
En institutionsetnografisk undersøgelse af hverdagen i psykiatriske organisationer*
34. Didde Maria Humle
Fortællinger om arbejde
35. Mark Holst-Mikkelsen
*Strategieksekvering i praksis
– barrierer og muligheder!*
36. Malek Maalouf
*Sustaining lean
Strategies for dealing with organizational paradoxes*
37. Nicolaj Tofte Brenneche
*Systemic Innovation In The Making
The Social Productivity of Cartographic Crisis and Transitions in the Case of SEET*
38. Morten Gylling
*The Structure of Discourse
A Corpus-Based Cross-Linguistic Study*
39. Binzhang YANG
*Urban Green Spaces for Quality Life
- Case Study: the landscape architecture for people in Copenhagen*
40. Michael Friis Pedersen
*Finance and Organization:
The Implications for Whole Farm Risk Management*
41. Even Fallan
Issues on supply and demand for environmental accounting information
42. Ather Nawaz
*Website user experience
A cross-cultural study of the relation between users' cognitive style, context of use, and information architecture of local websites*
43. Karin Beukel
The Determinants for Creating Valuable Inventions
44. Arjan Markus
*External Knowledge Sourcing and Firm Innovation
Essays on the Micro-Foundations of Firms' Search for Innovation*
- 2014**
1. Solon Moreira
Four Essays on Technology Licensing and Firm Innovation
2. Karin Strzeletz Ivertsen
*Partnership Drift in Innovation Processes
A study of the Think City electric car development*
3. Kathrine Hoffmann Pii
Responsibility Flows in Patient-centred Prevention
4. Jane Bjørn Vedel
*Managing Strategic Research
An empirical analysis of science-industry collaboration in a pharmaceutical company*
5. Martin Gylling
*Processuel strategi i organisationer
Monografi om dobbeltheden i tænkning af strategi, dels som vidensfelt i organisationsteori, dels som kunstnerisk tilgang til at skabe i erhvervsmæssig innovation*

6. Linne Marie Lauesen
Corporate Social Responsibility in the Water Sector: How Material Practices and their Symbolic and Physical Meanings Form a Colonising Logic
7. Maggie Qiuzhu Mei
LEARNING TO INNOVATE: The role of ambidexterity, standard, and decision process
8. Inger Hædt-Rasmussen
Developing Identity for Lawyers Towards Sustainable Lawyering
9. Sebastian Fux
Essays on Return Predictability and Term Structure Modelling
10. Thorbjørn N. M. Lund-Poulsen
Essays on Value Based Management
11. Oana Brindusa Albu
Transparency in Organizing: A Performative Approach
12. Lena Olaison
Entrepreneurship at the limits
13. Hanne Sørum
DRESSED FOR WEB SUCCESS? An Empirical Study of Website Quality in the Public Sector
14. Lasse Folke Henriksen
Knowing networks How experts shape transnational governance
15. Maria Halbinger
Entrepreneurial Individuals Empirical Investigations into Entrepreneurial Activities of Hackers and Makers
16. Robert Spliid
Kapitalfondenes metoder og kompetencer
17. Christiane Stelling
Public-private partnerships & the need, development and management of trusting A processual and embedded exploration
18. Marta Gasparin
Management of design as a translation process
19. Kåre Moberg
Assessing the Impact of Entrepreneurship Education From ABC to PhD
20. Alexander Cole
Distant neighbors Collective learning beyond the cluster
21. Martin Møller Boje Rasmussen
Is Competitiveness a Question of Being Alike? How the United Kingdom, Germany and Denmark Came to Compete through their Knowledge Regimes from 1993 to 2007
22. Anders Ravn Sørensen
Studies in central bank legitimacy, currency and national identity Four cases from Danish monetary history
23. Nina Bellak
Can Language be Managed in International Business? Insights into Language Choice from a Case Study of Danish and Austrian Multinational Corporations (MNCs)
24. Rikke Kristine Nielsen
Global Mindset as Managerial Meta-competence and Organizational Capability: Boundary-crossing Leadership Cooperation in the MNC The Case of 'Group Mindset' in Solar A/S.
25. Rasmus Koss Hartmann
User Innovation inside government Towards a critically performative foundation for inquiry

26. Kristian Gylling Olesen
Flertydig og emergerende ledelse i folkeskolen
Et aktør-netværksteoretisk ledelsesstudie af politiske evalueringsreformers betydning for ledelse i den danske folkeskole
27. Troels Riis Larsen
Kampen om Danmarks omdømme 1945-2010
Omdømmearbejde og omdømmepolitik
28. Klaus Majgaard
Jagten på autenticitet i offentlig styring
29. Ming Hua Li
Institutional Transition and Organizational Diversity: Differentiated internationalization strategies of emerging market state-owned enterprises
30. Sofie Blinkenberg Federspiel
IT, organisation og digitalisering: Institutionelt arbejde i den kommunale digitaliseringsproces
31. Elvi Weinreich
Hvilke offentlige ledere er der brug for når velfærdstænkningen flytter sig – er Diplomuddannelsens lederprofil svaret?
32. Ellen Mølgaard Korsager
Self-conception and image of context in the growth of the firm – A Penrosian History of Fiberline Composites
33. Else Skjold
The Daily Selection
34. Marie Louise Conradsen
The Cancer Centre That Never Was
The Organisation of Danish Cancer Research 1949-1992
35. Virgilio Failla
Three Essays on the Dynamics of Entrepreneurs in the Labor Market
36. Nicky Nedergaard
Brand-Based Innovation
Relational Perspectives on Brand Logics and Design Innovation Strategies and Implementation
37. Mads Gjedsted Nielsen
Essays in Real Estate Finance
38. Kristin Martina Brandl
Process Perspectives on Service Offshoring
39. Mia Rosa Koss Hartmann
In the gray zone
With police in making space for creativity
40. Karen Ingerslev
Healthcare Innovation under The Microscope
Framing Boundaries of Wicked Problems
41. Tim Neerup Thomsen
Risk Management in large Danish public capital investment programmes
- 2015**
1. Jakob Ion Wille
Film som design
Design af levende billeder i film og tv-serier
2. Christiane Mossin
Interzones of Law and Metaphysics
Hierarchies, Logics and Foundations of Social Order seen through the Prism of EU Social Rights
3. Thomas Tøth
TRUSTWORTHINESS: ENABLING GLOBAL COLLABORATION
An Ethnographic Study of Trust, Distance, Control, Culture and Boundary Spanning within Offshore Outsourcing of IT Services
4. Steven Højlund
Evaluation Use in Evaluation Systems – The Case of the European Commission

5. Julia Kirch Kirkegaard
AMBIGUOUS WINDS OF CHANGE – OR FIGHTING AGAINST WINDMILLS IN CHINESE WIND POWER
A CONSTRUCTIVIST INQUIRY INTO CHINA'S PRAGMATICS OF GREEN MARKETISATION MAPPING
CONTROVERSIES OVER A POTENTIAL TURN TO QUALITY IN CHINESE WIND POWER
6. Michelle Carol Antero
A Multi-case Analysis of the Development of Enterprise Resource Planning Systems (ERP) Business Practices

Morten Friis-Olivarius
The Associative Nature of Creativity
7. Mathew Abraham
New Cooperativism: A study of emerging producer organisations in India
8. Stine Hedegaard
Sustainability-Focused Identity: Identity work performed to manage, negotiate and resolve barriers and tensions that arise in the process of constructing or ganizational identity in a sustainability context
9. Cecilie Glerup
Organizing Science in Society – the conduct and justification of resposible research
10. Allan Salling Pedersen
Implementering af ITIL® IT-governance - når best practice konflikter med kulturen Løsning af implementerings-problemer gennem anvendelse af kendte CSF i et aktionsforskningsforløb.
11. Nihat Misir
A Real Options Approach to Determining Power Prices
12. Mamdouh Medhat
MEASURING AND PRICING THE RISK OF CORPORATE FAILURES
13. Rina Hansen
Toward a Digital Strategy for Omnichannel Retailing
14. Eva Pallesen
In the rhythm of welfare creation
A relational processual investigation moving beyond the conceptual horizon of welfare management
15. Gouya Harirchi
In Search of Opportunities: Three Essays on Global Linkages for Innovation
16. Lotte Holck
Embedded Diversity: A critical ethnographic study of the structural tensions of organizing diversity
17. Jose Daniel Balarezo
Learning through Scenario Planning
18. Louise Pram Nielsen
Knowledge dissemination based on terminological ontologies. Using eye tracking to further user interface design.
19. Sofie Dam
PUBLIC-PRIVATE PARTNERSHIPS FOR INNOVATION AND SUSTAINABILITY TRANSFORMATION
An embedded, comparative case study of municipal waste management in England and Denmark
20. Ulrik Hartmyer Christiansen
Follwoing the Content of Reported Risk Across the Organization
21. Guro Refsum Sanden
Language strategies in multinational corporations. A cross-sector study of financial service companies and manufacturing companies.
22. Linn Gevoll
Designing performance management for operational level
- A closer look on the role of design choices in framing coordination and motivation

23. Frederik Larsen
*Objects and Social Actions
– on Second-hand Valuation Practices*
24. Thorhildur Hansdottir Jetzek
*The Sustainable Value of Open
Government Data
Uncovering the Generative Mechanisms
of Open Data through a Mixed
Methods Approach*
25. Gustav Toppenberg
*Innovation-based M&A
– Technological-Integration
Challenges – The Case of
Digital-Technology Companies*
26. Mie Plotnikof
*Challenges of Collaborative
Governance
An Organizational Discourse Study
of Public Managers' Struggles
with Collaboration across the
Daycare Area*
27. Christian Garmann Johnsen
*Who Are the Post-Bureaucrats?
A Philosophical Examination of the
Creative Manager, the Authentic Leader
and the Entrepreneur*
28. Jacob Brogaard-Kay
*Constituting Performance Management
A field study of a pharmaceutical
company*
29. Rasmus Ploug Jenle
*Engineering Markets for Control:
Integrating Wind Power into the Danish
Electricity System*
30. Morten Lindholst
*Complex Business Negotiation:
Understanding Preparation and
Planning*
31. Morten Grynings
*TRUST AND TRANSPARENCY FROM AN
ALIGNMENT PERSPECTIVE*
32. Peter Andreas Norn
*Byregimer og styringsevne: Politisk
lederskab af store byudviklingsprojekter*
33. Milan Miric
*Essays on Competition, Innovation and
Firm Strategy in Digital Markets*
34. Sanne K. Hjordrup
*The Value of Talent Management
Rethinking practice, problems and
possibilities*
35. Johanna Sax
*Strategic Risk Management
– Analyzing Antecedents and
Contingencies for Value Creation*
36. Pernille Rydén
Strategic Cognition of Social Media
37. Mimmi Sjöklint
*The Measurable Me
- The Influence of Self-tracking on the
User Experience*
38. Juan Ignacio Staricco
*Towards a Fair Global Economic
Regime? A critical assessment of Fair
Trade through the examination of the
Argentinean wine industry*
39. Marie Henriette Madsen
*Emerging and temporary connections
in Quality work*
40. Yangfeng CAO
*Toward a Process Framework of
Business Model Innovation in the
Global Context
Entrepreneurship-Enabled Dynamic
Capability of Medium-Sized
Multinational Enterprises*
41. Carsten Scheibye
*Enactment of the Organizational Cost
Structure in Value Chain Configuration
A Contribution to Strategic Cost
Management*

2016

1. Signe Sofie Dyrby
Enterprise Social Media at Work
2. Dorte Boesby Dahl
*The making of the public parking attendant
Dirt, aesthetics and inclusion in public service work*
3. Verena Girschik
*Realizing Corporate Responsibility
Positioning and Framing in Nascent Institutional Change*
4. Anders Ørding Olsen
*IN SEARCH OF SOLUTIONS
Inertia, Knowledge Sources and Diversity in Collaborative Problem-solving*
5. Pernille Steen Pedersen
*Udkast til et nyt copingbegreb
En kvalifikation af ledelsesmuligheder for at forebygge sygefravær ved psykiske problemer.*
6. Kerli Kant Hvass
*Weaving a Path from Waste to Value:
Exploring fashion industry business models and the circular economy*
7. Kasper Lindschow
*Exploring Digital News Publishing
Business Models – a production network approach*
8. Mikkel Mouritz Marfelt
*The chameleon workforce:
Assembling and negotiating the content of a workforce*
9. Marianne Bertelsen
*Aesthetic encounters
Rethinking autonomy, space & time in today's world of art*
10. Louise Hauberg Wilhelmsen
EU PERSPECTIVES ON INTERNATIONAL COMMERCIAL ARBITRATION
11. Abid Hussain
On the Design, Development and Use of the Social Data Analytics Tool (SODATO): Design Propositions, Patterns, and Principles for Big Social Data Analytics
12. Mark Bruun
Essays on Earnings Predictability
13. Tor Bøe-Lillegraven
BUSINESS PARADOXES, BLACK BOXES, AND BIG DATA: BEYOND ORGANIZATIONAL AMBIDEXTERITY
14. Hadis Khonsary-Atighi
ECONOMIC DETERMINANTS OF DOMESTIC INVESTMENT IN AN OIL-BASED ECONOMY: THE CASE OF IRAN (1965-2010)
15. Maj Lervad Grasten
*Rule of Law or Rule by Lawyers?
On the Politics of Translation in Global Governance*
16. Lene Granzau Juel-Jacobsen
SUPERMARKEDETS MODUS OPERANDI – en hverdagssociologisk undersøgelse af forholdet mellem rum og handlen og understøtte relationsopbygning?
17. Christine Thalsgård Henriques
In search of entrepreneurial learning – Towards a relational perspective on incubating practices?
18. Patrick Bennett
Essays in Education, Crime, and Job Displacement
19. Søren Korsgaard
Payments and Central Bank Policy
20. Marie Kruse Skibsted
Empirical Essays in Economics of Education and Labor
21. Elizabeth Benedict Christensen
*The Constantly Contingent Sense of Belonging of the 1.5 Generation Undocumented Youth
An Everyday Perspective*

22. Lasse J. Jessen
Essays on Discounting Behavior and Gambling Behavior
23. Kalle Johannes Rose
*Når stifterviljen dør...
Et retsøkonomisk bidrag til 200 års
juridisk konflikt om ejendomsretten*
24. Andreas Søeborg Kirkedal
*Danish Stød and Automatic Speech
Recognition*
25. Ida Lunde Jørgensen
*Institutions and Legitimations in
Finance for the Arts*
26. Olga Rykov Ibsen
*An empirical cross-linguistic study of
directives: A semiotic approach to the
sentence forms chosen by British,
Danish and Russian speakers in native
and ELF contexts*
27. Desi Volker
Understanding Interest Rate Volatility
28. Angeli Elizabeth Weller
*Practice at the Boundaries of Business
Ethics & Corporate Social Responsibility*
29. Ida Danneskiold-Samsøe
*Levende læring i kunstneriske
organisationer
En undersøgelse af læringsprocesser
mellem projekt og organisation på
Aarhus Teater*
30. Leif Christensen
*Quality of information – The role of
internal controls and materiality*

TITLER I ATV PH.D.-SERIEN

1992

1. Niels Kornum
Servicesamkørsel – organisation, økonomi og planlægningsmetode

1995

2. Verner Worm
*Nordiske virksomheder i Kina
Kulturspecifikke interaktionsrelationer ved nordiske virksomhedsetableringer i Kina*

1999

3. Mogens Bjerre
*Key Account Management of Complex Strategic Relationships
An Empirical Study of the Fast Moving Consumer Goods Industry*

2000

4. Lotte Darsø
*Innovation in the Making
Interaction Research with heterogeneous Groups of Knowledge Workers creating new Knowledge and new Leads*

2001

5. Peter Hobolt Jensen
*Managing Strategic Design Identities
The case of the Lego Developer Network*

2002

6. Peter Lohmann
The Deleuzian Other of Organizational Change – Moving Perspectives of the Human
7. Anne Marie Jess Hansen
To lead from a distance: The dynamic interplay between strategy and strategizing – A case study of the strategic management process

2003

8. Lotte Henriksen
*Videndeling
– om organisatoriske og ledelsesmæssige udfordringer ved videndeling i praksis*
9. Niels Christian Nickelsen
Arrangements of Knowing: Coordinating Procedures Tools and Bodies in Industrial Production – a case study of the collective making of new products

2005

10. Carsten Ørts Hansen
Konstruktion af ledelsesteknologier og effektivitet

TITLER I DBA PH.D.-SERIEN

2007

1. Peter Kastrup-Misir
Endeavoring to Understand Market Orientation – and the concomitant co-mutation of the researched, the researcher, the research itself and the truth

2009

1. Torkild Leo Thellefsen
*Fundamental Signs and Significance effects
A Semeiotic outline of Fundamental Signs, Significance-effects, Knowledge Profiling and their use in Knowledge Organization and Branding*
2. Daniel Ronzani
When Bits Learn to Walk Don't Make Them Trip. Technological Innovation and the Role of Regulation by Law in Information Systems Research: the Case of Radio Frequency Identification (RFID)

2010

1. Alexander Carnera
*Magten over livet og livet som magt
Studier i den biopolitiske ambivalens*