

**Audit regulation and auditor disclosures**  
**Essays on the consequences of ISA 701**

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*To my lovely wife, Fatemeh*



## List of Essays <sup>1</sup>

This dissertation is based on the following Essays:

### Essay I

Hosseinniakani<sup>2</sup>, S. M. (Under review). The effects of the key audit matter disclosure requirement on audit quality and fees: Evidence from the European Union. Submitted to *International Journal of Accounting Auditing and Performance Evaluation*.

### Essay II

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### Essay III

Hosseinniakani, S. M., Samani,<sup>3</sup> N., & Overland,<sup>4</sup> C. (2020) Management's and auditors' disclosures of significant accounting estimates and the role of audit committees. *European Accounting Association Congress (EAA)*, (Accepted for presentation in a parallel session).

### Essay IV

Hosseinniakani, S. M. (2020). Unintended consequences of recent changes in audit standards: Evidence from real earnings management.

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<sup>1</sup> Essay 3 is an article co-authored with Niuosha Samani and Conny Overland; these authors provided the following contributions:

*Idea:* I worked on this essay's initial idea, then developed this further with Overland and Samani's assistance.

*Data Collection and Analysis:* Niuosha and I collected the data and conducted the analyses in the study.

*Writing:* The co-authors and I collaborated on writing the text in all sections of this essay.

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## **Abstract**

Auditing regulations have changed over time, with the aim of increasing the quality of the audit process and audit report that assist stakeholders in decision-making. Such changes include the recent revisions and introduction of International Standards on Auditing (ISAs), which aim to enhance transparency and the value of information presented in the audit report. The recent ISA 701 standard should meet the aims by requiring auditors to provide additional disclosures in their audit reports since 2016. The additional disclosures contain information regarding Key Audit Matters (KAM) that auditors face during their audit of financial statements, and include risk-related information. This thesis examines several possible consequences of the ISA 701 requirement in four essays, which primarily focus on the European Union (EU).

The first essay's results reveal a significant increase in audit quality of EU-listed companies, as measured by abnormal accruals—or specifically, in the United Kingdom, Ireland, and the Netherlands, where auditors have some experience in disclosing KAM before 2016. Consequently, these auditors charged higher audit fees after the ISA 701 introduction. Further, Essay 2 reveals that requiring the auditor to disclose KAM is associated with decreased liquidity in the capital markets of early adopters' countries, as measured using a liquidity factor and the bid-ask spread, but not in other EU countries. Moreover, Essay 3 provides detailed evidence of the potential treatment effects on management disclosures of significant accounting estimates using data from Swedish-listed companies. The results demonstrate that per se, both the ISA 701 requirement and KAM disclosure affect management disclosures. Further, these effects are contingent upon characteristics of the board of directors, such as the existence of an independent audit committee on the board. Finally, the results from examining 16 EU countries (in Essay 4) reveal a significant shift towards real earnings management, and specifically for companies with accrual-based earnings management constrained after the ISA 701 introduction. These findings contribute to recent research investigating these new audit standards' consequences.

**Keywords:** Audit regulation, auditor disclosures, key audit matters, ISA 701, audit quality, capital market, management disclosures, earnings management





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*A Snowy day in Gothenburg, February 2020!*



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## **Part I**

### **Introduction**



### 1. Background

#### *1.1 Why do users of financial statements demand independent audits?*

Auditing as an economic service is increasingly in demand, as it involves the potential to contribute to financial statement users' decision-making. Such important users include investors in the capital market, whose investing decisions are shaped by the auditor's reasonable assurance of the integrity of the client's corporate financial statements and related disclosures (Campbell and Parker, 1992). This reasonable assurance enhances the capital market's efficiency, reduces uncertainty regarding corporate financial information, and ultimately enhances investors' confidence. Regarding the information in the audit report and reasonable assurance, the capital market invariably demands an independent audit, which provides a high-quality assurance. This demand is based not only on the assurance disseminated in an audit report, but also the audit potential that the auditor provides within the audit process and the audit report's information content. This audit potential refers to the auditor's monitoring roles, information value and insurance (Wallace, 1980, 2004).

The auditor's monitoring activity can resolve the agency problems stemming from management incentives. Agency problems occur when managers as agents are motivated by personal incentives—such as compensation or the retention of contracts, among others—that can be obtained by manipulating accounting numbers and information rather than maximising the utility of company shareholders as principals or the capital market's investors (Jensen and Meckling, 1976; Watts and Zimmerman, 1983; Colbert and Jahera, 1988). Thus, the incentive problem here can lead managers to provide lower-quality or asymmetrical information, causing investing decisions to suffer. Further, shareholders and investors are concerned with the managers' incentives problem and the possible cost of managers' poor performance and misbehaviour; it is also costly to monitor management performance. Thus, the concerned parties are likely to sign a paid contract with an independent auditor, who assumes responsibility for monitoring managers' financial performance and preventing or detecting such management misbehaviour through the audit process.

Additionally, the concerned parties—and specifically, the investors—believe that the auditor potentially adds value to financial reporting by providing useful information that facilitates better investment decisions. Indeed, the auditor can assist investors by disclosing information in the audit report that confirms whether corporate financial statements are free of material misstatements and fraud, and are prepared in accordance with accounting standards. Further, auditors take responsibility for confirming the reliability of corporate account information, such as earnings and cash flows, which investors use to predict the firm's future value. Thus, auditing provides insurance for investors and reduces investors' overall uncertainty regarding the firm's financial reporting quality (Wallace, 1980, 2004).

Given the potentials and safety that audit services provide, investors may demand an independent audit. However, the degree to which the audit outcome reflects investors' demands depends on supplied audit quality.

### *1.2 How are the users of financial statements and audit reports assured of an audit's quality?*

Although the demand for an independent audit is essential for investors, the audit supplied depends on several observable and unobservable factors. Investors can be assured regarding an audit's quality, as they can observe whether the audit is conducted by a large, reputable and technically capable audit firm that provides higher-quality audits (DeAngelo, 1981b). Investors can then observe whether an audit engagement team is led by an auditor with a specific industry specialisation and the ability to constrain managers' misbehaviour (Krishnan, 2003). They can also observe the auditor's background relative to their level and type of education and experience, and consider these characteristics in judging the quality of the demanded versus supplied audit (Gul, Wu and Yang, 2013). It is likely that investors can observe a majority of factors related to auditor competence; however, unobservable factors related to auditor independence may make establishing audit quality more difficult.

Although auditors should be independent, and should use independent judgments to report any material misstatements discovered in financial statements, auditors are also likely to choose to maximise their own utilities. For example, the auditor may conduct services other than the regulated audit, such as initiating an audit priced lower than its costs ('lowballing') or retaining clients to obtain quasi-rents. This type of auditor mispricing depends on client retention, and can give the client a bargaining power superior to that of the auditor (DeAngelo, 1981a; Kanodia and Mukherji, 1994). This subsequently impairs the auditor's independence and decreases the audit's quality. Further, impairing the auditor's independence causes concerns for capital market investors who rely on the auditor's assurances.

To address concerns regarding auditor independence, those who establish auditing regulations and standards have introduced legislation to mitigate auditors' potential misbehaviour. Valuable steps forward in regulating audits and improving auditor independence include the United States' Securities and Exchange Commission (SEC), the Sarbanes-Oxley Act (SOX), and Public Company Accounting Oversight Board (PCAOB); in Europe, the European Parliament & Council of the European Union and European Commission<sup>1</sup> (EC); and internationally, the International Auditing and Assurance Standards Board<sup>2</sup> (IAASB). These were implemented as a result of the Enron scandal and Arthur Andersen's collapse in the United States, at a time when the public began to question the auditor's role (Tannenbaum, 2002).

In response, various examples of what was believed could change the public's view of the audit profession and improve investor confidence include: limiting auditors' non-auditing services,

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<sup>1</sup> The European Commission (EC) adopted similar rules required in the United States in the wake of the Enron corporate scandals and accounting firm Arthur Andersen's audit failure. The EC provided a set of fundamental auditing principles to enhance auditors' independence in the European Union, such as those pertaining to auditors' liability and non-auditing services (EC, 2002).

<sup>2</sup> The aftermath of different audit failures—whether in the United States, European Union or other countries—has led the IAASB to introduce a set of international audit standards (ISAs). These ISAs aim to increase the auditor's responsibility in the audit process (e.g. ISA 200) as well as audit reporting (e.g. ISA 700), which potentially enhances auditors' independence.



requiring auditors to disclose the fees charged for non-audit services (Frankel, Johnson and Nelson, 2002), penalising auditors for failure (liability rules), a mandatory rotation of the audit firm and audit partner (Barbara, Richard and Kurt, 2005; Lennox, Wu and Zhang, 2014), and mandating that auditors sign their audit reports (Carcello and Li, 2013), among others. Such audit regulations provide an environment in which the exposure to auditors' litigation and reputation risks increases, therefore encouraging auditors to avoid possible litigation and reputation costs by supplying higher-quality audits.

As previously described, audit regulations assure investors about the quality of audit services. In addition to audit regulations affecting the audit process, regulatory bodies have attempted to improve the content of the auditor's report to enhance the value of its communication and information. Therefore, this report should contain information that is useful to investors, and investors should be able to understand its content. Such improved audit regulations included the introduction of international audit reporting standards in the 1990s; these aimed to not only resolve the gaps between expectations and communications in the audit report, but also harmonise the structure of reporting among countries in the last decade of the 20<sup>th</sup> century (Hay, 1998; King, 1999). This resulted in an audit report with opinions noted in a standardised format, in which auditors were required to issue their opinions regarding the financial statements' fairness. While the standardised audit report communicated a 'pass' or 'fail' opinion, gaps still occurred between expectations and communications, as investors' expectations differed from what the auditor delivered in an audit. Further, users desired information in audit reports that differed from what the auditor communicated (Church, Davis and McCracken, 2008; Mock *et al.*, 2013). Thus, users perceived the standardised audit report as only symbolic, and were not keen to read it in its entirety.

Gaps in audit reports generated a discussion between academics and regulators, and especially during the 2007–2008 financial crisis. This discussion addressed users' concerns and their need for more information related to both audit and client firms (Church, Davis and McCracken, 2008; Mock *et al.*, 2013). Users also expressed their interests regarding the significant matter that an auditor faces during an audit process as well as the information related to client accounts, which involves estimations' risk and uncertainty (IAASB, 2012). Such important information could be collectively disclosed in an audit report as key matters to allow users to receive the desired information. In 2016, the IAASB introduced a completely new audit standard—ISA 701—which required auditors to disclose these key audit matters (KAM). Such a requirement was the next step to reassure users regarding the quality of auditing services and subsequent audit reports; this is also the main topic of discussion in this thesis.

### 2. Objective of the thesis and research questions

The introduction of ISA 701 was meant to improve audit quality and respond to investors' needs; however, a broad research question often addressed in recent audit research involves the degree to which this new audit standard contributes to the supply of an audit. First, it is important to understand the consequences of an audit regulation or standard (Carcello and Li, 2013). Although an audit standard primarily aims to improve the audit process and reporting, it can result in costs or benefits. For instance, the main purpose and intended benefits of introducing the ISA 701 involved enhancing the quality of audits and their reports by enhancing their transparency and communication value (IAASB, 2013). However, concerns were raised that this could also increase the fees an auditor charged for audit assignments (Prasad and Chand, 2017). Thus, research should empirically examine the possible consequences of ISA 701 to draw conclusions regarding the standard's costs and benefits.

Therefore, this thesis aims to empirically examine the consequences<sup>3</sup> of ISA 701 on audit quality—whether actual or perceived—and on overall corporate financial reporting. In this context, four essays address four research questions (RQs). Figure 1 illustrates the primary research's theoretical framework and research questions. Specifically, RQ1 discerns whether the KAM disclosure requirement enhances audit quality and affects the audit fees of listed companies in EU countries. This question is motivated by a possible increase in auditor litigation and reputation incentives, which should result in the auditor's higher audit quality. Next, RQ2 concerns whether the KAM disclosure requirement affects the capital market by enhancing information's value. This question is motivated by the fact that the new audit report, including KAM disclosures of investors' desired information, should add value to the overall corporate information environment. Thus, the capital market should perceive this added value, which should lead investors to change their investment decisions. These two research topics are discussed in a licentiate thesis and as a supplement to this thesis.

The next two essays in this thesis respond to a question regarding the KAM disclosure requirement's impacts on management disclosures and real earnings management. Thus, RQ3 concerns whether the KAM disclosure requirement has a spill-over effect on management disclosures in a similar area of focus. The reasoning behind this question is that auditors' disclosure of significant uncertainty in accounting estimates—an area similar to management disclosures—can potentially constrain these disclosures' opportunistic behaviour. Finally, RQ4 determines whether firms increased their real activities' management after the ISA 701 introduction. This question is motivated by firms' manipulation of accrual-based earnings

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<sup>3</sup> The IAASB indicated that the intended benefits of the new auditor's report include: 1. Enhanced communication between auditors and investors, as well as those charged with corporate governance; 2. Users' increased confidence in audit reports and financial statements; 3. Increased transparency, audit quality and information value; 4. Management and financial statement preparers' increased attention to disclosures referencing the auditor's report; 5. Auditors' renewed focus on matters to be reported that could result in increased professional scepticism; and 6. Enhanced financial reporting in the public's interest (IAASB, 2013). Thus, the intended benefits indicated by the IAASB are more likely to be considered as intended consequences of ISA 701.

management, which auditors can potentially constrain and can possibly use to influence management to shift to real activities and continue their misbehaviour.

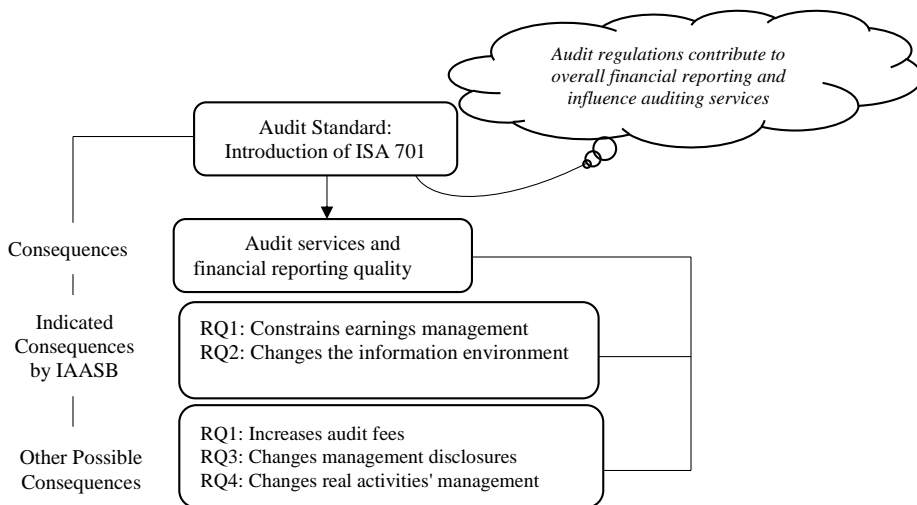


Figure 1. Primary theoretical framework

By responding to these four research questions, this thesis aims to draw conclusions regarding audit regulations’ role in audits’ quality and corporate financial reporting. This includes some insights that could be informative for investors requesting more information in audit reports, the regulators who introduce new auditing standards and academic researchers of auditing and audit reporting quality.

### 3. Institutional Background of ISA 701

#### 3.1 Introduction of ISA 701

As mentioned in the first section of this introductory chapter, users (investors) expressed their interest for more information in audit reports to increase transparency, and specifically after the 2007–2008 financial crisis (EC, 2011b). In October 2010, the European Commission published a Green Paper and initiated a discussion and questions regarding the information provided by auditors and auditor independence (EC, 2010). Stakeholders—including investors, lenders, analysts, academics, management personnel, auditors and regulators—were invited to provide their perspectives regarding the discussions in the Green Paper. One specific central discussion among stakeholders or respondents to the EC’s Green Paper involved the inclusion of some additional information in the audit report to clarify audit opinions or make them more informative (EC, 2011b). Following this Green Paper, the IAASB in October 2012 invited investors and analysts—who originally called for changes in audit reporting—and other users to indicate their desired information. Their suggestions included additional information about significant audit matters, auditors’ conclusions on the appropriateness of management’s use of the going-concern assumption, and entity-specific information in the audit report, among others

(IAASB, 2012). These suggestions were relatively similar to those suggested by stakeholders in response to the EC's Green Paper.

The EC then attempted to stabilise financial systems after the financial crisis in Europe and mitigate the existing gap in expectations between stakeholders and auditors by proposing a new regulation on statutory audits of public-interest (listed) companies (EC, 2011a). The proposed regulation included a requirement on the disclosure of risks of material misstatement in the audit report, which will be further discussed in a subsequent section. Moreover, the IAASB acted simultaneously with the European Union's regulators in responding to users' requests for relatively similar audit requirements. In 2013, the IAASB proposed and circulated a draft of its new ISAs to collect stakeholders' comments by November 2013. These proposed new ISAs included a set of new audit standards that required auditors to disclose the audit's scope, KAM and materiality, among other information (IAASB, 2013).

Investors and analysts positively reacted to the suggested improvements to the auditor's report and the IAASB's new proposal. From their perspective, disclosing KAM as per ISA 701 was the most important proposal (IMA, 2013), and a significant step towards increasing the audit report's informative value. Carcello's (2012) survey indicated that investors' most desired changes involved auditors' discussions of management estimates and judgment based on the proposed ISA 701. Prasad and Chand (2017) found that 80% of commentators supported the idea of an increased communication of audit- and firm-related information in the audit report, such as KAM as noted in the ISA 701 standard.

The IAASB later finalised ISA 701, which has been in effect since 15 December 2016 (IAASB, 2015), and required<sup>4</sup> auditors to disclose KAM in listed companies' audit reports. The KAM paragraph contains information on the higher assessed risk of material misstatements or significant risk, significant auditor judgments regarding complex accounting estimates, and the effects of significant events or transactions. Significant accounting estimates can be an important area of focus, as they reveal any uncertainty about firms' revenue, liability, valuation, inventory, receivables, the impairment of tangible and intangible assets, and business combinations. Such estimates also potentially affect firms' future cash flows, which is a key criterion in decisions by users who evaluate firms' future performance (Gutierrez, Minutti-Meza, Tatum and Vulcheva, 2018). In requiring auditors to disclose KAM, this important new ISA received international attention.

Although the new ISA requirements have been applied internationally, the ISA 701 received special attention in the European Union, as its 2014 regulatory framework established a similar requirement. This new EU framework was established by Directive 2014/56/EU and Regulation 537/2014 (European Parliament & Council of the European Union, 2014a, 2014b). Directive 2014/56/EU is the amended version of 2006/43/EC, and addresses the statutory audit of listed entities' annual and consolidated accounts. The new EU audit legislation—including this Directive and Regulation—applied to auditors of listed companies from 17 June 2016. This

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<sup>4</sup> The Appendix at the end of this chapter presents detailed requirements based on ISA 701, which are described through an example of KAM disclosure.

new legislation also applied to the 28 current EU member states as well as other countries in the European Economic Area. Unlike with Regulation 537/2014, EU member states had to transpose the provision in Directive 2014/56/EU into national law by 17 June 2016.

The European Union's legislation contains a series of requirements that includes mandatory auditor rotations, the provision of non-audit services, auditing fees, definitions of the audit committee's role and responsibility and the provision of disclosures that support the audit opinion. Article 10-2c in Regulation 537/2014 is an important requirement, and similar in many aspects to the ISA 701. The former requires auditors of listed entities to disclose additional information supporting their audit opinions. At a minimum, these auditors should: 1) describe the most significant assessed risks of material misstatement, including those that may occur due to fraud; 2) summarise the auditor's response to these risks; and 3) clearly reference relevant disclosures in financial statements concerning each assessed risk of material misstatement. As the concept of the 'assessed risk of material misstatement' in the European Union's legislation has been derived from ISAs, both methods arguably communicate similar matters (Federation of European Accountants—FEE, 2015).

However, differences exist between the EU legislation and the ISA 701 standard, and specifically regarding their effective dates and requirements. The EU legislation was applied beginning on 17 June 2016, and should be adopted in reports relating to financial years ending on or after 30 June 2017. In contrast, the ISA 701 was effective on 15 December 2016, and covers the financial years ending on or after 15 December 2016. Nevertheless, the EU regulation stipulates that if a company's financial year begins on a date before 16 June 2016 (e.g. 1 January 2016), the company's auditor is exempt from including a KAM disclosure in the audit report unless the country's national law mandated that the company's auditors comply with ISA 701 (according to the IAASB). Sweden provides a practical example, in that it required auditors to comply with both the IAASB and EU regulations. Therefore, auditors of all listed firms in Sweden must include a KAM disclosure in their audit reports of financial years ending on or after 15 December 2016.

Moreover, the EU legislation requires the disclosure of matters included in financial statements, while audit reports based on the ISA 701 may also disclose matters not included in financial statements, but that are nonetheless deemed significant (FEE, 2015). Thus, audit reports based on the ISA 701 are expected to promote better communication than the European Union's legislation, as the former can potentially have positive impacts on auditing practices in countries that adopt the new ISA requirements. Nevertheless, the focus here is not on the difference between the ISA 701 and the EU's risk-disclosure requirement; rather, this work highlights the extent to which KAM disclosures are required and regulated in EU countries.

### *3.2 Overview of the European Union's new audit-reporting timeline*

The proposed ISA (IAASB, 2013) and its finalised version (IAASB, 2015b) were implemented throughout the European Union in different periods. Table 1 illustrates the EU's adoption of both versions of the ISA 701.

**Table 1.** Adoption of the ISA 701 in the European Union

Country	Proposal of ISA 701 (2013 version)	Finalised ISA 701 (2016 version)
Austria		Adopted in 2016 based on the IAASB effective date
Belgium		Adopted based on the EU's regulations after 2016*
Bulgaria		Adopted based on the EU's regulations after 2016
Cyprus		Adopted in 2016 based on the IAASB effective date
Czech Republic		Adopted in 2016, based on the IAASB effective date
Germany		Adopted based on the EU's regulations after 2016
Denmark		Adopted in 2016 based on the IAASB effective date
Estonia		Adopted in 2016 based on the IAASB effective date
Spain		Adopted based on the EU's regulations after 2016
Finland		Adopted in 2016 based on the IAASB effective date
France		Adopted based on the EU's regulations after 2016
United Kingdom	Adopted in 2012–2013	Adopted in 2016 based on the IAASB effective date
Greece		Adopted based on the EU's regulations after 2016
Croatia		Adopted in 2016 based on the IAASB effective date
Hungary		Adopted in 2016 based on the IAASB effective date
Ireland	Adopted in 2012–2013	Adopted in 2016 based on the IAASB effective date
Italy		Adopted based on the EU regulations after 2016
Lithuania		Adopted in 2016 based on the IAASB effective date
Luxemburg		Adopted based on the EU's regulations after 2016
Latvia		Adopted based on the EU's regulations after 2016
Malta		Adopted in 2016 based on the IAASB effective date
Netherlands	Adopted in 2014	Adopted in 2016 based on the IAASB effective date
Poland		Adopted based on the EU's regulations after 2016
Portugal		Adopted in 2016 based on the IAASB effective date
Romania		Adopted based on the EU's regulations after 2016
Sweden		Adopted in 2016 based on the IAASB effective date
Slovenia		Adopted in 2016 based on the IAASB effective date
Slovakia		Adopted based on the EU's regulations after 2016

\* Although mandatory adoption occurred in some countries after the fiscal year starting in June 2016, some auditors in these countries voluntarily included KAM disclosures in their audit reports. Additionally, audits of some of the companies in countries that adopted ISA 701 in 2016 were based on each country's national GAAP rather than the ISA; thus, these auditors did not include a KAM disclosure in their audit reports.

The pre-implementation period<sup>5</sup> covers the time in which the auditors' reports were based on the proposed version. In 2012, the United Kingdom's Financial Reporting Council (FRC) introduced its ISA 706 in the United Kingdom and Ireland in its 'Emphasis of matter paragraphs and other matter paragraphs in the independent auditor's report' (FRC, 2012). These 'emphasis of matter' paragraphs include the matters considered the most significant to the auditor. While they refer to the information disclosed in financial statements, this ISA did not determine what could be considered an 'emphasis of matters', although this has been effective in the fiscal years ending on or after October 2012. Additionally, some auditors in the

<sup>5</sup> The pre-implementation of ISA 701 was based on a proposal of the standard, and primarily occurred in the United Kingdom and Ireland in October 2012 and in the Netherlands in 2014. The ISA 701 post-implementation period was based on the final version, and occurred in the EU in December 2016.

Netherlands have voluntarily followed the IAASB's proposals—including ISA 701—since the financial year ending in December 2013. Further, the Netherlands' *Koninklijke Nederlandse Beroepsorganisatie van Accountants*—or the Royal Dutch Professional Organisation of Accountants, hereafter 'NBA'—also adopted the IAASB's new audit requirements. This required auditors of listed entities to disclose KAM in their audit reports for the financial years ending on or after December 2014. The NBA based its new audit requirements on the IAASB's proposals, aspects from the new 2013 audit report introduced in the United Kingdom, and some other requirements from EU regulations (NBA, 2014).

The ISA 701 post-implementation period began on the date EU countries adopted the finalised ISA. For instance, the United Kingdom's FRC implemented its new ISA 700, which was revised in June 2016, and required auditors to communicate KAM in accordance with the finalised ISA 701, effective since 15 December 2016. While no significant difference exists between the proposed and finalised ISA 701, the latter provides a more stabilised enforcement environment to enhance adopting countries' confidence regarding policymakers' final decisions. Moreover, all other EU countries that adopted this ISA in their national standards were also likely to implement the IAASB's new audit requirements by the fiscal year ending December 2016, or in the following year. This thesis investigates those EU countries that implemented ISA 701 in the 2016 fiscal year.

## 4. Theoretical Framework

### 4.1 Concept and framework of audit quality

Although many research questions can be applied in audit research, the most prevalent are as follows:

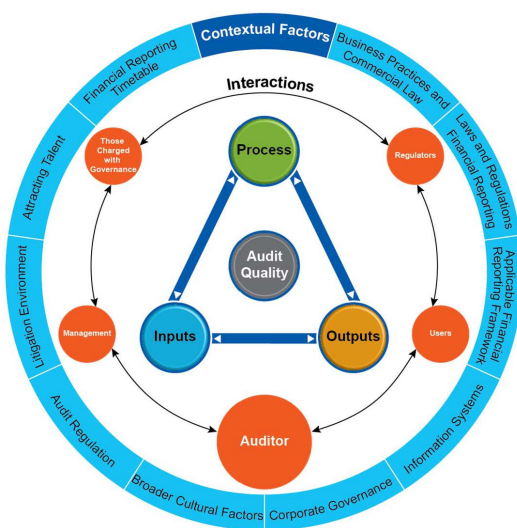
- 1- Do auditors supply similar levels of auditing or audit quality?
- 2- Is the audit quality observable? In other words, do users perceive the audit's quality?
- 3- Do all firms demand similar levels of audit quality? What drives the demand for audit quality?
- 4- Do audit standards contribute to audit quality?

While prior audit research has addressed these questions to build theory explaining audit quality, such research has documented that: (1) higher-quality audits are those conducted by large audit firms with more significant reputations and stronger incentives (DeAngelo, 1981b); (2) investors, analysts, creditors and other stakeholders at least partially perceive this quality (Dye, 1993; Ghosh, Kallapur and Moon, 2009; Schmidt, 2012; Burnett, Chen and Gunny, 2018); (3) this quality nevertheless depends on the level of governance in the firm demanding an audit, as well as the firm's incentives (Abbott, Parker, Peters and Raghunandan, 2003a, 2003b; Abbott, Parker and Peters, 2004; Bratten, Causholli and Sulcaj, 2019); and finally, (4) audit standards contribute to the audit's quality, providing an environment in which the auditors take more responsibility for the audit performed (Carcello and Li, 2013).

The theoretical implications from prior literature indicate that despite auditors' role as the main

drivers of audits—and that they should assist users in investment decisions (Healy and Palepu, 2001)—audit quality depends on many factors that can create a more robust process. Therefore, it is difficult to summarise all these implications in a single framework to define audit quality. In this context, audit literature has asserted that audit quality is a complex, multi-dimensional issue (Francis, 2011), and thus, several academic research agendas and frameworks have been introduced to facilitate audit research (Francis, 2011; Knechel, Krishnan, Pevzner, Shefchik and Velury, 2013; DeFond and Zhang, 2014). Moreover, the IAASB introduced an audit-quality framework that inclusively introduced all factors driving an audit (IAASB, 2014). Figure 2 illustrates an overview of this framework.

This framework primarily indicates that high-quality audits are performed by auditors with appropriate competencies—such as sufficient knowledge, skills, time, ethics and experience (input)—and by applying an audit process and control procedures based on regulations and standards (process). As the outcome of the audit, the audit report includes relevant information that should be visible to the users (output). Additionally, the framework indicates that parties other than the auditors who perform the audit, such as those charged with governance, management, users and regulators, are also critical in ensuring audit quality and supporting high-quality financial reports.



**Figure 2.** Audit quality framework as introduced by the IAASB (2014)

According to this framework, audit regulations as a contextual factor can potentially impact the quality of companies' financial reporting and auditing. In this context, the research diagram in Figure 1, and as illustrated in the first section of this introductory chapter, is consistent with the IAASB's framework. The following section presents audit literature related to this context, or specifically, audit quality and auditing regulations' impact on the quality of financial reporting and auditing.



### *4.2 The role of regulations in auditing: An overview of audit research*

Before discussing the impact of these regulations, one must first define audit quality and the components of audit quality as not only discussed in auditing literature, but also considered by regulators. Literature has presented different definitions for audit quality, as this is a complex issue; this work considers the definitions most relevant to the research questions.

#### *4.2.1 The definition of audit quality and its factors*

Audit quality is traditionally defined as the market-assessed joint probability that an external auditor incorporates his or her competencies to discover an error in financial statements; the auditor then reports this error through an independent judgement (DeAngelo, 1981b). This definition indicates that audit quality is measured by understanding its two main components: an auditor's competence and independence. The former refers to the auditor's technical capabilities that allow them to identify financial statement errors (DeAngelo, 1981b); the latter refers to the ability to withstand client pressure and disclose the errors (DeAngelo, 1981a). Thus, any strong competence and independence will lead the auditor to supply a higher-quality audit.

Large audit firms are likely to supply higher-quality audits through well-established technical capabilities, and perform these audits using strongly competent auditors (DeAngelo, 1981b). This is because larger audit firms have performance-based, brand-name reputations in society, and consequently, the incentive to maintain this reputation by supplying higher-quality audits (Watts and Zimmerman, 1986; Simunic and Stein, 1987). The reputation incentive has become an important factor influencing auditor independence, as it affects auditors' wealth; auditors are likely to avoid audit failures that result in a loss of reputation. Indeed, reputable auditors, such as larger auditing firms, are likely to maintain their reputations by issuing more accurate reports (Lennox, 1999a). This auditing concern exists given that these firms will experience losses through fewer clients or lower fees if their reputations are damaged as a result of audit failure (DeAngelo, 1981b). Additionally, the litigation incentive is another factor influencing auditor independence. As any increase in risk increases the auditors' probability of litigation, auditors are likely to avoid litigation costs by issuing more accurate reports to prevent audits' failure (Dye, 1993). Hence, both reputation and litigation incentives promote auditor independence.

The traditional definition of audit quality includes the supply side of audit quality as a function of auditor incentives (independence) and competencies, but not the demand side, which includes the function of client incentives and competencies. DeFond and Zhang (2014, p. 276) proposed a broader definition of higher audit quality, as 'greater assurance (depending on auditor incentives) that the financial statement faithfully reflects the firm's underlying economics, conditioned on the client firm's financial reporting system and innate characteristics', and thus, as a component of financial reporting quality based on the auditor's ability and client competencies. Audit quality is considered a component of financial reporting

quality, as a financial report is perceived as more credible if it has been submitted for a higher-quality audit.

Client competencies regarding their audit demands are considered crucial in audit literature, and refer to the characteristics of a type of corporate governance—or specifically, the audit committee and board of directors—that determine an audit’s quality. The audit committee has a responsibility to select, retain and terminate an audit and firm or engagement partner, as well as determine the audit firm’s compensation. Additionally, the audit committee is responsible for overseeing the audit firm’s work, including acting as an intermediary to resolve any disagreements that arise between the auditor and management (Bratten, Causholli and Sulcaj, 2019). Regarding these important roles, the audit committee’s characteristics can lead to the demand for a high-quality audit. Related empirical evidence has documented that an independent audit committee that takes a more active monitoring role constrains auditors’ economic dependencies, or non-audit services (Abbott *et al.*, 2003a). Such a committee will instead demand a higher-level audit (increasing audit fees), which results in a higher-quality audit (Abbott, Parker and Peters, 2004; Bratten, Causholli and Sulcaj, 2019).

These studies of corporate governance indicate that client competencies drive both supply and demand sides of audit quality; therefore, the IAASB’s framework (Figure 2) includes corporate governance as one of its contextual factors.

### *4.2.2. Regulations’ impact on audits*

Another important factor that impacts audit supply is regulatory intervention. Auditing research and the IAASB’s framework have cited this as one factor to considerably improve audit quality by strengthening auditors’ incentives to supply higher-quality audits (independence), as well as their competencies to deliver this supply (DeFond and Zhang, 2014; IAASB, 2014). Section 1.1 in the current chapter discusses audit regulations’ importance in both the supply of and demand for audits. In contrast, the current section specifically focuses on regulatory contributions to improve auditor independence, and particularly the contribution to auditor litigation or reputation incentives.

Auditor independence was questioned in the 1990s and at the beginning of the 21st century, and especially at the time of the Enron scandal and Arthur Andersen’s collapse. One part of this discussion concerned auditors’ revenue as related to non-audit services, which could lead to auditors’ economic dependency on their clients, thus impairing their independence (DeAngelo, 1981a). Subsequently, users asked for a clarification of such non-audit services: any amounts charged for non-audit services should be disclosed, and any economic dependency should be constrained to enhance auditor independence. This economic dependency—and specifically in a weak information environment—could possibly lead auditors to, for instance, not issue a going-concern-modified opinion for financially distressed companies (Geiger and Raghunandan, 2002). Such motivations have led auditing regulations and standards to expose auditors’ litigation and reputation incentives by changing the audit firm’s litigation environment.

Either increasing or decreasing litigation pressure can impact the audit and client companies' financial reporting, as reducing litigation pressure in particular provides a favourable environment to promote the audit firm's less conservative behaviour and reduce going-concern-modified opinions (Geiger, Raghunandan and Rama, 2006). On the one hand, weakening the litigation environment benefits investors and clients, who would bear some unnecessary costs for assertions of audit failures that are later determined not to have failed based on court judgments. This also benefits auditors' reputations, as they may issue going-concern-modified opinions with fewer errors. On the other hand, less conservative auditing as a result of a less litigious environment can increase client companies' manipulation of accounting numbers (Lee and Mande, 2003). These effects result from changes in auditors' conservatism in decision-making, and are more pronounced for companies audited by Big N audit firms than non-Big N audit firms (Lee and Mande, 2003; Geiger, Raghunandan and Rama, 2006). These studies also demonstrated that auditors are less likely to supply high-quality audits when facing decreased litigation risk, and this may also lead to more reporting errors when litigation exposure increases. However, reporting errors are less likely and costs are lower than the costs resulting from decreased auditor litigation (Geiger and Raghunandan, 2002). Thus, more strict liability regimes lead to higher-quality audits due to auditors' incentives: the auditor's increased reputation and litigation risks. These will compel the auditor to more carefully evaluate information suggesting a failing client, and possibly modify their auditing opinions (Blay, 2005). These studies answer the research question regarding whether an increased risk of auditor litigation—as engendered by audit regulations and standards in the aftermath of the Arthur Andersen scandal—promotes higher audit quality.

A similar research question is also applied for the new audit requirements implemented in the aftermath of the 2007–2008 financial crisis. For example, such requirements mandate that the audit partner disclose their identity or sign audit reports; this imposes an increased responsibility and accountability on the individual audit partner and potentially exposes auditors' litigation risks. Thus, auditors will increase their efforts to discover more material misstatements and report them through their independent judgement, which has been strengthened by the new requirements (Carcello and Li, 2013).

Another example involves the new auditor disclosure requirement. As discussed in the first section, new ISAs have required auditors to disclose information at users' request; consequently, any changes to the audit report have significant informational value to these users (Prasad and Chand, 2017). However, concerns exist regarding the ISA requirements' practical consequences for investors, creditors and other stakeholders. Additionally, the consequences of this new audit reporting are likely to involve changes in audit quality as well as increased audit costs and auditors' legal liability (Prasad and Chand, 2017). Although ISA 701 does not include any explicit requirement to enhance audit quality, this is potentially achieved by increasing auditors' accountability<sup>6</sup> and their exposure to litigation and reputation

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<sup>6</sup> The increased accountability supports auditors' judgment ability while decreasing their judgement variability (DeZoort, Harrison and Taylor, 2006; Carcello and Li, 2013); in contrast, litigation risks induce an increased effort towards discoveries that increase both audit costs and quality (Chiawen and Wang, 2006).

risks. Auditors' accountability then increases as a result of ISA 701, as they should assume responsibility for disclosing the most significant matters in their audit reports (Reid, Carcello, Li and Neal, 2019). Further, these auditors should disclose significant matters and explain how they arrived to their specific conclusions.

The determination and disclosure of this matter depend on the auditor's judgement, as KAM are concentrated in subjective areas, such as management's judgement of significant accounting estimates. Thus, it is possible that an auditor's judgement could lead to determination errors. Such errors regarding KAM are documented through disclosures, and these hold auditors accountable for any possible costs that the error imposes on users and their client companies. The auditor can also bear these costs if the error is significant and leads to litigation and a damaged reputation. Thus, auditors' litigation and reputation risks can potentially increase as they assume the risk and accountability of disclosing new information. Although this may not considerably increase litigation exposure in various countries with low litigation risk (e.g. in the EU setting), it increases auditors' reputation risks. Countries with few auditor litigation incentives still include the auditor's reputation-related risks as a valid incentive to impact both perceived and actual audit quality (Skinner and Srinivasan, 2012). Overall, recent changes in audit standards can potentially enhance audit quality, due to the possible increase of auditors' litigation and reputation risks (Prasad and Chand, 2017; Gutierrez *et al.*, 2018; Li, Hay and Lau, 2018; Klueber, Gold and Pott, 2019; Reid *et al.*, 2019).

The role of audit regulations is reviewed here to highlight their impact as a contextual factor in not only strengthening auditors' independent judgment, but also eventually enhancing auditors' scrutiny of client firms' financial accounts. It should be noted that audit regulations have impacted the supply in the audit process while leading to some improvements in the audit report's content or quality of auditors' disclosures, which *per se* represents an improvement in audit quality. Users, and particularly capital market investors, can perceive the regulatory impacts on audit quality, whether in audit processes or reporting.

### *4.2.3 Audit regulations' contributions to capital market confidence*

While audit regulations' contributions to the audit supply have been previously discussed, this sub-section examines how investors are involved and whether they benefit from this contribution. The IAASB's audit-quality framework mentions users (investors) as a factor, as they interact with auditors and regulators in either demanding or supplying audits. Investors are likely to enhance the audit quality affecting their investment decisions when they either demand a particular level of quality for an audit, or request specific information to be communicated in an audit report. They benefit from enhanced quality in terms of their investment decisions, as they can perceive these changes in quality.

The discussion regarding investors' requests for higher-quality audits and additional information is pervasive in audit research. This is also built upon agency theory, which indicates that the audit and auditor act as intermediaries to potentially mitigate investors' concerns about company management's financial-reporting misbehaviour, subsequently enhancing investors' confidence by adding value to corporate financial reporting (Jensen and

Meckling, 1976; Watts and Zimmerman, 1983, 1986). This discussion centres on the conflicts of interest between management, shareholders and investors, resulting in information asymmetry (agency costs) that negatively affects investors' investment decisions. Thus, auditors assist investors by adding value to the information that managers disclose, an effect magnified by superior audit quality. Moreover, auditors as intermediaries in an audit can gain internal knowledge about firms' accounts, and thus, can provide reliable assurance regarding the accuracy of management disclosures as well as additional useful information for investors (Healy and Palepu, 2001).

As investors clearly recognise auditors' ability to influence financial reports, they expect transparent audit reports from auditors, and are interested in the extent to which they can benefit from any additional information. Therefore, investors facing any type of gap in audit reports—whether pertaining to information or expectations—will request solutions, which academics have naturally investigated and regulators have responded to. For instance, investors raised concerns after the 2007–2008 financial crisis that audit reports still included gaps in both information and expectations. Academics discussed how investors perceived the standardised audit report as symbolic, and that additional audit- and client-firm-related information was needed to create more transparent audit reports (Church, Davis and McCracken, 2008; Carcello, 2012; Mock *et al.*, 2013). Thus, audit standards required a KAM disclosure based on ISA 701 to enhance the value of both communications and information. This is because auditors' detailed information can more strongly support their opinions, and would allow investors to better understand the extent of the work performed in an audit (Church, Davis and McCracken, 2008).

The new disclosure is a joint effort between investors and regulators—and academics, to an extent—to enhance the audit report's transparency and quality; however, this is only perceived when the capital market is satisfied with the output. This also depends on the audit report's information content. Audit research has indicated that the audit report is a source of supplementary information for financial statement users, and has documented that the market reacts to audit reports' information content, such as opinions or going-concerns in the audit report's disclosures (Loudder *et al.*, 1992; Taffle, Lu and Kausar, 2004; Ianniello and Galloppo, 2015). Such market reactions to the audit report's content are reflected by changes in stock prices, the volume of stocks being transacted, stock returns, and changes in market liquidity, in which the new information in an audit report changes the company's information environment. These market effects are also likely to occur after including a KAM disclosure in the audit report (Christensen, Glover and Wolfe, 2014; Lennox, Schmidt and Thompson, 2017; Prasad and Chand, 2017; Gutierrez *et al.*, 2018). Therefore, this thesis also seeks to reveal whether ISA 701 impacts the information used in the capital market. Consequently, it provides evidence regarding investors' perceptions of the information environment following the adoption of new audit regulations. As investors anticipate a changed information environment, this change is likely to decrease information asymmetry and increase investors' confidence. This possibility of change in the information environment demonstrates regulators' and users' contributions to audit reporting quality.

### 4.2.4 Audit regulations' effects on management's discretion and incentives

Audit regulations' effects on audit quality can also impact management's discretion in financial reporting. This is because management teams can choose between accounting policies and decide on accounts' estimates, which may impact the risk of material misstatements. As management has various incentives—such as earnings- or stock-based compensation—that depend on the firm's performance, including profitability and earnings, management can use their aforementioned discretion to manipulate the accounting numbers representing this performance (Healy and Palepu, 2001). Management can also obfuscate the disclosure of accounting information around account estimations, for example, to manipulate investors' perceptions of the firm's performance (Li, 2008; Huang, Teoh and Zhang, 2014). Thus, audit regulations that increase the auditor's exposure to litigation and reputational risks encourage auditors to increase their scrutiny of corporate accounts, which affects management's opportunistic use of their discretion.

Exposed auditor litigation and reputation risks will compel the auditor to not only constrain management's opportunistic use of their discretion, but also force management to properly report accounting information. For instance, such regulatory effects have led auditors to increase their attempts to discover whether management has constrained their earnings manipulation, such as by inflating earnings numbers. Auditors can also potentially affect management's discretionary decisions or choice or disclosure of accounting estimates, and especially when auditors could potentially be exposed to litigation as a result (Watts and Zimmerman, 1981; Nelson, Elliott and Tarpley, 2002). Auditors had potentially stronger effects on management disclosures after the implementation of ISA 701, as this ISA requires auditors to focus on areas similar to those that are also of focus for management (Cade and Hodge, 2014).

However, these auditors may not be able to completely constrain management's opportunistic behaviour, as managers have alternative ways to manipulate accounting numbers, while the auditor can only constrain one means of manipulation<sup>7</sup>. Consistent with this argument, audit researchers have discovered that management's accruals-based earnings manipulation—which is one way of inflating earnings—is constrained under higher audit quality and a greater regulatory scrutiny of corporate financial statements. Thus, managers may shift to real activities management, which is another way to inflate earnings (Cohen, Dey and Lys, 2008; Chi, Lisic and Pevzner, 2011; Ernstberger *et al.*, 2017).

This thesis discusses audit regulations' and the subsequent auditing's effects on management's discretionary or disclosure-related choices as well as earnings manipulation. Although ISA 701 does not primarily aim to affect management's financial reporting, and this is not an intended benefit as indicated by the IAASB, these effects are possible consequences.

In summary, Section 4 in this introductory chapter has provided an overview of research

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<sup>7</sup> Adam Smith's classical economics view regarding the friction between individual desires and societal norms indicates that 'whatever the incentive, whatever the situation, dishonest people will try to gain an advantage by whatever means necessary' (Levitt and Dubner, 2005, p. 14).

indicating that audit regulations are a factor in improving audit quality and firms' financial reporting. Therefore, auditors are critical in supplying independent audits—whether through the audit process itself or the resulting audit report—that benefit investors and hamper management's opportunistic behaviour. In this context, this thesis provides empirical evidence relating the ISA 701's causal effects on audit quality, the capital market and management decisions regarding the reporting of earnings as well as disclosures.

### **5. Research Design**

#### *5.1 Motivation for the applied methods*

This thesis' four research questions are addressed using a research design based on archival accounting and audit research. Despite the use of both archival and experimental methods in accounting and audit studies that investigate a phenomenon's causal effects, this thesis provides evidence based on archival methods. Moreover, this thesis follows the methods applied in previous archival studies that have investigated a new regulation's effects on the study's outcomes (e.g. Cohen, Dey and Lys, 2008; Li, 2008; Carcello and Li, 2013; Christensen, Hail and Leuz, 2013; Huang, Teoh and Zhang, 2014).

Although research designs based on interviews, observations and experimental and archival methods can all respond to research questions of causality, some differences exist that distinguish these causal methods. Observation and interview methods can potentially reveal any causality, but researchers using these methods are limited to accepting the world in its current state. In contrast, experimentation allows the researcher to systematically alter the variable(s) of interest, with the flexibility to manipulate the material used to study causal effects (Cooper and Schindler, 2011). Recent audit research studying the effects of KAM disclosure requirements through experimental studies have also applied this method. For instance, Cade and Hodge (2014), Dennis, Griffin and Johnstone (2018), and Christensen, Glover and Wolfe (2014) experimentally examined the ISA 701's causal effects on different variables of interest. These recent studies incorporated the advantages of the experimental method, which enabled them to manipulate or adjust the text of both annual and audit reports to include and exclude KAM disclosures. This allowed them to reveal the KAM disclosure's effect on investors' decisions and management's communications.

However, experimental studies are also subject to limitations when they analyse a regulation's effects using groups of people who are not directly involved in its preparation or regulatory outcome. For instance, the previously mentioned recent experimental studies involved accounting students with no experience in either auditing or the capital market. Thus, the heterogeneity that existed in this instance between the students and the people with actual professional experience can weaken the results. Aside from this limitation, experimental studies on KAM disclosure requirements have supported theory to allow archival studies to build their study motivations. This thesis also considers these experimental studies' implications.

Archival research has overcome experimental studies' existing limitations by using the actual

and observational data collected from different sources when studying causal effects (Gow, Larcker and Reiss, 2016). Further, archival research uses historical data regarding the phenomena practised in various firms, including those in the capital market as well as audit firms. The historical data in archival accounting and audit research can be examined using both statistical and econometric methods. Further, recent archival research on KAM disclosure requirements has used actual data from the capital market and firms to test the causality discovered and theorised in experimental studies (Gutierrez *et al.*, 2018; Li, Hay and Lau, 2018; Reid *et al.*, 2019). This thesis follows these recent archival studies to collect its data, as described in the following subsection.

### *5.2 Data collection and validity*

Data is collected from different sources in conducting four studies related to the research questions in this thesis. First, both hand-collected and computerised data-collection methods were used. Archival data can be hand-collected from different sources, such as companies' websites and annual reports, capital market websites and audit firms' data sources. Part of the data in this thesis is hand-collected from each company's annual reports, which were downloaded for the study period from the Orbis database and through Google's search engine, or from companies' websites available for public use.

Computerised data are collected from such databases as Orbis, Thomson Reuters' DataStream, and the S&P's Capital IQ, as these databases belong to reliable companies that provide global companies' financial- and non-financial data. As other archival audit research has provided evidence using similar data sources, this offers support in comparing the results with other studies, then generalising them.

### *5.3 Drawing causal inferences*

One crucial methodological argument in archival accounting and auditing research involves drawing causal inferences using observational data. Gow, Larcker and Reiss' (2016) work investigated 125 research papers' research designs—whether experimental, field-related or archival accounting research—and indicated that 90% of these papers sought to answer causally related research questions. These included such research topics as whether KAM disclosure requirements affect: (1) audit quality and audit fees; (2) the capital market; (3) management disclosures; (4) management's reporting behaviour; and (5) investors' uncertainty. These are causally related research questions that recent studies and the current thesis seek to answer. While research has highlighted the importance of these research questions and related studies, it is also critical that the researcher discovers how to properly draw such causal inferences. One methodological guide suggests drawing a causal diagram to visually describe the causal inference drawn from a given research design (Gow, Larcker and Reiss, 2016). Therefore, Figure 3 illustrates the causal relationships of the dependent and independent variables in the regression models used in the four studies in this thesis.



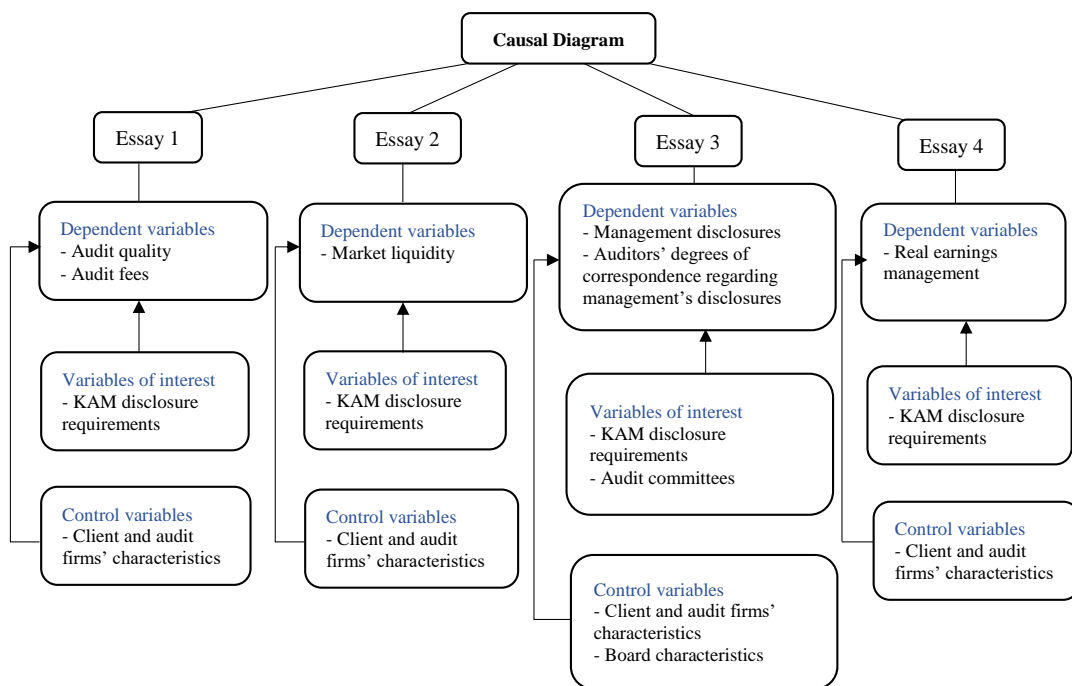


Figure 3. Causal inference diagram

The primary, simple causal diagram is adopted relative to this thesis' research questions; it represents the effects of the variables of interest on the outcome variables while controlling for other variables that could potentially affect the latter. For example, unobservable variables can affect the variables of interest, and especially those creating noise around the dependent variables. As these unobservable variables may result in biased estimates of causal effects, the model may experience endogeneity issues. For instance, audit quality is proxied by accruals-based earnings quality, which can possibly change over time, be affected by some other unobservable variables, and vary due to other specific events. Audit fees and measures of real earnings management can be subject to the same problems as accruals-based earnings quality. Thus, such endogeneity problems could create concern in our results.

Endogeneity is a crucial discussion in archival research, as it is difficult to perfectly detect unobservable variables. Two categories of econometric techniques are suggested for the research design to mitigate any endogeneity concerns. The first refers to such techniques as instrumental variables, difference-in-differences (DID) estimators, and a regression discontinuity design, which provide clear exogenous variations in estimating the coefficients of interest. The second category refers to such techniques as panel data, matching, and measurement error methods that oppose a clear source of exogenous variation; these instead rely on economic modelling assumptions (Roberts and Whited, 2013). The essays in this thesis

apply a combination of techniques from both categories.

The first two essays apply a DID research design and panel data methods involving both fixed and random effects to mitigate the probability that the unobservable variables will impact the outcome variables and the coefficients of interest. The DID research design enables researchers to capture more accurate effects from the immediate changes in economic and institutional environments and government policy (Roberts and Whited, 2013). The 2016 ISA 701 adoption in a majority of EU countries, but not all, provided a quasi-experimental environment to apply the DID method in this thesis.

Despite the problem in applying single cross-sectional<sup>8</sup> and single time-series<sup>9</sup> differences methods in natural experimental research, the first two essays applied a double-difference estimator, or DID method; this compares the outcome variables in the treatment and control groups in the before- and after-treatment periods. This comparison of outcome variables across time periods and groups mitigates endogeneity concerns, indicating that the outcome variables—such as the quality of accruals, audit fees, liquidity factors and measures of real earnings management—change over the observation period, even if the ISA 701 was not adopted.

Moreover, all essays control for unobservable factors by adding country-, industry- and firm-fixed effects in the study model. While the country-fixed effect captures the systematic institutional differences across countries, the industry-fixed effect controls for the differences in risk across industries. Moreover, firm-fixed effects control for technological and performance differences across firms (Roberts and Whited, 2013). Applying these techniques mitigates the unobservable variables' likely effects on outcome variables.

In summary, this section has described the validity of the data and research design used in the essays in this thesis. The data's validity has been clarified by describing the data sources and data collection methods, while the research design's validity has been proven robust by applying econometric techniques. Overall, the empirical design applied in the following four essays benefit from archival accounting and audit research. Subsequently, I provide a short summary of each essay that examines the research questions applying these described methods.

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<sup>8</sup> The single cross-sectional differences method captures the differences in outcome variables from a treatment and control group in a single post-treatment year. The single cross-sectional differences method is used only when no data is available on pre-treatment outcomes; otherwise, this method is not recommended (Roberts and Whited, 2013).

<sup>9</sup> The single time-series differences method captures the differences in outcome variables of a treatment group across the time before and after the treatment. As no control exists for the endogeneity problem resulting from the outcome variables' changes over time, the single time-series method can be problematic, as it is subject to endogeneity (Roberts and Whited, 2013).

### 6. Essay Summaries

As previously mentioned, this thesis includes four essays that examine the four research questions regarding the consequences of ISA 701. The first two essays have been included in a licentiate thesis; this revision focuses on the two essays' backgrounds and hypotheses development sections. This PhD thesis includes the final two essays, which were conducted after the licentiate thesis. Each essay is summarised as follows.

#### 6.1 *Essay 1*

Essay 1 empirically investigates whether introducing the KAM disclosure requirements in ISA 701 improved audit quality among the listed companies in the European Union. The main motivation to study changes in audit quality involves one such consequence of these changes, in that disclosing detailed information leads auditors to take responsibility, and the risks in disclosing new information enhance their accountability and potential exposure to litigation and increased reputational risk. Therefore, it is hypothesized that auditors will increase their efforts—as measured by the fees they charge for auditing services—and supply higher-quality audits to decrease litigation and reputational risks, which are the auditor's incentives.

Essay 1 tests this hypothesis using data from listed companies in all EU countries, collected for one year before the ISA 701 was adopted (2015), as well as through its year of adoption (2016). This essay's analyses report the ISA 701 requirements' different effects on audit quality for two groups of countries: those that adopted ISA 701 in 2016, and those that adopted it before 2016. The adopting companies are considered as a treatment group in a difference-in-differences regression model, and the companies that did not adopt it are considered the control group.

Audit quality is measured by earnings management proxies, including discretionary accruals and small increases in earnings, and by audit opinion. As the auditors' incentives were expected to increase after the introduction of ISA 701, auditors in this post-implementation period are more likely to constrain earnings management and issue qualified audit opinions. Consequently, auditors will charge higher audit fees to their clients as compensation for the increased level of auditing services.

These results indicate that audit fees increased in all EU member states after the KAM disclosure requirements were adopted in December 2016. However, the audit quality as proxied by abnormal accruals only increased in three countries practicing the requirement years earlier: the United Kingdom, Ireland, and the Netherlands.

#### 6.2 *Essay 2*

Essay 2 analyses listed companies in the European Union to investigate whether any additional disclosures based on ISA 701 have decreased information asymmetry and improved market liquidity. This essay hypothesizes that not only will investors react to new information in the short-term, but also that the information environment changes in the long-term. These

hypotheses are tested by examining the level of market liquidity around the dissemination date of new audit reports in all EU countries.

The main motivation to study these market effects is that the auditors' disclosures as based on ISA 701 contain new information desired by investors. Indeed, it is anticipated that new auditor disclosures will change the information environment and enhance investors' confidence, as these contain information regarding risks of material misstatement that affect firms' future cash flows.

Similar to Essay 1, Essay 2 collects data for listed companies in all EU countries for the year before ISA 701 adoption (2015), as well as the adoption year itself (2016). Market liquidity is measured by the bid-ask spread and aggregated liquidity factors, which represent changes in the information environment and asymmetry. The test results are consistent with the hypotheses for three countries that adopted ISA 701 earlier—the United Kingdom, Ireland and the Netherlands—but not for all EU countries. This essay concludes that ISA 701 significantly affected the bid-ask spread and information asymmetries.

### 6.3 Essay 3

Essay 3 examines the KAM disclosure requirements' effects on management disclosures as well as the audit committee's role in such effects. Overall, the KAM disclosure contains information similar to the management disclosures of significant accounting policies and estimates based on IAS 1 (paragraphs 122 and 125). This similarity enables us to hypothesize (Hypothesis 1a) that auditors' KAM disclosures would have spill-over effects on management's disclosure of significant accounting estimates in the ISA 701 pre- and post-adoption periods. Hypothesis 1b then assumes that the effect would be stronger when an audit committee exists within the board of directors. Further, management disclosures are measured by the number of significant items disclosed by management. We also test tone and sentiment in the management disclosure, which is measured using a set of risk-related words based on work by Campbell, Chen, Dhaliwal, Lu and Steele (2014). The tone measurements capture management's tendency to disclose risk-related words.

Additionally, the similarity between ISA 701 and IAS 1 enables us to discover the correspondence between management and auditor disclosures by testing Hypothesis 2a, and thus, test the audit committee's effects on the correspondence in Hypothesis 2b. This hypothesis is based on prior literature stating that effective corporate governance contributes to financial reporting quality (Klein, 2002; Bedard, Chtourou and Courteau, 2004) as well as the audit supply and demand (Abbott *et al.*, 2003a, 2003b; Abbott, Parker and Peters, 2004). This is also consistent with the IAASB's audit quality framework, which mentions corporate governance as a contextual factor affecting auditing supply and demand. This correspondence is measured by the degree to which management's disclosure measures correspond with auditors' disclosures of key audit matters.

The study sample contains data from all Swedish companies listed on the Stockholm NASDAQ Stock Exchange. The sample testing of Hypothesis 1 involves 911 firm-year observations spanning 2013 to 2018.

The results from testing Hypothesis 1a reveal that since 2016, introducing the ISA 701 requirements has led to further management disclosures, with more risk-related factors. Additionally, the results from testing Hypothesis 1b indicate that an existing audit committee on the board of directors significantly affects management's disclosure of risk-related factors, and especially after the adoption of ISA 701. Although our descriptive evidence indicates a significant difference between auditor and management disclosures, the results from Hypothesis 2a reveal a significant connection between management and auditors in the number of items and risk-related factors. Finally, we find that this connection is higher for firms with an audit committee.

### *6.4 Essay 4*

Essay 4 examines the possible effects from introducing ISA 701 on firms' real earnings management. Accounting literature has documented that management is likely to avoid reporting losses and meet or exceed previous years' earnings benchmarks by engaging in either accruals-based or real earnings management. The former can be possibly detected and constrained by higher audit quality and greater regulatory enforcement, compelling management to shift from accruals-based to real earnings management. Nevertheless, it is assumed that real earnings management increases after adopting KAM disclosure requirements, as these can potentially increase auditors' efforts to constrain accruals-based earnings management.

Four measures are adopted from previous studies to measure real earnings management: abnormal cash flows from operations; abnormal production; abnormal expenses; and a combination of these three measures. The effect is tested by collecting data from 16 EU countries that adopted ISA 701 in 2016, with 4,877 firm-observations from 2013 to 2018. One test is employed using a sample of all companies, and another sample only includes suspect firms, or those with management teams that demonstrated the propensity to avoid reporting losses in previous years.

The results reveal no change in real earnings management after the ISA 701 was introduced. However, the coefficient of the interaction between the ISA 701 requirement and abnormal accruals is significantly and negatively associated with real earnings management, proxied by the abnormal cash flows from operations (CFO). Thus, the result reveals a significant shift to real earnings management, but only for those companies with abnormal accruals that decreased after introducing ISA 701. This is consistent with prior studies indicating that management teams use real earnings management as a substitute for accruals-based earnings management.

### 7. Conclusion, Contributions and Limitations

This thesis investigates some of the possible consequences of ISA 701, which required auditors to disclose KAM in their audit reports beginning 15 December 2016. The ISA 701 requirement is relatively similar to EU regulations effective 17 June 2016 (European Parliament & Council of the European Union, 2014a, 2014b). Therefore, this thesis's investigation can relate to the consequences of auditor disclosure requirements in both the IAASB and EU regulations. An investigation of their consequences is important, as it documents the degree to which these audit standards and regulations achieve their goals. Additionally, the current change in audit standards and regulations is highly sensitive, as it responds to users' requests to include additional information enhancing audit reports' transparency.

The disclosure of information based on ISA 701 and the new EU audit regulations aim to enhance audit reports' transparency and information value. Therefore, the IAASB also indicated several consequences of this new ISA (Footnote 3); the essays in this thesis empirically examine two: enhancing audit quality and increasing communication and informational value. Moreover, these essays include empirical evidence on other possible consequences, such as increased audit fees, changes in management's disclosures of significant accounting estimates, and increases in the use of real earnings management. Consequently, this thesis provides several contributions, as follows.

Essay 1 uses a setting outside of the United Kingdom to provide evidence in accordance with recent studies' future research agendas (Köhler, Quick and Willekens, 2016; Prasad and Chand, 2017), which call for research examining new audit regimes' effects on audit quality and fees. This essay further scrutinises and interprets the audit quality and fees among EU member states after adopting these new audit standards. The findings in Essay 1 indicate that KAM disclosure requirements potentially compel auditors' further effort into constraining earnings management and enhancing financial reporting quality. This is also consistent with recent archival studies investigating similar effects in other settings, such as the United Kingdom and New Zealand (Li, Hay and Lau, 2018; Reid *et al.*, 2018). While this parallels Klueber, Gold and Pott's (2019) experimental study, the results do not align with those of Gutierrez *et al.* (2018). Further, the findings indicate that as a result of supplying higher-quality audit efforts, this increased financial reporting quality has led to increased audit fees. In the United Kingdom, the ISA 701 pre-implementation period (the proposed version) occurred simultaneously with another requirement that requires audit committees to disclose relatively similar information as required from the auditors. These two concurrent events led to difficulties among studies using UK data (Gutierrez *et al.*, 2018; Reid *et al.*, 2019) in disentangling the treatment effects of auditor regulations and audit committee requirements on audit quality and fees. Essay 1 overcomes this limitation by testing the treatment effect using all EU data related to the fiscal years before and after 2016 (or the finalised ISA 701 from the post-implementation period).

Essay 2 provides implications regarding market effects around the ISA 701's adoption. While recent studies have examined market effects in the United Kingdom, Essay 2 geographically expands the topic to include listed companies in all EU countries as its study sample. Moreover,

one goal of the IAASB's new audit reporting standard was to enhance these reports' information value; therefore, this essay provides empirical evidence with a specific focus on the ISA 701 post-implementation period. This essay's findings indicate that the new information included in audit reports potentially affects investors' investing decisions as well as market liquidity. This study also overcomes previous UK studies' limitations from the two previously described concurrent events (e.g. Gutierrez *et al.*, 2018).

Essay 3 discusses the KAM disclosure requirements' effects on management disclosures and the role of corporate governance—or specifically, audit committees' monitoring roles—in both management's disclosures and the correspondence between management's and auditors' disclosures. This essay's findings demonstrate that one consequence of KAM disclosure requirements not indicated by the IAASB involves the change in management's communication of information on significant accounting estimates. This finding indicates the requirement's effect on management's disclosure behaviour, which can significantly impact the information environment. This essay uses an archival research design to complement Cade and Hodge's (2014) recent experimental study, which reveals that auditors' KAM disclosures can potentially influence management's disclosures, as measured by the number of risk items disclosed by management and risk-related factors. Additionally, this is consistent with the position that audit committees contribute to management's and auditors' cooperation in financial reporting, as this essay discovers that the existence of an audit committee in the board of directors is associated with a significant change in management disclosures after the introduction of the ISA 701, as well as correspondence between management's and auditors' disclosures.

We use archival (observational) data to contribute to recent experimental studies investigating boards of directors, and specifically, an audit committee's presence on the board. We then examine such an audit committee's effects on management disclosures after the ISA 701 adoption (e.g. Fuller, 2015). To the best of our knowledge, this archival research is the first to examine the board of directors' contribution to the correspondence between management and auditors. Therefore, this essay informs companies and policymakers of the audit committee's importance in management's disclosures of significant accounting estimates, as well as auditors' and management's correspondence in this regard.

Essay 4 indicates that the ISA 701 requirements can possibly increase real earnings management. Its findings augment recent studies that investigate the changes in accruals-based earnings management as an intended consequence of ISA 701 (Gutierrez *et al.*, 2018; Li, Hay and Lau, 2018; Reid *et al.*, 2019). Recent studies provide evidence demonstrating a significant decrease in abnormal accruals after the introduction of ISA 701. Moreover, the finding in Essay 4 indicates that companies that decrease abnormal accruals after the ISA701 introduction are likely to increase real earnings management to some extent, as limited to an abnormal CFO proxy. Thus, this essay provides evidence indicating that increasing real earnings management is a possible unintended consequence of the ISA 701 requirement.

Overall, the thesis parallels contemporaneous studies investigating the consequences of new audit standards and regulations in an attempt to highlight auditing regulations' importance in improving audit reports' quality and information value. It also augments these recent studies by revealing some additional important consequences of these new audit regulations, such as effects on management disclosures. Thus, the recent changes in audit regulations have created a path towards improving the auditing field by requiring the disclosure of additional information in audit reports; consequently, this improves the quality of both auditing and corporate financial reporting. The audit committee's characteristics are also important in facilitating this improvement.

The essays provide somewhat limited research conclusions due to their specific research design, as detailed in the essays but more generally described here. One primary limitation in these essays involves the KAM disclosure requirements in ISA 701, which were introduced simultaneously with the revision of other ISAs. Hence, the studies in Essays 1, 2 and 4 may not precisely isolate ISA 701 effects, as these studies' variables of interest do not directly measure KAM disclosures, but are year-dummy variables capturing the changes in outcome variables in the requirement's pre- and post-adoption periods.

Additionally, the findings from Essays 1 and 2 are limited to only two years of observations (2015 and 2016); thus, obtaining data from subsequent years (2017 and 2018) could provide additional implications regarding whether the ISA 701's effects have gradually changed over time.<sup>10</sup> Despite applying the DID method in Essays 1 and 2, if responses to the ISA 701 requirements have been gradual or delayed, the study model may fail to capture the effect within a short time-series (Roberts and Whited, 2013). Finally, Essays 1, 2 and 4 use some proxies known as 'noisy measures' that may not precisely capture the audit quality and market effects, although this is a common limitation in audit research. Essays 1 and 2 suggest that future studies must provide more detailed empirical evidence to control for auditor disclosures' treatments while studying regulatory effects to thoroughly overcome these limitations. Part of this suggestion involves measuring KAM disclosures, as in Essay 3; consequently, similar measures could be adopted in the study design in Essays 1 and 2. Future studies must expend greater effort to overcome these limitations, which would require more resources in general, and more time in particular.

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<sup>10</sup> As indicated in the Essay 1 results, this could relate to improvements in auditors' knowledge over time as a result of practicing the requirements. This improvement could enhance audit quality as well as investors' confidence in the level of risk in their investment decisions.



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### Appendix

Below is an example of a KAM disclosure extracted and copied from a company's annual reports. The company's name has been kept confidential, as this example is presented to indicate the components of the KAM disclosure requirement and what constitutes a KAM disclosure paragraph, rather than assessing this particular company's KAM disclosure itself. According to ISA 701 and Article 10-2c in Regulation 537/2014, auditors are required to determine, communicate and document KAM. After determination of KAM, the auditors' KAM disclosure should include information based on four sub-requirements under the communication category described in ISA 701. Thus, auditors are required to 1) define KAM in their audit as an introduction in the KAM paragraph, 2) describe why a matter is deemed significant, 3) reference the related disclosure, and 4) describe how the audit addressed such matters. The below example clarifies the components of the KAM disclosure requirement based on these four sub-requirements.

#### Example

##### *Key audit matters*

##### Component 1

Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

##### Matter 1- GOODWILL

##### Component 2

##### *Description*

As at 31 December, reported value of goodwill amounts to SEK 575 million in the Group's report of its financial standing. The company checks on an annual basis, and if there's an indication of a decrease in value, the company makes sure that the reported values do not

## Introduction

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exceed the calculated recoverable amount. The recoverable amount is determined for each cash generating unit through a present value of future cash flows. Future cash flows are based on the management's business plans, forecasts, and include a number of assumptions about earnings, growth, investment requirements and discount rate.

Changes in assumptions have a major impact on the calculation of the recoverable amount, and the assumptions made by the Company are therefore of great importance as to whether there is a need for writing down. We have therefore assessed that the recognition of Goodwill is a specifically important area of the audit.

### Component 3

A description of the write-down test appears in Note 15, "Intangible non-current assets", and in Note 2, "Significant assessments and estimates".

### Component 4

#### *How our audit addressed this key audit matter*

In our audit, we have assessed and tested the company's procedure for setting up a write-down, i.e. through assessing previous accuracy in forecasts and assumptions. We have also made comparisons with other businesses to assess the likelihood of future cash flows and growth assumptions, and, with the help of our specialists, we have tested the chosen discount rate and long-term growth forecasts. Additionally, we have reviewed the company's model, its method of running a write-down test, as well as evaluating the company's sensitivity analyses. We have reviewed the information obtained in the financial statement.

## Matter 2- REVENUE RECOGNITION

### Component 2

#### *Description*

The Group's revenue from sales in 2018 amounted to SEK 2,044 million. A substantial part of the revenue, SEK 606 million, came from deliverables to the packaging industry, for which the Group recognises revenue over time in compliance with IFRS 15. For these projects, we accounted the revenues reported and the company's efforts to comply with its performance obligation, [Component 3 described in Note 4 and in the section "Revenue" in Note 2]. The method implies that evaluations must be made to measure progress towards complete compliance, and changes to this imply that future results will be affected. The difficulty of assessing the result is particularly great at the start of the project and for projects that are technically complex, which is why the income reporting is considered to be a particularly important area of the audit.



### Component 4

#### *How our audit addressed this key audit matter*

In our audit, we have assessed and tested the process for auditing revenues over time, as well as the company's procedures and evaluations to measure progress towards complete compliance. In addition, we have conducted random checks of fundamental documentation and reviewed management's evaluation of the need for reservation concerning onerous contracts. We have reviewed the information obtained in the financial statement.

### Matter 3- ACQUISITION OF SHARES IN SUBSIDIARIES

#### Component 2

#### *Description*

The Group has in 2018 made two acquisitions of shares in subsidiaries. The total acquisition amounted to SEK 190 million, and acquired intangible assets amounted to SEK 94 million, of which goodwill amounted to SEK 91 million. The company's information regarding the acquisitions is presented in [Component 3- Note 34 "Business combinations/divestments", Note 33 "Cash flow", as well as in the "Consolidated financial statements" in Note 2.] The report regarding acquisitions has required significant assessments from the company. The most important evaluation concerns true values on separately identifiable assets and liabilities when allocating the purchase price. In addition, necessary adjustments were made to the Group's accounting principles. While preparing the acquisition analysis, the company has made several assumptions about cash flows, growth, discount rate, as well as a choice of a valuation model. Acquired assets valuations of true values and liabilities are a particularly important area of the audit since they require substantial assumptions by the company and entail significant evaluations in the audit.

#### Component 4

#### *How our audit addressed this key audit matter*

In the audit, we have assessed and reviewed the company's processes for setting up an acquisition analysis, through assessing the plausibility of future cash flows and growth forecast, among other things. We have examined the company's models and methods for carrying out acquisition analysis, and how reasonable their choice of valuation model was. We also examined assumptions regarding discount rates, future cash flows and assets' life-span, among other things. Additionally, we reviewed the adjustments made to adapt the acquired companies' accounting policies to the Group's policies. We have reviewed the information obtained in the financial statement.