Audit Style and Financial Statement Comparability: A Comparison of Accounting Standards

Daniël Wilmink
367034
Coach: Drs R. van der Wal RA
Co-reader: Dr. L. Dal Maso
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Abstract

The purpose of this study is to identify what influence accounting standards have on auditor induced financial statement comparability. Firm-pairs audited by the same Big 4 auditor have higher financial statement comparability in comparison to firm-pairs audited by different Big 4 auditors. This difference is manifested through the unique set of in-house working rules and interpretations of accounting standards by the Big 4 firms – referred to as audit style. I hypothesize a positive association between audit style and financial statement comparability under principles-based as well as rules-based accounting standards. Succeeding this, I expect auditor induced financial statement to be stronger under principles-based standards. Following an analysis of 668,583 unique matched firm-pairs, I find the association between audit style and financial statement comparability to be positive and significant for both settings, suggesting that Big 4 auditors influence financial statement outcomes through the accrual component of earnings. The contemporaneous association between audit style and financial statement comparability is documented to be stronger under principles-based accounting standards. The results confirm that accounting standards indeed influence auditor induced financial statement comparability.

Table of Contents

List of Tables

1. Introduction

The purpose of this thesis is to study the influence of the audit style of Big 4 audit firms on financial statement comparability, and whether accounting standards influence this association[1]. Over the past decades standard setters have imposed several rules and initiatives as a result of an increasing demand for more comparable financial statements. A product of this is the increasing convergence of the two largest accounting standards, namely the United States Generally Accepted Accounting Principles (US GAAP) and the International Financial Reporting Standards (IFRS), as established by the Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) respectively[2]. This is because financial statement comparability increases under uniform accounting standards (FASB and IASB, 2002; Wang, 2014). Subsequently, increased comparability leads to lower acquisition costs of information and increases the overall quantity as well as quality of information available to analysts about the firm (De Franco et al., 2011; Barth et al., 2012; Kim et al., 2013; Chen et al., 2016). While comparability is commonly attributed to accounting standards, be it US GAAP or IFRS, literature shows that economic agents such as auditors influence financial reporting outcomes as well (Ball et al., 2003; Leuz et al., 2003; Cole et al., 2012). The positive influence of auditors specifically is manifested through their development of a unique set of internal working rules, also defined as audit style (Kothari et al., 2010; Francis et al., 2014)[3]. Given the impact of an audit firms' style on financial statement comparability and the sole availability of evidence based on a rules-based setting, a logical consequence is to study the aforementioned association in a principles-based setting and compare the results between both types of accounting standards, in order to test whether accounting standards have an influence on auditor induced financial statement comparability.

Similarly to Francis et al. (2014), I define audit style as the unique set of internal working rules for the implementation of auditing standards and enforcement of accounting principles within their clients. Although it is difficult to fully disentangle the exact differences between the audit styles of Big 4 offices, notable differences arise around the documentation of audit procedures as well as

1 Big 4 audit firms refers to the four largest auditing offices: EY, PWC, KPMG and Deloitte.
2 The convergence of both standards was initiated by the FASB and IASB through The Norwalk Agreement (2002) where both parties pledged to aim for full convergence of US GAAP and IFRS.
3 Francis et al. (2014) provide a comprehensive list of the various current sets of internal working rules developed by the Big 4 accounting firms. This list is exhibited in Appendix C.

the interpretation of standards (AFM, 2014; FRC, 2016). These differences manifest, amongst others, through the amount and the height of fines as imposed by regulatory bodies such as the Securities Exchange Commission (SEC) in the United States (US), the Financial Reporting Council (FRC) in the United Kingdom (UK) and the Autoriteit Financiële Markten (AFM) in the Netherlands (AFM, 2016; FRC, 2017; SEC, 2017). While Francis et al. (2014) examine the effect of audit style on financial statement comparability influence in the US - where the accounting standards are rules-based - this thesis primarily focuses on the UK, where the accounting standards are predominantly principles-based (Forgeas, 2008; FRC, 2015). However, since the aim of this thesis is to compare a principles-based setting – the UK – with a rules-based setting – the US – for the impact of Big 4 audit style and financial statement comparability it is important to first investigate this association across the two settings separately. Only hereafter the results can be compared across both types of accounting standards.

Studying the influence of audit style on financial statement comparability is important because of the aforementioned increasing convergence of IFRS and US GAAP. Comparability is a unique qualitative characteristic of financial information that enhances the users' ability to identify similarities and differences in financial performance across firms. As such, comparability is of particular importance for investors as they base their investment decisions on evaluations of alternatives, which are impossible to assess without comparable information (FASB, 1980; IASB, 2010). However, despite the underlying emphasis on the importance of comparability by policy makers there has been scant empirical research on the usefulness of comparability (Schipper, 2003). This lack of evidence can be largely attributed to the difficulty of empirically measuring the concept of comparability for financial statements De Franco et al. (2011). Nevertheless, recent evidence is consistent with policy makers' arguments that financial statement comparability is of significant importance for investors and analysts. Several studies find that financial statement comparability lowers the acquisition cost of information, and increases the overall quantity as well as quality of information available to analysts about the firm (De Franco et al., 2011; Barth et al., 2012; Kim et al., 2013; Chen et al., 2014). By illustrating how audit style impacts financial statement comparability and how both sets of accounting standards influence this association, this thesis is relevant for companies that use either set of standards. An understanding of the difference between principles-based and rules-based standards can be of valuable interest to those considering

to switch, albeit for stakeholders – such as financial statement users – or because of foreign expansion. Next to this, answering the research question is relevant for regulating bodies, firms and the general public by giving insight into the influence of audit firms as economic institutions on the comparability of financial statements. Given the decreasing trust of the public in the audit profession after scandals such as Enron and more recent scandals such as Penn West Exploration, my thesis creates relevance for the public and standard setters by shedding light on the role of auditors in the production of financial statements and how using a different set of accounting standards influences this role. Through providing these insights, the public will be more informed on the role of the accountant and will therefore be able to better manage their expectations about their work. Subsequently, by having better managed expectations of the public, the audit expectation gap is lowered and hence public trust in the audit profession increases (Hayes et al., 2014).

Lastly, my thesis is relevant for the ongoing debate by standard setters and literature about which type of standard offers the highest net benefit. Nelson (2003) for instance suggest that the low precision in certain expressions under the principles-based system lead a broader range of interpretations, which could lead to lower financial statement comparability. On the other hand, the SEC (2003, note 13) suggests that *"In a rules-based system, financial reporting may well come to be seen as an act of compliance rather than an act of communication. Moreover, it can create a cycle of ever-increasing complexity, as financial engineering and implementation guidance vie to keep up with another."*. In consonance with this, Kabureck (2016) concludes that an excessive amount of rules leads to unnecessary complexity, but on the other hand he also states principles written at a high level result in comparability issues. In the end, he concludes that well-written principles-based offers the highest net benefit. However, this only holds if used in conjunction with a robust Conceptual Framework, as only then it is possible to feasibly make all material accounting decisions. Similarly, Schipper (2003) argues that rules-based standards possibly hinder high quality financial reporting and thereby financial statement comparability.

As stated by De Franco et al. (2011), financial statement comparability is defined through broad generalities in literature, rather than through an exact definition. Therefore, guiding this thesis, I follow their definition of comparability as "*[...] the idea that the accounting system is a mapping*

from economic events to financial statements. For a given set of economic events, two firms have comparable accounting systems if they produce similar financial statements.". This definition aligns with the aim of this thesis, as it encompasses the use of the accounting system by preparers and auditors, as well as which type of system, or more broadly, which standard is applied. Altogether, the abovementioned leads to the following research question which is leading in this thesis:

"Is auditor induced financial statement comparability associated with accounting standards?"

And more specifically:

- *Does audit style influence financial statement comparability in a principles-based setting?*
- *Can this influence be observed in a rules-based setting using a similar methodology?*
- *Does the influence of audit style on financial statement comparability differ in a principles-based setting from a rules-based setting?*
- *How large is the difference between the rules-based and principles-based setting?*

The abovementioned research question is answered through an analysis of all Standard & Poor's 500 (S&P 500) firms for the US setting and a manual selection of the 500 largest firms per fiscal year for the United Kingdom over the years 2005 up and until 2015. This analysis is conducted through regressing a dummy variable for audit style on a variable measuring financial statement comparability. Here, the former variable indicates whether two firms share a similar Big 4 auditor and hence a similar audit style, and the latter measures the difference in the level of total- and discretionary accruals of firm-pairs in a similar industry as well as firm year. After conducting the primary regression for the set of UK firms, I repeat the given analysis for the US sample. Lastly, I conduct a Difference-in-Differences analysis to compare the results across both settings and to provide an answer on the research question.

The findings of this study suggest that the influence of auditors as economic agents on the production of financial is not solely bound to the United States, as previously documented by Francis et al. (2014). Results indicate a positive and significant association between audit style and financial statement comparability for both the United States as well as the United Kingdom. Thus,

a firm-pair which is audited by the same Big 4 auditor will have more comparable financial statements in contrast to firm-pairs which have different auditors. Thereby, this indicates that the aforementioned association exists under rules-based as well as principles-based states, contrary to suggestions by the current literature body. Results from the third hypothesis indicate a significant difference in auditor induced financial statement comparability, which is stronger under principles-based standards. This suggests that the influence of Big 4 auditors is likely to result in more comparable financial statements when accounting standards are principles-based, rather than when they are rules-based.

In hindsight, this study contributes to the current body of literature in several ways. First, it extends the research of Kothari et al. (2011) and Francis et al. (2014) by documenting the existence of audit style – as manifested through the development of unique in-house working rules and interpretations of accounting standards – in a setting other than the United States. Moreover, it documents the influence of accounting standards on auditor induced financial statement comparability and the difference therein between principles-based and rules-based accounting standards. Second, the findings of this study contribute to studies of, for instance, Ge et al. (2011), Bamber et al. (2010) and Leuz et al. (2003), who study the influence of the unique style of economic agents on the production of financial statements. Finally, I contribute to literature revolving around accounting standards and financial statement outcomes, thereby providing evidence in the ongoing discussion which accounting standard offers the highest net benefit.

Besides this, the results of this study have several practical implications. First, the findings of this study operate as an extension to the suggestions for further research of Francis et al. (2014), who suggest to identify whether other variables influence auditor induced financial statement comparability. The findings in this study suggest that accounting standards have an influence on the association between audit style and financial statement comparability. In addition to this, the findings provide evidence that auditors as economic agents have an influence on the production of financial statements. Indeed, as documented in the results, the unique set of internal working-rules as well as the interpretations of accounting standards of Big 4 auditors, result in different financial statement accounting outcomes. Thereby, this confirms that there are differences in the amount of flexibility which Big 4 auditors allow their clientele in the estimation of various financial statement

properties, such as accruals and accounts requiring rigorous estimations[4]. Third, by shedding light on the role of auditors in the production of financial statements, the expectation gap of the public can be lowered. By being aware of what influence auditors have on these statements, the trust of the public in the accounting profession can rise. Finally, the conclusions of this study provide evidence of new controls in the financial statement comparability literature.

The remainder of this thesis is structured as follows: Chapter 2 provides an overview of related and important literature concerning the two sets of accounting standards, financial statement comparability and auditor characteristics. Chapter 3 expounds on the hypotheses of this study, after which Chapter 4 will further cover the methodology. Next, the data collection and the results are discussed in Chapters 5 and 6 respectively. Subsequently, Chapter 7 will documents the practical and theoretical implications of this thesis as well as its limitations. Lastly, Chapter 8 concludes this thesis.

[4] This is consistent with the findings from the interview that was conducted with a Big 4 audit partner, as documented in Appendix D.

2. Literature review

2.1 Introduction

My literature review is built on four streams of literature. First, it is based on literature studying principles-based and rules-based accounting standards. This is important, because my thesis aims at studying the influence of principles-based accounting standards on the association between audit style and financial statement comparability. Moreover, I examine the difference in financial statement comparability between the two standards and it is therefore relevant to explain these as well as identifying key related literature. The second stream of literature extends this and is based on empirical research around the financial statement comparability across these standards. Given the assumption that the internal working rules of an audit firm have an impact on financial statements, it is relevant to evaluate the third stream of literature which examines the impact of auditor characteristics on performance and financial statements. The fourth stream focuses on other variables which affect financial statement comparability, as these are likely to be control variables in my analyses. However, before expounding on existent literature regarding these topics, it is important to shed light on the importance of financial statement comparability.

2.2 The importance of financial statement comparability

The IASB Conceptual Framework (2010, p. 9) states that "*The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders and other creditors in making decisions about providing resources to the entity. Those decisions involve buying, selling or holding equity and debt instruments, and providing or settling loans and other forms of credit.*". However, in order for investors to make economic decisions, financial statements need to encompass several fundamental qualitative characteristics, such as relevance and faithful representation (IASB, 2010). However, only when accounting data is able to summarize information impounded in market prices, it becomes value relevant to users (Chang, 1998; Francis and Schipper, 1999). This value relevance is enhanced through financial statement comparability, as it allows users to identify similarities and differences in financial performance across firms. Therefore, comparability is of significant importance for the users encompassed in the IASB's objective of financial reporting as they base their investment decisions on evaluations of alternatives, which

are impossible to assess without comparable information (FASB, 1980; IASB, 2010). Indeed, literature shows that comparable financial statements improve an investors' understanding and evaluation of firm performance, as less adjustments as well as judgmental calculations with accounting numbers are necessary when comparing a firm's performance with that of its peers Kim et al. (2013). Moreover, a large number of Financial Statement Analysis textbooks highly stress the importance of financial statement comparability in estimating firm performance (De Franco et al., 2011)[5]. It is therefore inevitable to conclude that comparability is a significantly important characteristic to pursue, as pursued by both the IASB and FASB – the largest standard setters in accounting – through the convergence IFRS and US GAAP (FASB and IASB, 2002). This has inevitably led to a large discussion over whether principles-based or rules-based accounting standards are more feasible to adopt and are more likely to, amongst others, foster financial statement comparability.

2.3 Principles-based and rules-based accounting standards

Several studies have studied the difference between principles-based and rules-based accounting standards (Ampofo et al., 2005; Leuz, 2003; Pacter, 2002; Street et al. 2000)[6]. US GAAP are commonly defined as a rules-based standards, whereas IFRS are attributed to a principles-based system (Agoglia et al., 2011). Both US GAAP and IFRS are perceived to be high quality accounting standards (Leuz et al., 2003; Joos and Leung, 2013). Although both standards share a number of similarities in the area of conceptual framework, treatments of related party transactions, post balance sheet events, contingencies and provisions, there are some notable differences (Ampofo et al., 2005). The most notable practical differences arise with presentation, revenue as well as expense recognition, tax and certain items across various financial disclosures (PwC, 2016). More broadly, the principles-based system differs from a rules-based system through the application of professional judgement by the auditor, whereas with the latter the auditor assesses situations based on rules (Berkowitz and Rampell, 2002). However, Schipper (2003) suggests that the difference between IFRS and US GAAP is more relative than absolute, because dependent on the context both sets of standards include principles as well as rules. The distinctness

[5] See de Franco et al. (2011) p. 896, footnote 2.

[6] These studies largely study the difference between International Accounting Standards (IAS) and US GAAP. IAS were published by the International Accounting Standards Committee between 1973 and 2001. IFRS adopted all principles of IAS in 2001 and are therefore highly similar. Hitherto, when differences arose, IFRS always superseded IAS (Picker, 2016).

arises through the increased detail in guidance which the FASB offers on the application of accounting principles in comparison to the IASB (Barth et al., 2012). Nevertheless, modern users and regulators predominantly agree that the IASB as well as IFRS are not as principles-based as suggested (Schipper, 2003). Despite this notion, IFRS originally remains principles-based is therefore incorporated into this literature review in addition to UK GAAP, which is quite similar but more principles-based (Brochet et al., 2013).

The practical manifestation of the difference between principles-based and rules-based standards remains to be discussed. Nelson (2003) for instance suggests that because of the required application of professional judgement by auditors under a principles-based system, these standards are more likely to result in different accounting outcomes through various possible interpretations by accountants as well as auditors. This in return results in lower comparability of financial statements. On the other hand, Nelson (2003) provides the notion that a decrease in rules could lead to an increase in financial statement comparability. This is consistent with Nobes (2005), who suggests that when principles are clearer, less rules are necessary and an increase in financial statement comparability can be expected. Indeed, Agoglia et al. (2011) also find that accounting outcomes are less dispersed under principles-based accounting standards. This is attributable to the decreasing propensity of CFOs to engage in aggressive reporting under these standards. In addition to this, Agoglia et al. (2011) find that CFOs are more likely to engage in aggressive reporting under rules-based standards, but that this is mitigated in the presence of a strong audit committee. The findings of Nelson (2003) are similar as he concludes that, provided with the right incentives, managers are more likely to exhibit opportunistic behavior and inclined to engage in earnings management under more precise accounting standards. This is consistent with Nelson et al. (2002) who find that when standards are rules-based, managers are more likely to structure earnings management attempts according to precise standards and auditors are less likely to adjust these. Additionally, they find that when standards are less precise, managers are equally prone to engage in earnings management. However, when standards are less precise, auditor instead are more likely to make adjustments to these attempts. Conversely, Fornaro and Huang (2012) find that this increase in opportunistic behavior is more likely to occur under principles-based standards. The results of Van Beest (2009) support the mixed evidence in literature about accounting standards and earnings management, as he observes comparable levels of earnings

management under both sets of standards. This leads to him to conclude that the nature of earnings management changes under accounting standards, rather than the level thereof. Indeed, Hotaling and Lippitt (2003) show that even under rules-based accounting standards management and auditors exhibit opportunistic behavior, as shown in practice by the Enron bankruptcy in 2003.

An interesting perspective to consider in this discussion is that of McEnroe and Sullivan (2012), who study the perceptions of CPAs and CFOs regarding both sets of standards. The authors find that amongst both CFOs and CPAs there is no consensus on which standard is preferred as there is an even split between which standards CPAs prefer for eight concepts. Here, both parties prefer a rules-based system as a fundament for the concepts of verifiability, neutrality, comparability and consistency. Although CPAs and CFOs appear to be more comfortable with a rules-based regime for the aforementioned fundamental qualitative characteristics, it appears that the both parties are open-minded towards a principles-based regime. Despite this movement, McEnroe and Sullivan (2012) stress that a shift towards a more principles-based system will not necessarily achieve the fundamental qualitative characters – amongst which comparability - more successfully. Yet, research indicates a positive market reaction for the increasing likelihood adoption of principles-based accounting standards in the United States (Armstrong et al., 2010; Joos and Leung, 2013). However, the authors are unable to attribute the adoption of a principles-based regime increased audit quality or financial statement comparability. On the other hand, Donelson et al. (2012) find that a rules-based regime is preferred due to lower litigation risk, which is in line with the hypotheses of McEnroe and Sullivan (2012). Although the likelihood of being sued is lower when rules are applied correctly, the authors find that the overall litigation cost is likely to be lower under a principles-based system as cases are more easily dismissed or settled for lower amounts. Donelson et al. (2016) contend this in their finding that a demand for rules-based standards is likely to persist in the United States due to the continuous presence of high litigation risk.

Finally, Collins et al. (2012) study financial reporting outcomes under both sets of accounting standards. In line with the arguments of the SEC (2003), Collins et al. (2012) find evidence that principles-based standards, at least for lease reporting, do not result in more dispersed reporting outcomes. Therefore, this adds the suggestions of Nelson (2003) and Nobes (2005) that financial statement comparability potentially increases under principles-based standards.

2.4 Effects of financial statement comparability

Despite the discussion over which standard fosters higher comparability and whether a switch from rules-based to more principles-based system is just, the demand for uniformity in accounting standards has increased over the past years. As a response, a large number of countries have either voluntarily or mandatorily adopted IFRS in the past decade (IASPlus, 2012). Consistent with the Securities and Exchange Commission's (SEC) beliefs (SEC, 2008), Barth et al. (2013) suggest that IFRS adoption results in capital market benefits through increased comparability. Callao et al. (2007) find that comparability decreased following IFRS adoption in Spain, but are limited by a significantly short timeframe and small sample size. In contrast, Brochet et al. (2013) document that mandatory IFRS adoption leads to increased comparability and thereby capital market benefits. The authors suggest that these capital market benefits are attributable to improvements in comparability of statements across firms, rather than changes in the quality of information specific to the firm. Consistent with these results, Yip and Young (2012) find that mandatory IFRS adoption leads to increased cross-country comparability and that high quality information as well as accounting convergence are highly likely drivers thereof. This suggests that using or adopting a similar set of standards "*[…] makes more similar things look more alike without making different things look less different*" (Yip and Young, 2012). Complementing this, Wang (2014) finds that the harmonization of accounting standards increases comparability and facilitates transnational information transfer, thereby resulting in economic benefits for users. These economic benefits are, amongst others, a reduction in information asymmetry and the scope for earnings manipulation, thereby enhancing stock market efficiency (Iatridis, 2010). However, in the study of Iartridis (2010) the results are largely dependent on voluntary disclosure and thereby the incentives of management. While the harmonization of accounting standards fosters financial statement comparability, Zeff (2007) justly notes that harmonization can impair comparability through differences in interpretation and terminology[7]. Additionally, Cole et al. (2012) note that while comparability is of significant importance for investors, there is also a risk that uniformity makes unlike items look similar. Consistent with this, DeFond et al. (2011) note that uniformity in accounting standards does not necessarily foster an increase in cross-border investment, let alone cross-border financial statement comparability as suggested by the SEC (SEC, 2008). According

7 Zeff (2007) for instance cites Doupnik and Richter (2004) as an example of the difference how German auditors construe 'probability' more conservatively than US auditors.

to their findings, this is highly dependent on the firms' reporting incentives, as well as the amount of industry peer firms adopting or using a similar set of accounting standards. Lastly, Kothari et al. (2010) argue that financial statements are less likely to be comparable under principles-based standards, as each audit firm has its own interpretation of the standards. These principles-based standards however, lead to the development of internal working rules and therewith audit style, as discussed in section 2.5.

The benefits of financial statement comparability also hold on the capital market as well as with acquisitions of firms. Chen et al. (2016) for instance document that increased financial statement comparability allows acquirers to make better acquisition decisions when the target firms' financial statements are more comparable with those of industry peer firms. Consistent with this, Kim et al. (2013) examine how financial statement comparability influences the perception of debt market participants on firm credit risk. They find that financial statement comparability lowers the information uncertainty and asymmetry of debt market participants, resulting in capital market benefits in, amongst others, of lower bid-ask spreads. Similarly, Kim et al. (2016) study the influence of financial statement comparability on ex ante crash risk, meaning the subjective assessment of future stock price crash risk by investors. Their results suggest that increased financial statement comparability reduces managements' tendency to hide bad news, which improves the investors' assessment of a firm's future crash risk. On the production side of information, Gong et al. (2013) find that when earnings are more comparable, management is more prone to issue earnings forecasts. Additionally, they document that as earnings are less comparable, the market reaction to these earnings forecasts is stronger. Vice-versa, this implies that if earnings are more comparable, the market will only show a weak reaction to earnings forecasts by management. This is in line with the definition of value relevance by Ohlson (1995), who notes that greater value relevance implies that investors need to rely less on "other information" than they already have available to them.

Conclusively, financial statement comparability entails a wide range of influences. These influences range from reduced information asymmetry (Iatridis, 2010) to a large number of economic benefits such as lower bid-ask spreads (Kim et al., 2013), lower ex ante crash risk (Kim et al., 2016) and capital market benefits (Barth et al., 2013).

2.5 The impact of auditor characteristics on financial statement outcomes

As audit style is considered to be an auditor characteristic, a distinction is made between factors attributable to the auditor and external influences when identifying influences on financial statement outcomes. While financial statement comparability is largely attained through the aforementioned application of similar standards, Cole et al. (2012) argue that comparability of financial statements can be attributed to the preparers thereof. Through surveying a significant amount of auditors, analysts and other users of financial statements, Cole et al. (2012) find that a highly important influence on financial statement outcomes are the interpretation of applied standards and the judgements made by preparers. Additionally, they document that a factor which influences the comparability is which audit firm a company has. Indeed, auditors as economic agents influence the comparability of financial statements through their unique style and set of internal working rules (Kothari et al., 2010; Francis et al., 2014). Kothari et al. (2010) argue that in a principles-based setting it is not cost effective for accountants to work with these principles on a day-to-day basis. Because the authority on interpreting standards and implementing those has to be delegated to a very high number of accountants and auditors, it is therefore only possible if certain set of in-house working rules is formulated out of the principles. These working rules are unique and specific to the firm. While Francis et al. (2014) study these internal working rules, referred to as audit style, in a rules-based setting, they state that even under US GAAP accountants and auditors have to make considerable judgements in the interpretation and implementation of standards. They therefore complement the findings of Kothari et al. (2010) by extending it to a rules-based setting.

Further studies on the influence of auditor characteristics on financial statement outcomes differentiate between Big 4 and non-Big 4 accounting firms. Francis et al. (1999) find that the financial statements of clients audited by Big 4 audit firms contain a significantly lower amount of abnormal accruals compared to clients audited by non-Big 4 firms. Becker et al. (1998) contend this and find that Big 4 offices have higher audit quality compared to non-Big 4 offices. Therefore, this means that the amount of abnormal accruals is lower at Big 4 firm clients, the quality of their earnings is higher and thereby more comparable, which is consistent with the findings of Francis et al. (2014). More factors influencing financial statement outcomes are auditor tenure and firm specializations, as documented by Johnson et al. (2002) and Reichelt and Wang (2010)

respectively. Johnson et al. (2002) find that as the length of the relationship between a company and an audit firm increases, the quality of the financial reporting increases. Reichelt and Wang (2010) find that the financial statements of clients that are audited by an industry specialist contain less abnormal accruals. Additionally, they document that this association also holds for auditors who are specialized on a national level. This is consistent with the findings of Balsam et al. (2003), who document that Big 4 accounting firms are industry specialists in certain industries and that using an industry specialist increases the quality of earnings. Next to this, Frankel et al. (2002) find that the level of fees paid to audit firms for non-audit services positively influences the level of discretionary accruals. This means that an increase of non-audit fees paid to the auditor is likely to decrease the quality of earnings in the financial statements of the client.

2.6 Other factors influencing financial statement comparability

Next to the aforementioned auditor characteristics and the application of similar accounting standards, literature often distinguishes other factors which influence financial statement comparability. Through their survey, Cole et al. (2012) find that the industry in which companies operate is viewed as an important influence on financial statement comparability. Other influences on comparability which Cole et al. (2012) document are the terminology used in financial statements, the enforcement bodies which control the companies and the applicable tax law. These other influences however are viewed as less important by more experienced auditors in comparison to less experienced auditors, leading Cole et al. (2012) to conclude that more professional respondents make financial statements more comparable, despite underlying differences in these factors. The findings of De Franco et al. (2011) contend these results, as they find financial statement comparability to be higher for firms in the same industry and with a similar market capitalization. In addition to this, De Franco et al. (2011, p. 896) document that "*Comparability is also higher for firms with similar earnings attributes such as accruals quality, earnings predictability, earnings smoothness and whether or not the firm reports losses.*". This is in line with Ball et al. (2003), who find that important properties of financial statements, such as earnings in the form of recognition of income and losses are also driven by the incentives of economic agents such as auditors and management. In addition to this, Leuz et al. (2003) find that financial reporting outcomes are also influenced by institutional incentives. Other studies find that the earnings component of financial statements is of higher quality around initial public offerings (Ball

and Shivukumar, 2007). Although this is driven by several external influences, Ball and Shivukumar (2007) duly note that this increase in quality is highly attributable to increased monitoring by financial statement users, analysts and auditors. Although earnings are only a part of financial statements, these form an important component in the decision making process by financial statement users (Schipper and Vincent, 2003). Hence, this links to qualitative aspects such decision usefulness and value relevance of accounting numbers, as defined in the FASB Conceptual Framework (FASB, 1980). Additionally, when earnings are of lower quality, this implies that there is a risk that financial statements or components thereof look alike while they are not alike, as argued by Cole et al. (2012).

Another interesting view of influences on financial statement comparability is that of Prescott and Vann (2015), who document that national culture also has an effect on financial statement comparability. The study of Prescott and Vann (2015) relates to the study of Doupnik and Richter (2004) who view culture as a driver for a different interpretation of standards and concepts. Respective examples of cultural differences mentioned in these studies are the tendency of Chinese accountants to use more secretive expressions in the production of financial disclosure in comparison to Australian accountants and the more conservative interpretation of the word 'probability' by German auditors in comparison to auditors from the US. Similarly, Liao et al. (2012) document that even when using a similar set of standards, auditors from different countries vary in their level of conservatism. However, despite the suggestions of the aforementioned authors, none of them directly link these concepts to a tangible measure of comparability.

Lastly, Lang et al. (2010) document that there are many unobservable firm-specific characteristics which influence financial statement comparability, such as the firm size and the market-to-book ratio. Francis et al. (2014) contend this, but state that economic fundamentals or the propensity of management to manage earnings also possibly influence comparability.

2.7 Summary of literature review

Section one discusses the importance of financial statement comparability, which it largely derives from its enhancing effect on the value relevance of accounting information (IASB, 2010). Thereby,

it allows investors for a higher quality estimation of firm performance, as well as a more considerable evaluation of alternatives in making investment decisions (IASB, 2010).

Next I discuss the differences between principles-based and rules-based standards, where the former relies on the application of professional judgement by the auditor and in the latter the auditor assesses situations based on rules (Berkowitz and Rampell, 2002). Evidence regarding opportunistic behavior by management under both sets of standards is mixed, as literature provides various explanations for this phenomenon. Most notably however, are the findings of Van Beest (2009), who documents similar levels of earnings management under both principles-based and rules-based standards, leading him to conclude that using different accounting standards changes the nature in earnings management rather than the level thereof. Similarly, literature is divided about the other effects of applying either type of accounting standards. This applies for the cost of litigation (McEnroe and Sullivan, 2012; Donelson et al., 2016), as well as for financial statement comparability (Nelson, 2003; Nobes, 2005).

Section three provides an overview of literature studying the economic influence of financial statement comparability in various settings. Several studies suggest that financial statement comparability results in economic and capital market benefits, as financial statements become more comparable across firms (Brochet et al., 2013) as well as across countries (Yip and Young, 2012). The nature hereof is a reduction in information asymmetry and the scope for earnings manipulation, thereby increasing stock market efficiency (Iatridis, 2010). The aforementioned benefits resulting from financial statement comparability are lower bid-ask spreads (Kim et al., 2013), qualitatively higher acquisition decisions by firms (Chen et al., 2016), increased willingness by management to issue earnings forecasts as well as weaker stock market reaction to earnings surprises (Gong et al., 2013) and finally lower ex ante crash risk (Kim et al., 2016). However, despite these positive effects, literature addresses the risk that comparability might make unlike items look similar (Cole et al., 2012) and that financial statement comparability is possibly largely driven by a firm's reporting incentives (DeFond et al., 2011).

Following this, the subsequent sections discuss factors influencing financial reporting outcomes, which are split into factors attributable to the audit firm and factors considered external to the audit firm. The influences on financial statement comparability attributable to the audit firm are its audit

style (Kothari et al., 2010; Francis et al., 2014), the level of non-audit fees paid to the auditor (Frankel et al., 2002), audit firm industry specialization (Reichelt and Wang, 2010) and lastly the length of the relationship between the client and the audit firm (Johnson et al., 2002).

Indeed, as I document in the final section, literature distinguishes various other external factors influencing financial statement comparability. Cole et al. (2012) document that some of these influences are the industry in which the firm operates, the terminology used in financial statements, the enforcement bodies which control the companies and the applicable tax law. Other influences which I document are whether firms share a similar industry and have similar market capitalization (De Franco et al., 2011), whether or not the firm is about to commence an IPO (Shivukumar, 2007), institutional as well as management incentives (Ball et al., 2003; Leuz et al., 2003), national culture (Prescott and Vann, 2015), unobservable firm-characteristics such as size and market-to-book ratio (Lang et al., 2010) and finally economic fundamentals (Francis et al., 2014). Conclusively, these chapters provide a large number of variables relevant to my research design, which I discuss in chapter four.

3. Hypothesis development

Prior literature has often classified Big 4 audit firms by their unique audit methodology (Kinney, 1986). Cushing and Loebbecke (1986) find that in order to comply with international regulations, audit firms have to create their own set of internal working rules in order to apply accounting standards across their client base. Similarly, Kothari et al. (2010) argue that in a principles-based setting it is not cost effective for accountants to work with these principles on a day-to-day basis. Because the authority on interpreting standards and implementing those has to be delegated to a very high number of accountants and auditors, it is therefore only possible if certain working set of in-house working rules is formulated out of the principles. These working rules are therefore unique and specific to the firm. As documented in Appendix C, each Big 4 audit firm has its own manual on the interpretation and implementation of accounting standards, which are originally intended for internal use. EY for instance introduces its manual – GAAIT – as a useful guidance on the real world interpretation and practical implications of standards such as IFRS, US GAAP and Dutch GAAP. Similarly, Deloitte offers the Deloitte Accounting Research Tool (DART) which specifically states it includes Deloitte's own interpretation of standards such as those of the SEC and FASB. Equally, KPMG and PwC offer their own set of interpretations, eAudit and CFOdirect respectively, available for purchase to clientele. Literature shows that it is highly likely, that when faced with a difficult technical accounting issue in the preparation of the financial statements, the CFO of the respective company will consult the set of internal working rules, as provided by their current Big 4 auditor (Francis et al., 2014)[8]. Therefore, this implies that audit style does not only indirectly impact financial statements through the auditor, but also directly through the use of the Big 4 firm-specific audit style by its clientele. Hence, because the audit style of Big 4 audit offices affects the financial statements directly, I expect to observe more similarities in the financial statements in a pair of two companies that are audited by the same Big 4 office in comparison to a set of two companies that have different Big 4 auditors, where the effect of audit style is likely to be randomized away. The first hypothesis is therefore constructed as follows:

[8] Francis et al. (2014) assert this finding through interviews with practitioners. Additionally, their findings are supported by Acito et al. (2009, Table 4) who study lease accounting and suggest that the differences in the rates of client restatements are attributable to different interpretations of a similar set of accounting standards.

<u>H1:</u> Under principles-based accounting standards, the internal working rules of Big 4 audit companies positively influence financial statement comparability for a firm-pair audited by the same Big 4 audit company relative to a firm-pair audited by two different audit companies.

This hypothesis is stated in the alternative form. The corresponding null hypothesis is that, in a principles-based setting, the internal working rules of Big 4 audit companies *do not* positively influence financial statement comparability for two firms audited by the same Big 4 audit company relative to two firms audited by two different Big 4 audit companies.
The aforementioned hypothesis will be tested for both the principles-based setting and the rules-based setting using samples from the United Kingdom and United States respectively. Here, the results are expected to be consistent with those of Francis et al. (2014), who document that the audit style of Big 4 offices improves financial statement comparability in the United States. Therefore, the second hypothesis is structured as follows:

<u>H2</u>: Under rules-based accounting standards, a similar sign in influence of the internal working rules of Big 4 audit companies on financial statement comparability can be observed as under principles-based accounting standards.

This hypothesis is stated in the alternative form. The corresponding null hypothesis is that under rules-based accounting standards, a *different* sign in influence of the internal working rules of big 4 audit companies on financial statement comparability can be observed than under principles-based accounting standards.

Prior literature on principles-based standards documents an increase in financial statement comparability when switching to more principles-based accounting standards (Lang et al., 2010; DeFond et al., 2011; Barth et al., 2012; Yip and Young, 2012; Barth et al., 2013; Brochet et al., 2013; Cascino and Gaassen, 2015). Similarly, Agoglia et al. (2011) find that accounting outcomes are less dispersed under principles-based accounting standards. Consistent with this, Nelson (2003) suggests that more rules are likely to foster lower financial statement comparability. Hence, I

expect financial statement comparability to be higher under principles-based standards. In light of the aforementioned, this results in the following hypothesis:

> **H3: The influence of the internal working rules of a Big 4 company on financial statement comparability is stronger under principles-based standards than under rules-based standards.**

This hypothesis is stated in the alternative form. The corresponding null hypothesis is that the influence of the internal working rules of a Big 4 company on financial statement comparability *is weaker* under principles-based standards than under rules-based standards.

4. Research design

4.1 Introduction

The focus of this chapter is the research design employed to answer the research question. In order to measure the influence of audit style on financial statement comparability, I employ a cross-sectional research design. Although intuitively it might seem logical to employ a longitudinal research design, a cross-sectional research design provides more valid results due to the changing sampled subjects used for measurement. Indeed, the firms that comprise the S&P 500 as well as FTSE 100 have changed over the studied time period (FTSE, 2017). Similarly, firms switch auditors over time and are therefore neither consistent for measurement. Moreover, the aim of this thesis is to study the effect of audit style on financial statement comparability, rather than studying the development of this association over time. Conclusively, this drives the use of a cross-sectional research design. The remainder of this chapter commences with a discussion on the measurement of the independent variable, after which I discuss the measurement of the dependent variable as well as the control variables. Subsequently, I expound on the methodology to compare the results across both settings as well as the inherent benefits and drawbacks of this methodology. Finally, I provide a comprehensive summary of the aforementioned.

4.2 Independent variable measurement

The independent variable is audit style. Using a similar proxy as Francis et al. (2014), I proxy for audit style through a dummy variable, hereafter *SAMEBIG4*. This variable is defined as a pair of two firms either sharing a similar Big 4 auditor, and therewith audit style, or two different Big 4 auditors, implying two different types of audit style. Hence, *SAMEBIG4* adopts a value of 1 if a firm pair has a similar Big 4 auditor and a value of 0 if a firm pair has two different Big 4 auditors. Firm pairs are matched on their industry and fiscal years. This is in line with Francis et al. (2014), who match firm pairs based on operating in a similar industry and having the same fiscal year. Indeed, as previously discussed by De Franco et al. (2011), firm pairs operating in a similar industry are likely to have more comparable financial statements. Conclusively, the resulting firm pair matching criterion implies that for fiscal year *x* all possible unique pairs of firms in a similar industry are matched. The operating industry is identified through the first two digits of the Standard Industrial Classification (SIC) code. Hence, given that three firms - *A, B* and *C* – operate

in fiscal year *x* and industry *y*¸ firm pairs A-B, B-C and A-C are generated, where duplicate pairings such as C-A are removed from the sample.

4.3 Dependent variable measurement

This leads to the discussion on the measurement of the dependent variable, financial statement comparability. Given the scant availability of empirical measures of comparability and the aim of this thesis to compare two settings, it is more logical and feasible to use an existing empirical measure proven to be significant for one of the settings, rather than defining a new measure. Therefore, this section is devoted to the comparison of various available measures used in existing literature, after which I expound on the most suitable model.

4.3.1. Choice of accounting policies

Bradshaw and Miller (2008) study whether comparability of accounting information increases as accounting standards harmonize. They provide an interesting input-based methodology, in which they measure the chosen accounting policies and their impact on various metrics, amongst which conservatism, accrual-cash flow relations and compliance. Although this measure captures various financial statement components which are relevant to financial statement users, it conveys several limitations. In a practical sense, input-based data, such as on accounting policies, is often hard and costly to collect (De Franco et al., 2011). Second, due to a lack of available data this approach forces the use of a small sample and therefore is likely to lack external validity. Lastly, the use of input-based measure imposes a number of challenges on the researcher as discussed by De Franco et al. (2011).

4.3.2. Accounting comparability

De Franco et al. (2011) propose the notion that under the same set of economic events, firms with comparable accounting systems will produce similar financial statements. Subsequently they proxy for financial statements through earnings and economic events through stock returns. As pointed out by De Franco et al. (2011), this model aims to estimate whether the earnings of a set of industry peer companies similarly capture the underlying economics. This model appears intuitively attractive due to the notion that it is output-based, rather than input-based. However, this methodology abstracts a number of challenges, such as weights put on accounting decisions as well as accounting for variation. Similarly, firms with different accounting policies are still able to produce similar accounting outputs. De Franco et al. (2011) for instance indicate that firms using LIFO and FIFO accounting policies will still provide similar accounting outputs, given that inventory levels and prices are constant[9]. Hence, these input-based comparability metrics might not necessarily be relevant for users. However, albeit a seemingly advantageous measure, this methodology conveys some inherent limitations. The foremost limitation being that earnings are only one financial statement dimension and that other figures, such as balance sheet or cash flow numbers, are of equal importance to various financial statement users. Next to this, it is based on a different theoretical construct than my thesis. I assume that Big 4 audit firms, through their audit style, impose similar accounting choices on their clients, resulting in covariation of earnings notwithstanding the underlying economics. Conclusively, this methodology will not be applied.

4.3.3. Covariation of earnings over time

Similarly, a measure of comparability is the covariation of two firms' earnings over time (De Franco et al., 2011; Francis et al., 2014). In contrast to the previous measure, this approach is theoretically more in accordance with my theoretical basis as this metric captures everything that creates similarities in earnings, notwithstanding the underlying economics. Although both De Franco et al. (2011) and Francis et al. (2014) contend this to be a better measure compared to the aforementioned earnings metric, a potential limitation is that this measure does not fully isolate the effects of financial statement comparability through its inability of controlling for economic shocks. Indeed, the short nature of my sample period – 2005 up and until 2015 – increases the

[9] The use of the use of the LIFO accounting policy is prohibited under IFRS and UK GAAP. It is however still applicable under US GAAP, which in return could lead to different results when comparing two settings.

urgency of addressing this issue in comparison to the larger sample period used by Francis et al. (2014) – 1987 up and until 2011 – due to the number of huge economic shocks over this short time frame. There are however several possibilities for addressing this issue, such as the inclusion of controls for cash flow covariation and monthly stock return covariation for firm-pairs. Additionally, by creating firm-pairs based on industry and fiscal year, the aforementioned problem is largely mitigated. Despite the proposed controls, this approach relies on a larger sample as well as a longer sample period and is therefore likely to produce insignificant results for my sample. Next to this, this measure aims to measure the comparability over time, which is not the aim of my research. Therefore, this metric will neither be applied.

4.3.4. Similarities in accruals

Finally, Francis et al. (2014) suggest a comparability metric through the estimation of cross-sectional similarities in the levels of discretionary and total accruals. This metric is highly in accordance with my theoretical basis, because the audit firm, through their set of in-house working rules, influences accrual adjustments made by their clientele. Hence, a firm-pair with a similar Big 4 audit firm is more likely to make the same accrual adjustments in contrast to a firm-pair with different Big 4 auditors. Moreover, the level of allowed discretion is highly conditional on accounting standards as well as the leniency allowed by the audit firm[10]. Conclusively, this metric touches upon the assumption that the auditor directly influences financial statement comparability through the discretionary component of earnings as well as a difference therein through applied accounting standards.

This leads to the subsequent discussion on the actual estimation of total and discretionary accruals. The most well-known model to estimate these, is the basic Jones Model (Jones, 1991). However, hitherto there have been several augmentations to this model in order to control for numerous factors. The first one being the Modified Jones model, which provides a more powerful test to detect earnings management by only considering cash sales (Dechow et al., 1995). Yet, Dechow et al. (1995) find that almost all accrual models perform poorly, because performance has a big effect on discretionary accruals causing non-discretionary accruals to be classified as discretionary

[10] This was confirmed by a Big 4 firm partner in an interview. The main findings of this interview were confirmed by the partner and are documented in Appendix D.

accruals. Following this, Dechow et al. (2003) provide three innovations in their forward-looking model by separating non-discretionary accruals from discretionary accruals in credit sales as well as controlling for lagged accruals and growth. However, both models remain criticized for their misspecifications (Lee and Vetter, 2015). This leads to performance-adjusted models, such as the cash-flows model (Dechow and Dichev, 2002) and a similar cash-flow based modification by Pae (2005). While both models significantly improve the explanatory power of the Jones model, misspecifications prove to remain a ubiquitous problem (Kothari et al., 2005). Finally, a highly interesting model for my research design, is the linear performance-matching Jones model by Kothari et al. (2005), which controls for performance and includes an intercept. This mitigates heteroskedacity in omitted variables as well as residuals. In this model, firm-year observations are matched based on industry, fiscal year and whether firms report comparable levels of current- and prior-year ROA. In terms of explanatory power, this model outperforms all other accrual estimation models (Kothari et al., 2005). Although Lee and Vetter (2015) contend that this model neither completely mitigates the aforementioned misspecification problems, it is highly feasible to implement making it the model of choice for my research design.

The contemporaneous performance model of Kothari et al. (2005) cross-sectionally estimates the modified Jones model of Dechow et al. (1995) by subtracting the changes in accounts receivables (ΔAR_{it}) from the change in revenues (ΔREV_{it}). Therefore, this model is highly similar to the modified Jones model (Dechow et al., 1995), except that it includes the prior year return on assets (ROA_{it-1}), scaling of lagged assets (A_{it-1}) and a constant (α_0). As Kothari et al. (2005) contend, the use of assets as the deflator provides an additional alleviation for heteroskedacity. Therefore, following Kothari et al. (2005), I estimate the level of total accruals (TA_{it}) for firm *i* in year t as follows:

$$\frac{\boldsymbol{TA_{it}}}{\boldsymbol{A_{it-1}}} = \boldsymbol{\alpha_0} + \widehat{\boldsymbol{\alpha}}_{\boldsymbol{1}} \frac{\boldsymbol{1}}{\boldsymbol{A_{it-1}}} + \widehat{\boldsymbol{\beta}}_{\boldsymbol{1}} \frac{\boldsymbol{\Delta REV_{it}} - \boldsymbol{\Delta AR_{it}}}{\boldsymbol{A_{it-1}}} + \widehat{\boldsymbol{\beta}}_{\boldsymbol{2}} \frac{\boldsymbol{PPE_{it}}}{\boldsymbol{A_{it-1}}} + \hat{\boldsymbol{\delta}}_{\boldsymbol{1}} \boldsymbol{ROA_{it-1}} + \boldsymbol{\varepsilon_{it}} \qquad \textbf{(1)}$$

Where PPE_{it} is the net property, plant and equipment. Appendix B provides a comprehensive overview of all variables, including their definitions. Having estimated the level of total accruals, I subtract the level of non-discretionary accruals to derive the level of discretionary accruals.

Similar to the regression above, I estimate the level of discretionary (DA_{it}) and non-discretionary accruals (NDA_{it}) using the regression parameters from the abovementioned Kothari et al. (2005) contemporaneous performance model:

$$\frac{\boldsymbol{NDA_{it}}}{\boldsymbol{A_{it-1}}} = \boldsymbol{\alpha_0} + \widehat{\boldsymbol{\alpha}}_{\boldsymbol{1}} \frac{\boldsymbol{1}}{\boldsymbol{A_{it-1}}} + \widehat{\boldsymbol{\beta}}_{\boldsymbol{1}} \frac{\boldsymbol{\Delta REV_{it} - \Delta AR_{it}}}{\boldsymbol{A_{it-1}}} + \widehat{\boldsymbol{\beta}}_{\boldsymbol{2}} \frac{\boldsymbol{PPE_{it}}}{\boldsymbol{A_{it-1}}} + \widehat{\boldsymbol{\delta}}_{\boldsymbol{1}} \boldsymbol{ROA_{it-1}} \quad \textbf{(2)}$$

$$\frac{\boldsymbol{DA_{it}}}{\boldsymbol{A_{it-1}}} = \frac{\boldsymbol{TA_{it}}}{\boldsymbol{A_{it-1}}} - \frac{\boldsymbol{NDA_{it}}}{\boldsymbol{A_{it-1}}} \quad \textbf{(3)}$$

Larger firms are generally more likely to have larger accruals. Hence, discretionary accruals are scaled by lagged total assets in order to allow for a meaningful comparison across firms. The specific choice of lagged total assets is made to avoid auto-correlational effects which could potentially weaken the validity of my results[11]. With an estimation of the levels of total and discretionary accruals per firm, it is now possible to compare these across industry peer firm-pairs per fiscal year in the sample. This leads to the estimation of the variables $Difference\_TA_{mnt}$ and $Difference\_DA_{mnt}$, which are calculated as the absolute value of the difference in total and discretionary accruals between firms *m* and *n* in fiscal year *t*:

$$\boldsymbol{Difference\_TA_{mnt} = |TA_{mt} - TA_{nt}|} \quad \textbf{(4)}$$

$$\boldsymbol{Difference\_DA_{mnt} = |DA_{mt} - DA_{nt}|} \quad \textbf{(5)}$$

Where $Difference\_TA_{mnt}$ and $Difference\_DA_{mnt}$ are the absolute difference between the total accruals and the absolute difference between the discretionary accruals of firm pairs for fiscal year *t* respectively. Here, lower values of $Difference\_TA_{mnt}$ and $Difference\_DA_{mnt}$ indicate a smaller difference in total and discretionary accruals respectively. Hence, lower values therein indicate a higher cross-sectional comparability of earnings. The absolute value acts as a control for the reversing nature of accruals[12]. Negative accruals provide biased results through the accrual-difference metric, unless the absolute value is applied. Having defined the dependent variable, it

[11] An example of such auto-correlational effects is the likely joint determination of size and profits or that current size is a function of current profits.

[12] DeFond and Park (2001) are the first to document the reversing nature accruals: current positive accruals lead to negative accruals in the future, since income is 'borrowed' from the future.

is now possible to estimate a regression to test the effect of audit style on financial statement comparability for both sets of accounting standards. This results in the following regression formulas which I estimate using Ordinary Least Square regression:

$$\boldsymbol{Difference\_TA_{mnt} = \beta_0 + \beta_1 SAMEBIG4 + \beta_2 Controls + \varepsilon_{mnt}} \quad \textbf{(6)}$$

$$\boldsymbol{Difference\_DA_{mnt} = \beta_0 + \beta_1 SAMEBIG4 + \beta_2 Controls + \varepsilon_{mnt}} \quad \textbf{(7)}$$

As mentioned in paragraph 4.2, *SAMEBIG4* is a dummy variable which is coded as 1 if firm-pairs have a similar Big 4 auditor and 0 otherwise. Hence, these regression formulas are estimated for all possible firm-pairs, having either the same or different Big 4 auditors[13]. Similarly to the aforementioned, lower values of $Difference\_TA_{mnt}$ and $Difference\_DA_{mnt}$ indicate a higher cross-sectional comparability of earnings. Therefore, consistent with H1 and H2, I predict a negative value of the β_1 coefficients for the UK and US settings respectively. In order to minimize the influence of the structural error term, as well as to isolate the effect of audit style, various control variables are added, as discussed in the next section.

4.4 Control variables

No theoretical or empirical basis exists for which control variables to include when measuring comparability (Lang et al. 2010). Hence, I control for firm characteristics which are likely to result in similarities between earnings as suggested by Lang et al. (2010) and Francis et al. (2014). Notably, all of these control variables are measured as the absolute difference between firm-pairs, which follows from the fact that I estimate the regression for firm pairs. This is consistent with prior literature using firm pairs, which uses controls for both the levels as well as the differences between firm-pairs (Francis, Huang and Khurana, 2009; De Franco et al., 2011). I include controls for identifying the propensity of management to manage earnings, proxied for through the market-to-book ratio, the leverage of firms and the probability of incurring losses. I estimate the latter as the proportion of quarters in which a firm reported a negative quarterly income before extraordinary items over the previous 16 quarters. The leverage is calculated through the debt-to-

[13] The firm pair matching criterion implies that for fiscal year x all possible unique pairs of firms are matched. Hence, given that three firms - A, B and C – operate in fiscal year x, firm pairs A-B, B-C and A-C are generated, where duplicate pairings such as C-A are removed from the sample.

equity ratio of firms. Furthermore, I control for economic shocks by including the standard deviation of cash flows, standard deviation of sales, sales growth and cash flow from operations. The standard deviations of cash flows as well as sales are estimated over the preceding 4 fiscal years. Lastly, as mentioned in my literature review, firm size is likely to have an impact on financial statement comparability. Hence, I proxy for firm size through the natural logarithm of total assets. Following the aforementioned, I also include the minimum values of the control variables between firm pairs to measure the level of firm-pair characteristics. Francis et al. (2014) document that it does not matter whether the average between firm pairs or the minimum of the two is included. Finally, industry fixed effects are included in the regression analyses, by means of controlling for both firm-specific characteristics, as well as industry-wide effects. As documented by Francis et al. (2014), no empirical evidence exists to base predictions on regarding the sign of the coefficients of the control variables. However, I expect the signs of the absolute difference coefficients to be positive, as firms with more similar economic fundamentals and properties are more likely to produce similar financial statements. Conversely, firms with larger absolute differences in firm-characteristics are more likely to produce less comparable financial statements, increasing the value of the dependent variable. Correspondingly, I expect coefficients for minima to be negative, as firms with similar economic fundamentals are more likely to produce similar financial statements. For instance, when the minimum firm size and cash flow from operations of a firm-pair are higher, it is more likely that its counterpart experiences similar economic fundamentals, resulting in more comparable financial statements. Due to the large number of control variables, the adjusted R^2 is used to assess the explanatory power of the model.

4.5 Comparison across settings

Finally, in order to answer the research question, I employ a Difference-in-Differences (DID) analysis as a method to compare the results of both settings. This analysis combines the aforementioned into a regression and examines the interaction effect of accounting standards in the correlation between audit style and financial statement comparability. Hence, a dummy variable is created, *ACCSTD*, which assumes a value of 1 if the accounting standards are principles based and 0 otherwise. Therewith, I test the assumption whether the given association changes if principles-based standards are adopted. Similarly to before, I test whether two firms share a similar Big 4 auditor, using the *SAMEBIG4* variable. However, in order to have a pre- and post-treatment

effect, I adapt this variable to adopt a value of 1 if a firm-pair has shared the same Big 4 auditor for at least 1 year and 0 otherwise. This results in the following regression which is estimated using a difference-in-differences analysis:

$$\boldsymbol{Difference\ TA_{mnt} = \beta_0 + \beta_1 SAMEBIG4 + \beta_2 ACCSTD + \beta_3 SAMEBIG4 * ACCSTD + \beta_4 Controls + \varepsilon_{mnt}} \quad \textbf{(8)}$$

$$\boldsymbol{Difference\ DA_{mnt} = \beta_0 + \beta_1 SAMEBIG4 + \beta_2 ACCSTD + \beta_3 SAMEBIG4 * ACCSTD + \beta_4 Controls + \varepsilon_{mnt}} \quad \textbf{(9)}$$

The coefficient of interest in this regression is β_3, which measures the interaction effect between audit style and accounting standards and is referred to as the DID estimator. H3 can either be rejected or accepted using this estimator. Similarly to regression estimations (6) and (7), lower values of the dependent variable indicate higher financial statement comparability. Hence, following H3, I expect a negative value for coefficient β_3, since I hypothesize financial statement comparability to be higher under principles based standards.

4.6 Validity, reliability and endogeneity

Following the given research design, the matter of its reliability is to be discussed. Given that it is a replication of Francis et al. (2014), results following this design are expected to be similar. As such, this study assesses the test-retest reliability by applying it on two different sets of samples, across a different sample time frame. Indeed, if the results are highly similar to Francis et al. (2014), the reliability of this financial statement comparability metric is unquestionable. On the other hand, the validity hereof is debatable. As discussed earlier in this chapter, various measures of financial statement comparability currently exist, with accrual comparability likely being superior. Notwithstanding the fact that this metric captures several properties of financial statements which are likely to be impacted by audit style, this measure also takes into account multiple stakeholders, in contrast to, for instance, the measure of De Franco et al. (2011). Nevertheless, it remains an imperfect measure, as it does not consider other properties of financial statement comparability, such as infographics, the complexity of the contents of financial statements and other earnings attributes. Second, a risk exists that this metric measures uniformity

rather than comparability. As it currently stands, this measure remains preferable over the aforementioned other comparability metrics. Additionally, the validity of the applied metric is assessed through various robustness tests in order to further relieve the abovementioned concerns. Finally, the applied research design inevitably raises certain endogeneity concerns resulting from omitted variables. These could be economic fundamentals, firm-related characteristics or industry-wide effects. Hence, several precautions are taken to alleviate this concern. First, throughout regressions, industry fixed effects are applied in order to mitigate potential omitted variable bias resulting from innate firm-characteristics. Likewise, robustness tests are performed including additional year fixed effects, to further control for omitted variables resulting from trends over time. Consistent with this, tests excluding years strongly impacted by the economic crises are included in order to mitigate potentially biased results, following omitted variables from economic fundamentals. Similarly, additional tests are performed to isolate the effect of auditor induced financial statement comparability, as well as to attribute this to individual Big 4 auditors, rather than pairs of Big 4 auditors, resulting from auditor switches. Next to this, additional testing mitigates self-selection bias, which can be present as firms choose their own auditor, rather than randomly being assigned one. Finally, tests are performed to ascertain that auditors influence financial statement comparability through the accrual component of earnings, rather than through other properties of earnings, such as cash flows. In conclusion, limitations remain to exists, despite all the aforementioned precautions, as is further discussed following the results of the regressions performed in the next chapter.

4.7 Data collection

Due to several mergers and acquisitions of Big 4 firms such as PriceWaterhouseCoopers in 1998, financial scandals leading to the bankruptcy of Arthur Andersen in 2001 and data availability issues, I start my sample period in 2005 thereby mitigating the potential of biased results. In order to minimize the possibility of missing data, I use the largest listed companies in the United Stated and United Kingdom for my sample. For the United States this comprises the S&P 500 and for the United Kingdom I manually select the largest 500 companies per firm-year in order to achieve a representative sample. However, due to a lack of data for firm auditors and market values in the United Kingdom, this sample is more constrained in contrast to the United States.

4.7.1. United Kingdom sample

The intention to use a sample of similar size to that of the United States causes the necessity to search firms beyond the Financial Times Stock Exchange 350 – the 350 largest listed companies in the United Kingdom. Hence, I start collecting my sample data by extracting the assets for all firms located in the United Kingdom in the fiscal years of 2005 up and until 2015 from the Compustat - Global database through Wharton Research Data Services (WRDS). This yields a total of 21,997 firm-year observations attributed to 2,923 firms, which are largely listed in the primary and secondary stock markets. I sort the firms by fiscal year and total assets, in order to filter out the 500 largest firms per fiscal year, yielding 5,500 firm-year observations attributable to 875 unique firms for the sample time frame. In the estimations of discretionary and total accruals, I drop another 250 firms due to the presence of less than 10 firms for certain industries. Thereby, 17 industries remain that contain at least 10 unique firms. Another 607 firm-year observations are dropped due to a lack of data required for the estimation of accruals. Following Francis et al. (2010), I drop firms whose names contain "HOLDING", "HOLDINGS", "ADR", "partnership", "LP" and "LLP", leading to the exclusion of 18 firms. Due to the absence of data on auditors in the databases to which the university subscribes, I manually extract auditor data from the companies' financial statements for all firm-year observations, therewith dropping 8 observations. Similarly, market value data is unavailable through the WRDS Databases and is hence extracted from Datastream, after which I manually merge it with my dataset. After creating all possible firm-pairs per industry, another 8,696 firm-year observations are dropped due to a lack of data. Finally, I winsorize all continuous variables at the 1 and 99 percentile level in order to limit extreme values in driving the results of the regressions[14]. Conclusively, this leads to a resulting sample of 2,803 unique firm-year observations, with a total of 19,113 corresponding firm-pairs for all industries and fiscal years. In retrospect, the large drop if firm-year observations is largely attributable to the fact that numerous firms were not listed despite their large number of assets. This is largely noticeable by the number of firms that are dropped during the accrual estimation process as well as the number of firms dropped due to a lack of Market-to-Book ratio data. The table below provides an overview of the sample selection procedure.

[14] Undocumented results indicate a minimal influence of winsorization as most values of variables are scaled or logarithms. Without winsorization all results prove to remain significant.

Table 1: Sample Selection Process United Kingdom

Sample criteria	Observations
Initial firm number of firms from Compustat FY 2005-2015	2,923
Less:	
Firms that do not comprise the largest 500 per year	(2,048)
Firms with names including "HOLDING", "HOLDINGS", "ADR", "LLP", "LP" or "PARTNERSHIP"	(18)
Firms that lack data for accrual estimation	(235)
Firms in 2-digit industries with less than 10 observations	(250)
Initial total number of sample firms	372
Corresponding number of firm-year observations	2,803
Less missing variables:	
Auditor – Manually extracted from annual reports	(8)
Market-to-Book ratio – Extracted from Datastream	(268)
Loss probability	(192)
Total number of firm-year observations	2,355
Corresponding number of all firm-year combinations per industry	27,809
Less: firm-year combinations that lack data for either firm	(8,696)
Sample observations	19,113

This table describes the sample selection process, and describes how the final sample used for the analyses is derived after being subjected to various selection criteria. Similarly, it provides an overview of the treatment of lacking data required for the analyses. A line starting with 'Corresponding' indicates the use of the previously calculated total number of sample firms and firm-year observations respectively. This data is used for hypothesis 1.

4.7.2. United States sample

In contrast to the United Kingdom, the sample derivation for the United States involves significantly less contingencies with respect to data availability and is therefore significantly larger. All data is extracted from the Compustat – North America as accessed through WRDS. The initial sample for the United States comprises of all firms that are either part of, or were part of, the S&P 500 Index throughout the years 2005 up and until 2010. This sample contains 27,638 firm-year observations attributable to 2,852 firms. Similarly to the United Kingdom sample, I drop 121 firms whose names contain "HOLDING", "HOLDINGS", "ADR", "partnership", "LP" or "LLP". Additionally, 721 firms are dropped throughout the accrual estimation process, leading to a subsequent initial total of 2,010 firms and 17,369 firm-year observations. Furthermore, 1,024 firm-year observations are dropped due to a lack of data for the independent and control variables. The resulting 16,345 firm-year observations can be matched to result in 728,372 unique firm-year

combinations for all industries containing at least 10 firms. However, due to a lack of data for firms in certain years, for example due to not being listed yet, this leads to the exclusion of 78,901 firm-year observations[15]. Conclusively, 649,470 firm-year observations remain in the sample. Similarly to the UK sample, I winsorize all continuous variables for the minima at the 1st and 99th percentile. Conversely, I only winsorize the continuous variables for the absolute differences at the 99th percentile, because their minimum is capped at 0 (Veenman, 2013). An overview of the sample selection process for the United States is provided in Table 2.

Table 2: Sample Selection Process United States

Sample criteria	Observations
Initial firm number of firms from Compustat FY 2005-2015	2,852
Less:	
Firms with names including "HOLDING", "HOLDINGS", "ADR", "LLP", "LP" or "PARTNERSHIP"	(121)
Firms that lack data for accrual estimation	(487)
Firms in 2-digit industries with less than 10 observations	(234)
Initial total number of sample firms	2,010
Corresponding number of firm-year observations	17,369
Less missing variables:	
Auditor	(2)
Market-to-Book ratio	(413)
Leverage	(46)
Standard deviation of sales	(237)
Standard deviation of sales growth	(315)
Standard deviation of cash flow from operations	(11)
Total number of firm-year observations	16,345
Corresponding number of all firm-year combinations per industry	728,372
Less: firm-year combinations that lack data for either firm	(78,901)
Sample observations	649,470

This table describes the sample selection process, as well as how the final sample used for the analyses is derived after being subjected to various selection criteria. Similarly, it provides an overview of the treatment of lacking data required for the analyses. A line starting with 'Corresponding' indicates the use of the previously calculated total number of sample firms and firm-year observations respectively. This data is used for hypothesis 2.

[15] The firm-year combinations per industry are created for all fiscal years. This implies that if firm A only has data available from 2005-2014 and firm B only for 2008 up and until 2015, combinations will be made for all years from 2005 up and until 2015. This results in a drop for the observations of years 2005, 2006, 2007 and 2015, because one of the two firms did not have available data for these. The requirement of available data for both years is necessary for the estimations of all variables, as I measure the differences, minima and whether firms have the same Big 4 auditor as well as similar accruals.

4.8 Summary of research design

The operationalization of the conceptual relation in my research design is visualized through the 'Libby boxes' of the predictive validity framework (Libby, 1981) presented in Appendix A. In this chapter, I discuss the selection and operationalization of my research design in steps. I proxy for audit style as a firm-pair having either the same Big 4 auditor or two different Big 4 auditors. Subsequently, I discuss various proxies for financial statement comparability, after which I motivate the choice for the employed method, the closeness of accruals. Using the Jones model (1991) with controls for contemporaneous performance, I estimate the absolute differences in accruals between firm-pairs. I regress the resulting values on the aforementioned proxy for audit style, including numerous controls as documented in section 4.4. Based on H1 and H2 I expect negative values for the coefficients of interest. Similarly, I expect the values of the absolute difference controls to be positive. Conversely, I expect the coefficients of the controls for minima to be negative. Finally, I conduct a DID analysis, where I examine the interaction effect between audit style and accounting standards. Similarly to above, I expect a negative value of the DID estimator, as firms who have principles-based accounting standards as well as the same Big 4 auditor are more likely to produce comparable financial statements. This is in line with H3. The table in Appendix B presents an overview of all variables used in my regressions. Next, the validity, reliability and possible biases resulting from endogeneity are discussed. Subsequently, this chapter covers the sample selection procedures for both the principles-based as well as the rules-based setting. The samples derived for the United Kingdom and United States, are used to test hypotheses 1 and 2 respectively. In retrospect, the United Kingdom sample is significantly smaller than that of the United States, which is attributable to a large lack of data regarding firms outside of the Financial Times Stock Exchange (FTSE) 100 and FTSE 250, the largest 350 listed firms in the United Kingdom. Further loss of data is alleviated through the necessity to manually collect data for the independent variable. However, due to the largest firms being listed later than data was available for many variables, this still leads to the exclusion of a significant amount of firm-year observations. Nevertheless, despite the difference of 630,000 firm-year combinations per industry, the United Kingdom sample remains large enough to provide valid as well as significant results.

5. Results

5.1 Introduction

Succeeding the collection of data from various databases, and merging as well as preparing these, the analysis of the data is conducted. The statistical analysis of the data entails the testing of the hypotheses, by means of the operationalization of the research design, with the goal to answer the research questions which guide this thesis. First, I cover the assumptions of the Ordinary Least Square (OLS) regressions, having identified violations and describing executed amendments to overcome these. Subsequently, the descriptive statistics of both settings are presented and discussed, after which I provide the results of regression and interpret them. Following this, I identify, compare and discuss the results of both settings through the use of the aforementioned Difference-in-Differences (DiD) design. Finally, I present performed robustness checks and discuss these in light of the original findings of the regression analyses.

5.2 OLS assumptions

Before drawing inferences from the regression analyses, it is important to test certain OLS assumptions in relation to the data used, in order to increase the validity and credibility of the results. Hence, I discuss the assumptions of multicollinearity, homoskedacity and the normal distribution of errors in the following subsections, as well as providing the corresponding tests to identify and alleviate any violations thereof.

5.2.1. Normal distribution of errors

In order to test whether the error terms in the regression analyses are randomly distributed with a zero-mean, the Shapiro-Wilk Test is applied. As indicated by the p-values in panels A and B of Table 10 in Appendix E, the hypothesis of normality is rejected for both settings, implying that the error terms do not follow a normal distribution. However, the rejection of the hypothesis of normality can be attributed to the suitability of the Shapiro-Wilk Test, as it is normally suitable for up to 5,000 observations. Hence, when using a larger samples, small deviations from the mean can lead to rejection of the hypothesis and thereby result in improper inferences regarding normality. Therefore, it can not be statistically inferred that the hypothesis of normality in error terms is

rejected. Indeed, even in case of a violation of this assumption, it should not cause major problems to statistical inferences made about the used data (Pallant, 2007). Consistent with this, Altman and Bland (1995) indicate that when large sample size are used, the distributions of data can be ignored.

5.2.2. Homoskedacity

The assumption of homoskedacity is based on the premise that the error term in a linear regression is the same for all values of the predictor variable, rather than displaying variance across it. This implies that in addition to the error terms being normally distributed with a zero-mean, it should also have constant variance in the cross-section[16]. A violation of this assumption leads to heteroskedacity and does not necessarily lead to biased coefficient estimators, but rather results in biased estimators of the standard errors. Hence, hypothesis testing is not possible and therefore it should be tested for using the Breusch-Pagan / Cook-Weisberg test, as displayed in Table 11 in Appendix E. The null-hypothesis of homoskedacity is rejected and hence heteroskedacity is present. In order to alleviate this, robust standard errors are applied in both settings.

5.3 Descriptive statistics United Kingdom

Table 3 presents the sample descriptive statistics for the United Kingdom, containing all 19,110 firm-pair combinations by industry for the sample years of 2005 up and until 2015. Consistent with expectations, the minimum values of the dependent variables as well as all control variables concerning the absolute difference are near to 0 and thereby indicate similarity. The mean difference in total accruals is 8,5% total assets, whereas the difference in discretionary accruals is only 7,8% of total assets. The SAMEBIG4 variable is coded as 1 for 23,1% of the firm-pairs in the sample, which is similar to statistics documented by Francis et al. (2014). For several variables, such as *Diff_CFO_SD and Min_CFO_SD*, extreme observations remain, despite winsorization. These however, do not necessarily highly drive the results, as discussed in subsequent sections. The aforementioned reversing nature of accruals can be observed through the negative values of the minimum amount of total- and discretionary accruals, as these are negative, rather than only positive. The high negative values of *Min_MTB* and *Min_Leverage* indicate the presence of firms with negative total equity.

[16] The underlying logic is that the variance is the squared value of the standard deviation of a normal distribution.

Table 3: Sample Descriptive Statistics United Kingdom

Variable	Min.	25%	Mean	Median	75%	Max.	STD
Dependent variables							
Difference_TA	0.001	0.026	0.085	0.058	0.114	0.438	0.087
Difference_DA	0.001	0.025	0.078	0.055	0.105	0.385	0.076
Test variables							
SAMEBIG4	0.000	0.000	0.231	0.000	0.000	1.000	0.421
Control variables							
Min_TA	-0.502	-0.502	-0.129	-0.989	-0.411	0.453	0.916
Min_DA	-0.303	-0.066	-0.037	-0.024	0.004	0.087	0.067
Diff_Size	0.000	0.628	1.675	1.356	2.404	6.053	1.336
Min_Size	3.381	5.075	5.902	5.713	6.644	9.639	1.271
Diff_Leverage	0.000	0.453	3.861	1.120	2.694	78.000	9.988
Min_Leverage	-35.075	0.434	0.055	0.834	1.349	4.973	5.093
Diff_MTB	0.000	0.650	4.440	1.650	3.870	70.720	9.856
Min_MTB	-41.940	0.860	0.885	1.490	2.350	7.250	5.624
Diff_CFO	0.000	0.033	0.104	0.074	0.143	0.561	0.102
Min_CFO	-0.275	0.266	0.057	0.063	0.100	0.267	0.083
Diff_Loss_Prob	0.000	0.000	0.232	0.200	0.400	1.000	0.283
Min_Loss_Prob	0.000	0.000	0.052	0.000	0.000	0.800	0.137
Diff_CFO_SD	0.000	9.830	191.928	34.127	102.611	3635.433	513.087
Min_CFO_SD	1.139	5.698	29.643	10.517	23.974	524.957	66.323
Diff_Sales_SD	0.003	3.724	4.924	4.910	6.131	9.239	1.789
Min_Sales_SD	-0.238	2.914	3.720	3.726	4.537	7.309	5.158
Diff_SGR_SD	0.000	1.470	2.480	2.334	3.302	6.976	1.429
Min_SGR_SD	0.006	0.049	0.126	0.085	0.149	0.792	0.131

This table reports the descriptive statistics for all 19,110 firm-pairs in the sample period of 2005 up and until 2015. An explanation of the control variables is provided in Appendix B.

5.4 Descriptive statistics United States

Table 4 presents the sample descriptive statistics for all 649,470 firm-pair combinations between 2005 and 2015 in the United States. Relatively similar to the United Kingdom, 22.1% of firm-pairs has the same Big 4 auditor. Similarly, the differences of total- and discretionary accruals in percentage of total assets are lower for the United States in comparison to the United Kingdom, displaying values of 6.8% and 6.5% respectively. Notably, these values are significantly lower than those of Francis et al. (2014). However, this can be attributed to the fact that Francis et al. (2014) use a significantly larger sample, therefore including a large number of smaller firms which potentially these drive results.

Table 4: Sample Descriptive Statistics United States

Variable	Min.	25%	Mean	Median	75%	Max.	STD
Dependent variables							
Difference_TA	0.001	0.022	0.068	0.049	0.093	0.308	0.064
Difference_DA	0.008	0.021	0.065	0.046	0.088	0.298	0.061
Test variables							
SAMEBIG4	0.000	0.000	0.221	0.000	0.000	1.000	0.415
Control variables							
Min_TA	-0.356	-0.125	-0.096	-0.080	-0.051	0.010	0.067
Min_DA	-0.273	-0.053	-0.031	-0.018	0.006	0.069	0.060
Diff_Size	0.000	0.723	1.833	1.541	2.652	5.947	1.380
Min_Size	3.752	5.745	6.766	6.601	7.693	10.538	1.442
Diff_Leverage	0.000	0.303	2.483	0.733	1.703	54.740	6.889
Min_Leverage	-22.805	0.252	0.255	0.519	0.984	3.243	2.933
Diff_MTB	0.000	0.610	3.732	1.454	3.140	65.911	8.635
Min_MTB	-25.681	1.152	1.478	1.685	2.459	6.952	3.543
Diff_CFO	0.000	0.031	0.097	0.690	0.131	0.509	0.095
Min_CFO	-0.295	0.040	0.068	0.074	0.110	0.239	0.080
Diff_Loss_Prob	0.000	0.000	0.255	0.200	0.400	1.000	0.284
Min_Loss_Prob	0.000	0.000	0.059	0.000	0.000	0.600	0.135
Diff_CFO_SD	0.000	26.875	361.102	95.471	336.747	4024.694	681.127
Min_CFO_SD	2.846	12.673	72.028	26.967	67.082	891.489	133.065
Diff_Sales_SD	0.000	4.574	5.801	5.812	7.132	9.682	1.844
Min_Sales_SD	5.907	41.480	248.051	91.258	237.219	3215.429	467.459
Diff_SGR_SD	0.000	1.704	2.578	2.433	3.290	6.615	1.278
Min_SGR_SD	0.164	0.547	0.111	0.092	0.144	0.420	0.077

This table reports the descriptive statistics for all 649,470 firm-pairs in the sample period of 2005 up and until 2015. An explanation of the control variables is provided in Appendix B.

5.5 Regression analysis United Kingdom

The test of H1 is presented in Table 5, using the models as specified in equations (6) and (7). Under H1 I predict that audit style influences financial statement comparability under principles-based accounting standards, which are embodied through UK GAAP in the United Kingdom. Consistent with H1, the coefficient of the variable of interest - *SAMEBIG4* – is negative and significant. This implies that firms which operate in the same 2-digit SIC industry, have higher financial statement comparability when they have the same Big 4 auditor. The adjusted R^2 of these models are 59,69% and 53,71%, which is similar to the reported values of Francis et al. (2014) in the United States for the accrual comparability metrics. As suggested by the coefficients of interest, the influence of

audit style on accrual levels is near equal for total and discretionary accruals. Interestingly, this model displays lower values of the *SAMEBIG4* variable in comparison to Francis et al. (2014), suggesting a stronger association under principles-based standards. However, rather than directly comparing these numbers, a test of H3 is conducted using a Difference-in-Differences analysis, as documented in section 6.7. In line with expectations, the coefficients *Min_TA* and *Min_DA* are negative and higher for their respective dependent variable counterpart.

Table 5: OLS Results for Hypothesis 1

	Panel A: Y = Difference_TA			Panel B: Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.090	21.59	0.000***	0.120	29.17	0.000***
SAMEBIG4	-0.003	-3.06	0.002***	-0.002	-2.07	0.038**
Min_TA	-0.710	-61.11	0.000***	-0.072	-6.88	0.000***
Min_DA	-0.015	-1.06	0.291	-0.685	-56.29	0.000***
Diff_Size	-0.004	-7.79	0.000***	-0.004	-6.87	0.000***
Min_Size	-0.012	-15.55	0.000***	-0.011	-15.00	0.000***
Diff_Leverage	-0.001	-5.75	0.000***	-0.000	-3.44	0.001***
Min_Leverage	-0.002	-9.65	0.000***	-0.001	-7.50	0.000***
Diff_MTB	0.002	14.52	0.000***	0.001	12.58	0.000***
Min_MTB	0.003	14.69	0.000***	0.002	12.15	0.000***
Diff_CFO	-0.039	-5.48	0.000***	-0.068	-10.41	0.000***
Min_CFO	-0.410	-41.33	0.000***	-0.323	-35.53	0.000***
Diff_Loss_Prob	-0.035	-17.74	0.000***	-0.027	-14.55	0.000***
Min_Loss_Prob	-0.074	-15.26	0.000***	-0.066	-14.75	0.000***
Diff_CFO_SD	0.000	1.88	0.060**	0.000	3.19	0.001***
Min_CFO_SD	0.000	0.89	0.374	0.000	1.26	0.206
Diff_Sales_SD	0.002	5.64	0.000***	0.001	3.55	0.027**
Min_Sales_SD	0.007	12.36	0.000***	0.006	11.39	0.000***
Diff_SGR_SD	0.000	0.66	0.507	0.000	0.61	0.593
Min_SGR_SD	-0.010	-1.79	0.073*	-0.009	-1.77	0.077*
Industry FE	Yes			Yes		
Adjusted R^2	0.5969			0.5371		
Number of obs.	19,113			19,113		
F-val. (sign.)	708.99	(0.000***)		545.67	(0.000***)	

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *Difference_DA* is estimated using the contemporaneous performance model of accruals by Kothari et al. (2005). *SAMEBIG4* represents the variable of interest, which is a dummy variable coded as 1 when a firm-pair shares the same Big 4 auditor and operates in the same 2-digit industry, and 0 otherwise. Robust standard errors are applied, due to the presence of heteroskedacity. The control variables are defined in Appendix B.

Indeed, higher values of the firm-pair minimum suggest a higher possibility of a lower value in the difference metrics. This is amplified by nearly all minima metrics, with exception of the minimum market-to-book ratio and the minima of standard deviations. Notably, the relatively high and negative coefficient of *Min_CFO* suggest that the level of cash flows play an important role in the level of accruals. This is not surprising, given the large amount of literature around the contemporaneous relation between cash flows and accruals since Dechow (1994). Contrary to the predictions, several of the difference metrics in the control variables display negative values, rather than positive values. However, this is largely for variables that either display a similar sign as those of Francis et al. (2014), and for variables that display a marginal association. Following this, Table 11 in Appendix F displays the Pearson Correlation Test by means of identifying the direction and strength of the linear relationship between the variables used in this OLS regression model. As documented in the table, all variables display a low or moderate association with each other, except for the variables related to accruals, such as *Difference_TA (DTA)*, *Difference_DA (DDA)*, *Min_TA (MTA)* and *Min_DA (MDA)*, which is in line with expectations. However, the documented linear associations could indicate the presence of multicollinearity, which refers to a near perfect linear relation between two or more explanatory variables (Grewal et al., 2004). This implies that in the regression model the explanatory variables are not only correlated to the dependent variable, but also to each other. Consequences thereof are highly inflated standard errors and unstable estimations of the coefficients in the regression. Although the presence of multicollinearity does not necessarily violate the assumptions of an OLS regression, it does affect the generalizability of the results. I therefore test for multicollinearity through the use of the variance inflation factor (VIF). Generally, a VIF below 10 is accepted by researchers, although its values should preferably stay under 5 (Field, 2009). Values above 10 indicate the presence of multicollinearity. Table 13 in Appendix F summarizes the VIF values for the variables in the abovementioned regression model, where Panel A illustrates the values for the United Kingdom. Evidently, all VIF values are below 5 and therefore it can be assumed that multicollinearity is not present in this regression model. As documented in the research design, industry fixed effects are applied to control for further omitted variables. In conclusion, the results statistically infer the rejection of the alternative hypothesis, indicating the presence of auditor induced financial statement comparability in the United Kingdom, after controlling for firm-specific characteristics as well as industry-wide effects.

5.6 Regression analysis United States

By means of the model specified in equations (6) and (7), the test of H2 is conducted, as presented in Table 6. H2 predicts that under rules-based accounting standards, as manifested in the United States through US GAAP, an association exists between audit style and financial statement comparability. Indeed, the coefficient of *SAMEBIG4* is negative and significant at the 1% percent significance level, which is consistent with H2. The explanatory power of both models is highly similar to Francis et al. (2014), despite the sample size being four times smaller. Conversely, the

Table 6: OLS Results for Hypothesis 2

	Panel A: Y = Difference_TA			Panel B: Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.051	81.55	0.000***	0.098	163.96	0.000***
SAMEBIG4	-0.001	-4.01	0.000***	-0.001	-4.13	0.000***
Min_TA	-0.642	-276.17	0.000***	-0.042	-19.34	0.000***
Min_DA	-0.060	-24.04	0.000***	-0.677	-294.41	0.000***
Diff_Size	-0.002	-26.59	0.000***	-0.003	-43.41	0.000***
Min_Size	-0.007	-65.63	0.000***	-0.009	-82.77	0.000***
Diff_Leverage	-0.000	-18.14	0.000***	-0.000	-9.45	0.000***
Min_Leverage	-0.001	-21.30	0.000***	-0.000	-10.44	0.000***
Diff_MTB	0.000	20.97	0.000***	0.000	10.36	0.000***
Min_MTB	0.001	22.97	0.000***	0.000	12.37	0.000***
Diff_CFO	-0.001	-0.99	0.322	-0.016	-17.25	0.000***
Min_CFO	-0.183	-130.69	0.000***	-0.167	-128.52	0.000***
Diff_Loss_Prob	-0.015	-60.92	0.000***	-0.013	-56.50	0.000***
Min_Loss_Prob	-0.031	-52.49	0.000***	-0.026	-46.68	0.000***
Diff_CFO_SD	-0.000	-7.01	0.000***	0.000	5.32	0.000***
Min_CFO_SD	0.000	11.37	0.000***	0.000	23.99	0.000***
Diff_Sales_SD	0.001	28.36	0.000***	0.002	34.04	0.000***
Min_Sales_SD	0.004	40.38	0.000***	0.003	38.15	0.000***
Diff_SGR_SD	-0.001	-12.33	0.000***	0.000	2.72	0.007***
Min_SGR_SD	-0.001	-0.78	0.436	-0.014	-15.27	0.000***
Industry FE	Yes			Yes		
Adjusted R^2	0.5615			0.5481		
Number of obs.	649,470			649,470		
F-val. (sign.)	25589.80	(0.000^{***})		25591.72	(0.000^{***})	

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *Difference_DA* is estimated using the contemporaneous performance model of accruals by Kothari et al. (2005). *SAMEBIG4* represents the variable of interest, which is a dummy variable coded as 1 when a firm-pair shares the same Big 4 auditor and operates in the same 2-digit industry, and 0 otherwise. Robust standard errors are applied, due to the presence of heteroskedacity. The control variables are defined in Appendix B.

SAMEBIG4 coefficient is marginally higher, as inferred by the reported t-statistics. This, however, is most likely attributable to the sole use of the largest firms in my sample, rather than including smaller firms. A supporting notion is the increased risk of litigation for larger firms. The signs of the control variables are largely similar to those of Francis et al. (2014), with the exception of a few variables which display a negligibly marginal association to *Difference_TA* and *Difference_DA*. Similarly, certain values could be different due to differences in calculation[17]. Similarly to the United Kingdom, industry fixed effects are applied to control for omitted variables. The correlations between the variables used are presented in Table 12 in Appendix F. In line with expectations, none of the variables display a high linear association with each other, except for the accrual-related variables. These findings are robust to the multicollinearity test, as documented in Table 13. Indeed, the results in the table statistically infer that multicollinearity is not present in this model, as all VIF values are under 10. In conclusion, the findings for the United States are in line with Francis et al. (2014) and therefore confirm the predictions of H2. Hence, under rules-based accounting standards, firm-pairs with the same Big 4 auditor will display higher financial statement comparability in contrast to firms that do not have the same Big 4 auditor, after controlling for firm-specific characteristics as well as industry-wide influences.

5.7 Comparison of settings

By means of the introduction a new dummy variable, *ACCSTD*, coded as 1 for the United Kingdom and 0 for the United States respectively, I measure whether the accounting standards have an influence on the association between audit style and financial statement comparability. By means of the interaction the *SAMEBIG4* and *ACCSTD* variables, the comparison of both settings is achieved. Table 7 presents the results of the Difference-in-Differences analyses as specified in equations (8) and (9), which are used to test H3. The results in Table 7 provide compelling evidence that under principles-based standards the contemporaneous association between audit style and financial statement comparability is higher than under rules-based standards. Indeed, the DID-estimator, *SAMEBIG4*ACCSTD*, is negative and significant at the 1% and 5% level, with coefficients of -0.043 and -0.002 for total- and discretionary accruals respectively.

[17] The market value in the market-to-book ratio can for instance be estimated in two ways. Either as the price of the common shares outstanding multiplied by the number of common shares outstanding, or as the market capitalization of the company.

Table 7: OLS Results for Hypothesis 3

	Panel A: Y = Difference_TA			Panel B: Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.051	82.49	0.000***	0.098	164.29	0.000***
SAMEBIG4	-0.001	-3.93	0.000***	-0.001	-4.12	0.000***
ACCSTD	0.014	27.16	0.000***	0.005	9.91	0.000***
*SAMEBIG*ACCSTD*	-0.004	-3.88	0.000***	-0.002	-2.39	0.017**
Min_TA	-0.645	-277.40	0.000***	-0.044	-20.55	0.000***
Min_DA	-0.057	-22.81	0.000***	-0.676	-296.72	0.000***
Diff_Size	-0.002	-27.48	0.000***	-0.003	-43.74	0.000***
Min_Size	-0.007	-66.47	0.000***	-0.009	-83.13	0.000***
Diff_Leverage	-0.000	-17.05	0.000***	-0.000	-8.37	0.000***
Min_Leverage	-0.001	-21.87	0.000***	-0.000	-11.50	0.000***
Diff_MTB	0.000	23.37	0.000***	0.000	12.52	0.000***
Min_MTB	0.001	25.73	0.000***	0.000	15.22	0.000***
Diff_CFO	-0.002	-1.84	0.066*	-0.017	-18.84	0.000***
Min_CFO	-0.190	-135.71	0.000***	-0.171	-132.63	0.000***
Diff_Loss_Prob	-0.016	-63.52	0.000***	-0.014	-58.33	0.000***
Min_Loss_Prob	-0.033	-54.67	0.000***	-0.028	-48.81	0.000***
Diff_CFO_SD	-0.000	-7.08	0.000***	0.000	5.41	0.000***
Min_CFO_SD	0.000	10.97	0.000***	0.000	23.50	0.000***
Diff_Sales_SD	0.001	28.94	0.000***	0.002	34.09	0.000***
Min_Sales_SD	0.004	41.25	0.000***	0.003	38.99	0.000***
Diff_SGR_SD	-0.001	-11.85	0.000***	0.000	2.16	0.031**
Min_SGR_SD	-0.001	-0.99	0.320	-0.013	-13.81	0.000***
Industry FE	Yes			Yes		
Adjusted R^2	0.5619			0.5469		
Number of obs.	649,470			649,470		
F-val. (sign.)	23286.44	(0.000^{***})		23267.90	(0.000^{***})	

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *SAMEBIG4* represents audit style, and is a dummy variable coded as 1 when a firm-pair shares the same Big 4 auditor and operates in the same 2-digit industry, and 0 otherwise. *ACCSTD* is a dummy variable coded as 1 when a firm reports under UK GAAP and 0 under US GAAP. The variable of interest is *SAMEBIG4*ACCST*, which is the interaction effect between accounting standards and audit style. Robust standard errors are applied, due to heteroskedacity. The control variables are defined in Appendix B.

Consistent with the individual regression analyses of both settings, the coefficients of cash flow from operations and loss probability remain significant and negative. Notable, is the significant increase in the *Diff_Loss_Prob* coefficient in Panel A. Interpretation of this value drives the notion that if one of either firms in the firm-pair has been prone to report losses in previous years, this is likely to result in more comparable accruals. This can be related to earnings management literature,

which documents management's propensity to meet earnings benchmarks through the use of the discretionary component of earnings (Healy and Wahlen, 1999). Inversely, Healy and Wahlen (1999) document management's incentives of firms that experience growth to generate smooth earnings patterns. When combined, this plausibly results in a similar level of accruals. Consistent with Francis et al. (2014), the firm size coefficients remain negative and significant. This is not surprising, given that firms of equal size are more likely to produce more comparable financial statements. Relatedly, DeFranco et al. (2011) suggest that firms experiencing similar economic fundamentals are more likely to produce similar financial statements, given that they use similar accounting procedures. Contrarily to Francis et al. (2014), the standard deviations are estimated over the last 4 fiscal years, rather than over the last 16 fiscal quarters. Notwithstanding this difference, coefficients for standard deviations are either insignificant or display a highly marginal association to the dependent variables, suggesting that these control variables are not highly suitable proxy for economic fundamentals. However, given the lack of literature on the use of control variables in the given association, this is considered an extension of literature rather than a limitation of the model. Considering the test of H3, a reversal of the *ACCSTD* variable is required to statistically reject or confirm the hypothesis. Table 14 in Appendix F presents the findings when the *ACCSTD_R* variable is coded as 1 for rules-based standards and 0 for principles-based standards. Logically, the Adjusted R^2 of the models remain equal at the 56.19% and 54.69% level. Indeed, when reversed, the interaction between *ACCSTD_R* and *SAMEBIG4* results in a positive and significant association (p=0.000), inferring that auditor induced financial statement comparability is higher under principles-based standards than under rules-based standards. Hence, this leads this leads to the rejection H3, which is consistent with predictions.

5.8 Robustness checks

Next to the previously documented regression analyses, additional robustness checks are performed, with the aim to further ascertain the validity of the presented results. Through these tests, I eliminate potential biases in results by means of testing for self-selection, economic crises, auditor switches and isolating the effect of audit style, all of which are discussed in the following subsections. All relevant tables for the robustness test are presented in Appendix F.

5.8.1. Economic crisis

Throughout years 2008 and 2009, the economic crisis was at its peak. Combined with the aforementioned earnings management literature, which documents that economic distress can incentivize management to manage earnings through the accrual component, there is a large likelihood that accruals and other control variables cause biased results in the regression with having the same Big 4 auditor (Healy and Wahlen, 1999). Hence, an additional tests are conducted in order to mitigate potential bias resulting from this. First, I re-estimate equations (8) and (9) by means of including industry fixed effects clustered at the 2-digit SIC industry level, as well as including year fixed effects. This is used as a control further control for firm characteristics and potential omitted variables, such as economic crises. The results presented in Table 15 are consistent with predictions, as the *SAMEBIG4* and DID-estimator remain negative at the 5% and 1% significance level for total- and discretionary accruals respectively. In addition to this, this regression is re-estimated with the exclusion of fiscal years 2008 and 2009, by means of testing whether the economic fundamentals resulting from the economic crisis throughout these years might drive the results. The exclusion of years 2008 and 2009 results in a reduction of the sample by 125,178 matched firm-pairs. As documented in Table 16, the variables of interest remain equal and negative ($p < 0.10$). Similarly, the explanatory power of the models remains near equal to the original estimation. Therefore, the findings are robust to the original regression estimation and it can statistically inferred that the economic crisis does not induce bias in the documented results.

5.8.2. Exclusion of auditor switches

In their sample selection procedure, Francis et al. (2014) immediately exclude observations for the years in which a firm switches auditor, guided by the notion that it takes at least one fiscal year for a firm to be fully subjected to the audit style of a Big 4 auditor. Arguably, this is an unnecessary precaution, as nearly in all cases the new Big 4 auditor shadows the auditor under resignation for a full fiscal year in order to effectuate a smooth take-over[18]. Nevertheless, an additional analysis is conducted where the *SAMEBIG4* variable is replaced by a new dummy variable - *SAMEBIG4L*. This variable is only coded as 1 if a firm-pair has had the same Big 4 auditor in the current fiscal year (*t*) as well as the previous fiscal year (*t*-1) in order to exclude years in which firms switched

[18] For the United Kingdom for all firms the annual reports were checked manually in order to document their respective auditor. In nearly all cases, following a competitive tender, the newly selected auditor shadowed the auditor under resignation for at least one fiscal year.

to a new Big 4 auditor. Table 17 presents the results for the given analysis. Consistent with predictions, both the *SAMEBIG4* variable at the individual level, as well as its interaction coefficient with *ACCSTD* remain negative and significant at the 1% level ($p < 0.01$). Similarly, the explanatory powers of the models remain at a near equal level, making the findings robust to the original estimation. For completeness, I compare the results for a subsample of firms that switched to having the same Big 4 auditor by means of comparing the coefficients one year prior to doing so up and until the year thereafter. Thereby, I test whether the difference in the accrual comparability metrics truly results from audit style, rather than from any omitted variables in the given association. Table 18 documents the coefficients of the *SAMEBIG4* variable for both settings. As predicted, the influence on accrual comparability increases over time when firms switch to having the same Big 4 auditor. The coefficients for $t+1$ are higher than for the current year, as well as significantly higher prior to the auditor switch. Results are significant at the 5% significance level and are robust to the original findings. Therefore, this implies that the changes in financial statement comparability are indeed attributable to audit style, rather than any other omitted variables.

5.8.3. Self-selection bias

Self-selection bias is defined a situation in which individuals assign themselves into a group, rather than randomly being assigned to one. Thereby, the potential of self-selection bias exists, because firms choose their own Big 4 auditor, instead of randomly being assigned one. As documented by Greene (2011), omitted variables are a source of self-selection bias. However, this source of self-selection bias is mitigated through the analyses conducted in Tables 15 and 16, as industry- and year fixed effects are applied. Indeed, the application of industry fixed effects is a standard econometric technique which is used to mitigate the potential of omitted variable bias (Greene, 2011). In addition to this, the analysis conducted in the previous section confirms that audit style causes changes in the regression results during auditor switches, rather than other factors. Finally, firms choose a specific Big 4 auditor, because their individual methodology and interpretation of the accounting standards best aligns with the firm's preferences. Hence, this is consistent with the predictions of H1 and thereby does not induce self-selection bias.

5.8.4. Cash flows versus accruals

Following the conclusions of the interview that was conducted with a Big 4 audit partner, auditors should only be able to influence the accrual component of earnings, contrary to the cash flow component. Hence, as a robustness test, the dependent variable is set as the difference in cash flows from operations, rather than the difference in accruals. Indeed, the results in Table 19 indicate that the *SAMEBIG4* variable is not statistically different from 0 at the 1% significance level. This is consistent with the results documented by Francis et al. (2014) who find the *SAMEBIG4* variable not being statistically different from 0 at the 10% significance level. Hence, these are robust to the original results and confirm the notion that Big 4 auditors influence a firm's earnings through the accrual component of earnings, rather than through the cash component.

5.9 Summary of results

The research in this thesis is an extension of Francis et al. (2014), who document the association between audit style and financial statement comparability for the United States. Aside from replicating their research in the United States as well as the United Kingdom, this thesis aims to test whether accounting principles have an influence on this association. Hence, the three hypotheses were developed in order to investigate this influence and subsequently provide an answer to the research question which guides this thesis. First, the assumptions which are the backbone of the OLS regressions are evaluated and discussed. Resulting, is the identification of the violation of the homoskedacity and normal distribution of errors assumptions. As such, robust standard errors are applied throughout all regression analyses. Additionally, it can be statistically inferred that multicollinearity is not present in the regression models. Hereafter, the most notable figures of the sample descriptive statistics are discussed, after which the findings of the regression models are presented and evaluated. The findings suggest the presence of a negative association between audit style and financial statement comparability, which is consistent with H1 and H2. Subsequently, the interaction between audit style and accounting standards is presented, as a test of H3. The coefficients are negative and significant in line with the prediction of H3, suggesting that the contemporaneous association between audit style and financial statement comparability is stronger under principles-based accounting standards in comparison to rules-based standards. Finally, a number of sensitivity analyses are conducted. All results of these analyses are robust to

the original findings presented for the individual hypotheses, thereby increasing the credibility and validity of the results. The aforementioned findings form a fundament for providing an answer to the research question guiding this thesis, as documented in the following chapter.

6. Discussion

6.1 Introduction

Given the aforementioned findings in light of the research question as documented in the introduction, I argue the influence of auditor induced financial statement comparability to be stronger under principles-based standards. Following the analyses conducted in the previous chapter, by means of providing an answer to the research question, a discussion of the results, the therewith theoretical as well as practical implications, and finally the inherent limitations are documented in the following subsections of this chapter.

6.2 Discussion of results and theoretical implications

This study makes several contributions to literature. This study is one of few to study the influence of accounting standards on auditor induced financial statement comparability. Thereby, it combines and extends several streams of literature. First, it extends the research of Kothari et al. (2011) and Francis et al. (2014) by documenting the existence of audit style – as manifested through the development of unique in-house working rules and interpretations of accounting standards – in a setting other than the United States. Indeed, I find that audit style influences financial statement comparability under principles-based as well, consistent with the predictions of H1. Similarly, the findings under H2 support the conclusions of Francis et al. (2014) through a re-estimation of their research design. The implication hereof is that the influence of auditors as economic agents on the production of financial statements is not solely bound to rules-based standards, which prior to this study could be considered a limitation in the aforementioned research.

Following this, the findings of this study contribute to the second stream of literature around the influence of the unique style of economic agents on the production of financial statements. Ge et al. (2011) document the existence of the unique individual style of CFO's in corporate reporting, while Bamber et al. (2010) identify the unique style of corporate management therein. Similarly, Leuz et al. (2003) document that institutions are incentivized to influence financial reporting outcomes as well. I extend this stream of literature by broadening the influence of economic agents on the production of financial statements to their respective auditors.

Third, this study contributes to earnings management and earnings literature in a broader sense, through the use of total- and discretionary accruals as a proxy of financial statement comparability. Indeed, a number of earnings management studies use accruals as a property of earnings management, with higher discretionary accruals indicating higher levels of earnings management (Healy and Wahlen, 1999). Similarly, various studies proxy for earnings quality by means of the same accrual measure (Dechow, 1994; Dechow and Dichev, 2002). Thereby, my findings contribute to these streams of literature through the identification of the unique audit style of Big 4 firms, as their different styles result in various heights of discretionary accruals. Albeit a moderate contribution, this association incites suggestions for further research, as discussed in the following subchapter.

Fourth, this leads to the contribution in another stream of literature, namely studies regarding the different outcomes of the use of principles-based versus rules-based standards. Following a re-estimation of the findings a Francis et al. (2014) for the United States by means of a different sample under H2, I compare the findings of both settings using a Difference-in-Differences design. The subsequent findings are consistent with the predictions of H3, as I document auditor induced financial statement comparability to be stronger under principles-based standards. Given the strong divisiveness in the aforementioned stream of literature, the contribution of the findings in this study is two-fold. First, I provide clarity towards the notions of Nelson (2003) and Nobes (2005), who argue principles-based accounting standards lead to more dispersed accounting outcomes, due to a large difference in interpretations by accountants and auditors. Vice versa, they also suggest that more clarity in principles leads to more comparable financial statements. Hence, the findings under H3 dispute the first suggestion of both studies, by implying that principles-based accounting standards do not lead to a decrease in financial statement comparability, albeit moderated by the influence of Big 4 auditors. Thereby, I also build on the findings of Collins et al. (2012), who documents that for lease reporting, principles-based standards do not lead to more dispersed accounting outcomes. By extending this to an increased range in properties of financial statements influenced by auditors, I find principles-based standards to actually increase financial statement comparability in comparison to rules-based standards.

This directly leads to the contribution in the final stream of literature, which evolves around the adoption of accounting standards and financial statement comparability. As documented in the literature review, UK GAAP is principles-based, although the fundaments of IFRS also embody this property and can therefore be considered as principles-based as well (Agoglia et al., 2011; Brochet et al., 2013). Thereby, my findings contend to the results of Brochet et al. (2013), who document financial statement comparability to improve following the adoption of IFRS. Consistent with this, Yip and Young (2012) find that mandatory IFRS adoption leads to increased cross-country comparability. The findings of my study suggest that principles-based accounting standards have a positive influence on financial statement comparability, albeit based on an analysis of UK GAAP. Nevertheless, the notion that principles-based standards have a positive influence on financial statement comparability extends the findings of the aforementioned studies and thereby facilitates in the ongoing discussion around the adoption of a uniform set of accounting standards.

6.3 Practical implications

Provided the theoretical contributions, this study also gives rise to several practical implications. Following the final theoretical contribution my study, the results contribute to the ongoing discussion between standard setters on whether to adopt principles-based or rules-based accounting standards as the uniform norm. With the ongoing convergence between US GAAP and IFRS as incited by the FASB and IASB respectively, the findings of this studies provide additional insight in the fundamental characteristic of comparability. Given that comparability is of particular importance to investors, as they base their investment decisions on the evaluations of alternatives, additional insight in the role of accounting standards and auditor induced financial statement comparability provides standard setters with additional considerations in their deliberations for the aforementioned convergence of standards.

Secondly, the presented findings show the economic benefits resulting from auditor induced financial statement comparability. These economic benefits are manifested through a reduction in the acquisition cost of information, as well as the overall increase in quantity and quality of information available to investors and analysts (DeFranco et al., 2011; Barth et al., 2012; Kim et al., 2013; Chen et al., 2014). Thereby, these results create relevance for firms considering a switch

of auditor, as the comparability of their financial statements might be an important factor influencing their decision. Hence, this could lead to the choice of a Big 4 auditor which is an industry specialist and thereby audits the majority of the market in a given industry. Given that audits conducted by industry specialists result in less abnormal accruals, my findings could therefore lead to greater financial statement comparability across industries (Reichelt and Wang, 2010). Inversely, the economic benefits resulting from this knowledge possibly incentivizes audit firms to become industry specialists, as Balsam et al. (2003) note that the use of industry specialists results in higher earnings quality.

Finally, the results provide additional insight into the role of the auditor in the preparation of financial statements. The results suggest the influence of auditors in the production of, as well as across various properties of the financial statements. Moreover, through a provision of these insights, the general public will be more informed about the influence of auditors on financial outcomes. Thereby, this results in a decrease in the expectations gap, which is defined as the difference between what auditors actually do and what the public expects auditors to do (Hayes et al. 2014). Ultimately, given this decrease, this results in an increase of public trust in the accounting profession.

6.4 Limitations and recommendations for future research

Notwithstanding the aforementioned theoretical contributions as well as practical implications, this study conveys several inherent limitations. First, the comparison of the United Kingdom with the United States is limited through an unbalanced sample. This difference in sample sizes is largely driven by data availability issues in the United Kingdom and time constraints for several variables included in the used regression models. As such, company auditor data for instance had to be manually extracted from annual reports for all firm-year observations. Although the reported test statistics of the United Kingdom are highly similar to the United States, it might be that the validity of the results for the latter is notably higher. Similarly, the samples for both settings are restricted to the largest firms in their respective countries, therewith creating possible limitations in the generalizability of the results. As such, the selection of companies based on different indicators, such as total market capitalization or a percentage of the largest companies per industry might result in different results. This imposes the recommendation for further research, where a

broader and more diversified firm-sample could be included in the analysis of both settings. Next to this, the focus of this study limits itself the audit style of Big 4 auditors. This raises suggestions for further research to investigate the difference between the audit styles of non-Big4 and Big 4 auditors. Similarly, this study finds financial statement comparability to be higher when firm-pairs share the same Big 4 auditor in comparison to firms that do not. However, it can not be statistically inferred that the difference truly arises as a result of audit style. Inherent to the aforementioned, a suggestion for further research could be on the magnitude of the impact of audit style on financial statement comparability, by differentiating between small and large firms.

Besides this, the research design of this study imposes several limitations as well as suggestions for further research. First, the use of accruals potentially does not capture true financial statement comparability. Although accruals capture more dimensions of the financial statements than the original proxy of earnings comparability used by De Franco et al. (2011) and Francis et al. (2014), it remains imperfect as it fails to consider broader properties of financial statements such as complexity of contents, the use of infographics as well as other earnings attributes. Thereby, this creates the risk of uniformity instead of comparability, as cautioned for by Cole et al. (2012) and Yip and Young (2012), as no inferences can be made about the quality of earnings. Hence, given the aim of comparability according the FASB to make "alike things" look similar and "different things" look different, this leads to the suggestion to study the influence of audit style on the informativeness of earnings as well as its quality, in order to determine whether audit style results in uniformity or the increased informativeness and comparability of information. Relatedly, the results do not make inferences about true financial statement comparability. A suggestion for future research is to identify where comparability reaches its equilibrium in terms of the associated costs and benefits. Similarly, further research is required into other factors influencing financial statement comparability.

This immediately leads to the next limitation. While this study provides additional insight into the usefulness of the suggested control variables in the examination of financial statement comparability by Lang et al. (2010), De Franco et al. (2011) and Francis et al. (2014), this study does not consider other external factors which might influence the given association. For example, the influence of cultural differences between countries is not considered, while Liao et al. (2012)

document that despite the use of a similar set of accounting standards, auditors from different countries vary in their level of conservatism. This is consistent with the findings of Doupnik and Richter (2004), who document different interpretations across countries by auditors of the word 'probability', leading to different levels of conservatism. Similarly, the varying cross-country levels of litigation risk is not considered, while it is documented to have a high impact on audit quality (McEnroe and Sullivan, 2012; Donelson et al., 2016). Relatedly, consideration of country-specific legislation is recommended in future research. Moreover, the influence of auditor tenure in the auditor-client relationship could be considered, consistent with the findings of Johnson et al. (2002). In light of the aforementioned, this results in the suggestion for further exploration and identification of variables influencing this association. Similarly, this calls for the possible inclusion and operationalization of these variables in future research around this topic.

Finally, this study documents auditor induced financial statement comparability to be stronger under principles-based accounting standards. However, this does not infer anything about the actual quality of accounting standards. Thereby, this fosters the necessity for additional research in this area and gives rise to the suggestion to examine the qualitative differences between standards, such as US GAAP, UK GAAP and IFRS. An examination of the qualitative differences could lead to higher quality standards, more uniformity therein and finally more economic benefits for society at large.

7. Conclusion

The purpose of this study is to identify what influence accounting standards have on auditor induced financial statement comparability. Thereby, this study is an extension of Francis et al. (2014), who find firm-pairs audited by the same Big 4 auditor to have higher financial statement comparability in comparison to firm-pairs audited by different Big 4 auditors. This difference is manifested through the unique set of in-house working rules and interpretations of accounting standards by the Big 4 firms – referred to as audit style. Following the suggestions of Francis et al. (2014), this study aims to identify other factors influencing the association between audit style and financial statement comparability, by means of testing whether the applied accounting standards affect auditor induced financial statement comparability. Therefore, a comparison between the United States and United Kingdom is made, due to the fundamentally different applied accounting standards in either setting. First, an analysis is made of the two setting separately, after which the results of both sections are compared using a Difference-in-Differences design. In sum, the results presented in this study aim to answer the following research question:

"Is auditor induced financial statement comparability associated with accounting standards?"

By means of an analysis of 19,113 unique matched firm-pairs by 2-digit SIC industry and fiscal year in the United Kingdom, the predictions of H1 are tested. Under H1, I predict audit style to have a positive influence on financial statement comparability in the United Kingdom, where accounting standards are principles-based. The results indicate a negative association between having the same Big 4 auditor and the difference in accruals between matched firm-pairs. With smaller differences in accruals indicating higher financial statement comparability, the results lead to the acceptance of H1 – "*Under principles-based accounting standards, the internal working rules of Big 4 audit companies positively influence financial statement comparability for a firm-pair audited by the same Big 4 audit company, relative to a firm-pair audited by two different audit firms."*. Additional sensitivity tests are robust to these findings and exclude the possible impact of other economic fundamentals or any omitted variable bias. Conclusively, this provides a more comprehensive basis for the acceptance of this hypothesis.

A similar analysis is conducted for 649,470 unique matched firm-pairs in the United States with the aim of testing H2 – *"Under rules-based accounting standards, a similar sign in influence of the internal working rules of Big 4 audit companies on financial statement comparability can be observed as under principles-based accounting standards."*. The results confirm the conclusions of Francis et al. (2014) and suggest the universality of auditor induced financial statement comparability. Consistent with the predictions of H2, a negative sign is observed in the association between audit style and financial statement comparability. Additional sensitivity test are conducted, which are robust to the original findings. Thereby, this increases the credibility as well as validity of the findings, resulting in the acceptance of H2.

Finally, the findings corresponding to H1 and H2 are compared, by means of testing H3. The results provide compelling evidence that auditor induced financial statement comparability is stronger under principles-based accounting standards. Additional tests exclude bias resulting from omitted variables as well as from exogenous shocks, such as the economic crisis of 2008. Next to this, tests mitigate self-selection bias as well as providing evidence that the increase in financial statement comparability is truly attributable to audit style. Therefore, this leads to the acceptance of H3 – *"The influence of the internal working rules of a Big 4 company on financial statement comparability is stronger under principles-based standards than under rules-based standards."*. With the acceptance of H1, H2 and H3, this study concludes that accounting standards are indeed associated with auditor induced financial statement comparability.

Thereby these conclusions impose several implications. First, the findings of this study operate as an extension to the suggestions for further research of Francis et al. (2014), who suggest to identify whether other variables influence auditor induced financial statement comparability. The findings in this study suggest that accounting standards have an influence on the association between audit style and financial statement comparability. In addition to this, the findings provide evidence that auditors as economic agents have an influence on the production of financial statements. Indeed, as documented in the results, the unique set of internal working-rules as well as the interpretations of accounting standards of Big 4 auditors, result in different financial statement accounting outcomes. Thereby, this confirms that there are differences in the amount of flexibility which Big 4 auditors allow their clientele in the estimation of various financial statement properties, such as

accruals and accounts requiring rigorous estimations. Third, by shedding light on the role of auditors in the production of financial statements, the expectation gap of the public can be lowered. By being aware of what influence auditors have on these statements, the trust of the public in the accounting profession can rise. Finally, the conclusions of this study provide evidence of new controls in the financial statement comparability literature.

Notwithstanding these implications, this study involves several limitations. First, the sample sizes between the two settings are unbalanced, due to a lack of data for the United Kingdom. Similarly, this study only focuses on the largest firms in both settings, possibly hindering the generalizability of the results. As such, a suggestion for further research is to examine this influence with a more diversified and balanced sample. Besides this, the research design of this study does not consider other influences on financial statement comparability, such as legislation, litigation risk, auditor tenure and cultural specific influences. Due to the difficult operationalization of these concepts, this provides an area of future research. Additionally, no inferences can be made whether the observed differences in the accrual comparability metric result in uniformity rather true financial statement comparability, as desired by the FASB and IASB.

Finally, this study incites several possible areas of future research. An interesting consideration is to examine the differences between the audit styles of Big 4 auditors versus non-Big 4 auditors. Similarly, an identification of the tangible differences between the individual audit styles of Big 4 auditors can provide interesting results in light of financial statement comparability as well as for standard setters in general. Last but not least, a final area of future research is the identification of the differences in quality of accounting standards, in order to assess whether this drives the observed findings in this study.

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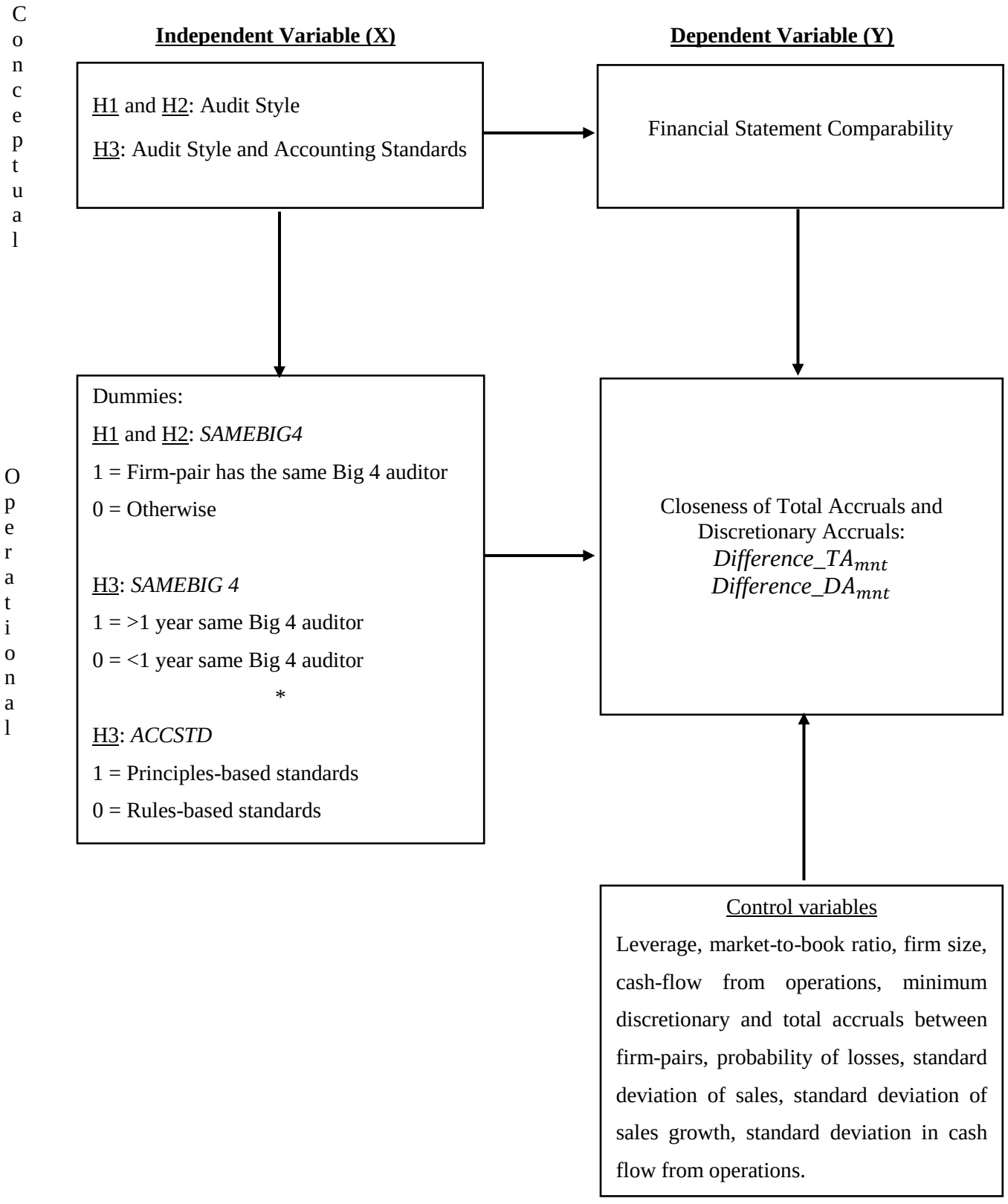
Appendix A: Predictive Validity Framework



Appendix B: Variable Definitions

Table 8: Definitions of Variables

Note: all variables are calculated for firm-pairs (firms *m* and *n*) which operate in the same 2-digit industry during the same fiscal year (year *t*), unless specified otherwise.

Dependent Variables	
Difference_TA	The absolute difference between the total accruals of firm-pairs. Total accruals are calculated as the income before extraordinary items minus net cash flow from operating activities, scaled by lagged assets. This variable is used to estimate the closeness of total accruals as a measure of financial statement comparability.
Difference_DA	The absolute difference between the discretionary accruals of firm-pairs. Discretionary accruals are estimated using the modified contemporaneous performance model by Kothari et al. (2005). This variable is used to estimate the closeness of discretionary accruals as a measure of financial statement comparability.
Explanatory Variables	
SAMEBIG4	Dummy variable which is coded as 1 if both firms in a firm-pair have the same Big 4 auditor, and 0 otherwise.
SAMEBIG4L	Dummy variable which is coded as 1 if both firms in a firm-pair had the same Big 4 auditor in the previous year (*t*-1) as well as in the current year (*t*), and 0 otherwise. This variable is used exclude firms which switched auditor.
ACCSTD	Dummy variable which is coded as 1 if the accounting standards are principles-based (UK GAAP – United Kingdom) and 0 if they are rules-based (US GAAP – United States).
ACCSTD_R	Dummy variable which is coded as 1 if the accounting standards are rules-based (US GAAP – United States) and 0 if they are principles-based (UK GAAP – United Kingdom).
*SAMEBIG4*ACCSTD*	The interaction between audit style and accounting standards. This variable is used to measure whether accounting standards influence the association between audit style and financial statement comparability.
*SAMEBIG4*ACCSTD_R*	The interaction between audit style and accounting standards. This variable is used to provide additional testing of H3 through the reversal of the *ACCSTD* variable.

(Continued on next page)

*SAMEBIG4L*ACCSTD*	The interaction between audit style and accounting standards, excluding firms which switched auditor in the previous fiscal year (*t*-1). This variable is used to measure whether accounting standards influence the association between audit style and financial statement comparability.

Control Variables

Min_TA	The minimum value of the total accruals of a firm-pair.
Min_DA	The minimum value of discretionary accruals of a firm-pair.
Diff_Size	The absolute difference between the firm sizes of a firm-pair. Firm size is calculated as the natural logarithm of assets.
Min_Size	The minimum value of the firm-sizes of a firm-pair.
Diff_Leverage	The absolute difference between the leverage ratios of a firm-pair. The leverage of a firm is calculated as total liabilities divided by total assets minus total liabilities.
Min_Leverage	The minimum value of the leverage ratios of a firm-pair.
Diff_MTB	The absolute difference between the Market-to-Book ratios of a firm-pair. The Market-to-Book ratio is calculated as the multiplication of the fiscal year closing price of a firm's stock and the number of common shares outstanding, divided by common equity.
Min_MTB	The minimum value of the Market-to-Book ratios of a firm-pair.
Diff_CFO	The absolute difference between the cash flow from operations - scaled by lagged total assets (year *t*-1) – of a firm pair.
Min_CFO	The minimum value of the cash flow from operations - scaled by lagged total assets (year *t*-1) – of a firm pair.
Diff_Loss_Prob	The absolute difference between the loss probabilities of a firm-pair. The probability of losses is calculated as the proportion of fiscal years in which a firm reported a loss over the past four fiscal years.
Min_Loss_Prob	The minimum value of the loss probabilities of a firm-pair.
Diff_CFO_SD	The absolute difference between the standard deviations of cash flows from operations of a firm-pair. The standard deviation of cash flows from operations is calculated over the preceding three fiscal years, including the current fiscal year.
Min_CFO_SD	The minimum value of the standard deviations of cash flows from operations of a firm-pair.

Diff_Sales_SD	The absolute difference between the standard deviations of sales of a firm-pair. The standard deviation of sales is calculated over the preceding three fiscal years, including the current fiscal year.
Min_Sales_SD	The minimum value of the standard deviations of sales of a firm-pair.

(Continued on next page)

Diff_SGR_SD	The absolute difference between the standard deviations of the growth in sales of a firm-pair. The standard deviation of sales growth is calculated over the preceding three fiscal years, including the current fiscal year.
Min_SGR_SD	The minimum value of the standard deviations of sales growth of a firm-pair.

Appendix C: List of current in-house working rules developed by each Big 4 audit firm

The following list is based on Francis et al. (2014), who study the effect of audit style on financial statement comparability in the United States - a rules-based setting. This list provides an overview of the various sets of firm-specific in-house working rules as developed by the Big 4 audit firms. These products were originally intended for internal use, but are now structurally offered to clients and other users.

- **Deloitte:** Deloitte Technical Library (http://www.deloitte.com/us/techlibrary); Deloitte Roadmap (http://www.deloitte.com/view/en_US/us/Services/audit-enterprise-risk-services/Financial-Statement-Internal-Control-Audit/Accounting-Standards-Communications/980bef5fe91fb110VgnVCM100000ba42f00aRCRD.htm).
- **Ernst & Young**: Global Accounting and Auditing Information Tool (GAAIT) (http://www.ey.com/gl/en/services/assurance/assurance-key-a-a-guidance-on-ernst---young-online---global-accounting---auditing-information-tool).
- **KPMG**: Accounting Research Online (https://home.kpmg.com/xx/en/home/insights/2016/12/our-approach.html).
- **PricewaterhouseCoopers**: Accounting Guides (http://www.cfodirect.pwc.com/CFODirectWeb/Controller.jpf?NavCode¼MSRA-777JJY).

Appendix D: Interview with Big 4 Audit Partner

The following appendix contains a confirmation of the main findings from the interview that was conducted with Arnoud A. Kuijpers, Partner Assurance at EY Rotterdam. For privacy reasons all contact details have been removed from the correspondence, which was conducted in Dutch.

Arnoud Kuijpers [redacted]

ma 19-6-2017 15:42

Aan: Daniel Wilmink ([redacted])

Beste Daniel,

Wij hebben elkaar uitgebreid gesproken over je scriptie. Daarbij heb ik een aantal zaken proberen te duiden, met name hoe verschillende kantoren omgaan met vaktechnische aangelegenheden. Onderstaand heb jij de belangrijkste items samengevat die ook hun weerslag zullen vinden in je scriptie. Hierbij kan ik bevestigen dat we deze besproken hebben.

Succes met de afronding!

Met vriendelijke groet / Kind regards,

Find us on: Facebook | LinkedIn | Twitter | YouTube

Arnoud A. Kuijpers | Partner | Assurance

Ernst & Young Nederland LLP
Boompjes 258, 3011 XZ Rotterdam, PO Box 2295 3000 CG Rotterdam, The Netherlands , Netherlands
[redacted]
EY/Comm: Chamber of Commerce Rotterdam: 24432942 | Registrar of Companies for England and Wales: OC335595
Website: http://www.ey.nl
Dorothy Fung Loy | Phone: +31 (0) 88 407 8715 | dorothy.fung.loy@nl.ey.com

From: Daniel Wilmink [mailto:[redacted]]
Sent: Monday, June 19, 2017 1:30 PM
To: Arnoud Kuijpers <[redacted]>
Subject: Re: Master Thesis

Hi Arnoud,

(Continued on next page)

Hartstikke bedankt voor het interview! De volgende hoofdbevindingen uit het gesprek heb ik opgenomen in mijn thesis:

- Er zijn aanzienlijke verschillen tussen de werkwijzen van de Big 4 kantoren. Deze verschillen manifesteren zich onder andere in de cultuur, waar men duidelijke verschillen observeert in de aansturing en ruimte die kantoren geven aan klanten op, bijvoorbeeld, schattingsposten.
- Deze ruimte en kritische houding varieert over tijd en is sterk gerelateerd aan de verschillende thema's waarop kantoren focussen, alsmede de wijze waarop deze bij verschillende kantoren aan het licht kwamen - denk hierbij dus ook aan schandalen.
- Daarnaast zijn er duidelijke verschillen in de wijze van omgang van interpretatiekwesties en derhalve in de daarop volgende uitkomsten. Deze verschillen ontstaan onder andere door:
    - de inzet van het vaktechnisch bureau bij deze kwesties;
    - de rol van de tweede partner;
    - drivers van teams alsmede partners om tot een oordeel te komen en;
    - de algemene controlemethodiek.

Met vriendelijke groet,

Daniel Wilmink

Appendix E: Regression analysis assumptions

Table 9: Shapiro-Wilk W Test for Normality

Panel A: United Kingdom

Variable	Obs	W	V	Z	Prob>z
Residuals	19,113	0.85199	1274.949	19.454	0.00000

Panel B: United States

Variable	Obs	W	V	Z	Prob>z
Residuals	649,470	0.85606	13,000	26.930	0.00000

By means of the Shapiro-Wilk W test one can assess whether the error terms of the regression follow a normal distribution with a with a zero-mean. The hypothesis of normality is rejected at the 1% level, inferring the non-normal distribution of error terms. However, this test is most suitable under 5,000 observations and can therefore result in misleading inferences regarding normality.

Table 10: Breusch-Pagan Test for Heteroskedacity

H0: Constant variance

Panel A: United Kingdom		**Panel B: United States**	
Chi-squared	2716.33	Chi-squared	34729.97
Prob > Chi-squared	0.0000	Prob > Chi-squared	0.0000

The Breusch-Pagan / Cook-Weisberg test for heteroskedacity tests against the null-hypothesis of homoskedacity. In case of rejection of the null-hypothesis, heteroskedacity is present. When present, robust standard errors can be applied in the regression in order to create constant variance in the error terms.

Appendix F: Additional Tables

Table 11: Pearson Correlation Matrix United Kingdom

	DTA	DDA	SB4	MTA	MDA	DSiz	MSiz	DLev	MLev	DMTB	MMTB	DCFO	MCFO	DLPrb	MLPrb	DCFSD	MCFSD	DSalSD	MSalSD	DSGSD	MSGSD
DTA	1.000																				
DDA	0.818 0.000***	1.000																			
SB4	-0.036 0.000***	-0.028 0.000***	1.000																		
MTA	-0.681 0.000***	-0.572 0.000***	0.012 0.098*	1.000																	
MDA	-0.570 0.000***	-0.650 0.000***	-0.067 0.353	0.812 0.000***	1.000																
DSiz	0.037 0.000***	0.019 0.009***	-0.008 0.253	-0.026 0.000***	0.013 0.077*	1.000															
MSiz	-0.174 0.000***	-0.166 0.000***	0.088 0.000***	0.119 0.000***	0.081 0.000***	-0.299 0.000***	1.000														
DLev	0.069 0.000***	0.058 0.000***	0.013 0.0742*	-0.058 0.000***	-0.063 0.000***	-0.019 0.008***	0.060 0.000***	1.000													
MLev	-0.087 0.000***	-0.078 0.000***	-0.005 0.466	0.110 0.000***	0.103 0.000***	0.013 0.083*	0.050 0.000***	-0.604 0.000***	1.000												
DMTB	0.088 0.000***	0.064 0.000***	0.010 0.168	-0.045 0.000***	-0.037 0.000***	-0.000 0.968	-0.006 0.394	0.747 0.000***	-0.507 0.000***	1.000											
MMTB	0.047 0.000***	-0.035 0.000***	-0.000 0.963	0.076 0.000***	0.067 0.000***	0.016 0.025**	0.007 0.342	-0.555 0.000***	0.830 0.000***	-0.616 0.000***	1.000										
DCFO	0.342 0.000***	0.263 0.000***	-0.010 0.173	-0.254 0.000***	-0.195 0.000***	0.096 0.000***	-0.283 0.000***	-0.028 0.000***	-0.042 0.000***	0.084 0.000***	-0.026 0.000***	1.000									
MCFO	-0.255 0.000***	-0.203 0.000***	0.014 0.046**	-0.055 0.000***	-0.018 0.015**	-0.051 0.000***	0.173 0.000***	0.011 0.126	0.011 0.123	0.068 0.000***	0.037 0.000***	-0.469 0.000***	1.000								
DLPrb	0.218 0.000***	0.195 0.000***	0.004 0.601	-0.258 0.000***	-0.206 0.000***	0.057 0.000***	-0.176 0.000***	0.042 0.000***	-0.068 0.000***	-0.009 0.235	-0.035 0.000***	0.2432 0.000***	-0.365 0.000***	1.000							
MLprb	0.193 0.000***	0.167 0.000***	-0.006 0.416	-0.296 0.000***	-0.232 0.000***	-0.033 0.000***	-0.125 0.000***	0.018 0.015**	-0.041 0.000***	-0.022 0.002***	-0.053 0.000***	0.016 0.024**	-0.198 0.000***	0.023 0.000***	1.000						
DCFSD	-0.013 0.000***	-0.004 0.000***	-0.012 0.086*	-0.010 0.155	-0.002 0.738	0.481 0.000***	0.241 0.000***	-0.034 0.000***	0.027 0.000***	-0.036 0.000***	0.024 0.000***	0.007 0.345	0.056 0.000***	-0.021 0.005***	-0.028 0.000***	1.000					
MCFSD	-0.039 0.000***	-0.038 0.000***	0.031 0.000***	0.002 0.836	0.011 0.121	-0.093 0.000***	0.607 0.000***	-0.009 0.236	0.029 0.000***	-0.015 0.035**	0.013 0.071*	-0.072 0.000***	0.117 0.000***	-0.091 0.000***	-0.030 0.000***	0.362 0.000***	1.000				
DSalSD	-0.057 0.000***	-0.061 0.000***	0.025 0.001***	0.062 0.000***	0.051 0.000***	0.533 0.000***	-0.395 0.000***	0.008 0.254	0.045 0.000***	-0.017 0.018**	0.025 0.001***	-0.069 0.000***	0.057 0.000***	-0.067 0.000***	-0.130 0.000***	0.540 0.000***	0.308 0.000***	1.000			
MSalSD	-0.116 0.000***	-0.106 0.000***	0.047 0.000***	0.127 0.000***	0.084 0.000***	-0.152 0.000***	0.682 0.000***	0.057 0.000***	0.015 0.042**	0.012 0.093*	0.003 0.725	-0.218 0.000***	0.219 0.000***	-0.221 0.000***	-0.164 0.000***	0.206 0.000***	0.553 0.000***	0.281 0.000***	1.00		
DSGSD	-0.109 0.000***	-0.118 0.000***	0.019 0.010**	0.112 0.000***	0.082 0.000***	-0.014 0.057*	0.088 0.000***	0.021 0.004***	0.014 0.047**	0.038 0.000***	0.018 0.014**	-0.118 0.000***	0.113 0.000***	-0.150 0.000***	-0.070 0.000***	-0.014 0.053*	-0.002 0.766	-0.018 0.011**	0.078 0.000***	1.000	
MSGSD	0.209 0.000***	0.1998 0.000***	-0.017 0.017**	-0.290 0.000***	-0.175 0.000***	0.010 0.176	-0.082 0.000***	-0.089 0.000***	0.021 0.004***	-0.107 0.000***	0.005 0.469	0.087 0.000***	-0.085 0.000***	0.170 0.000***	0.351 0.000***	0.064 0.000***	0.093 0.000***	0.006 0.414	-0.039 0.000***	-0.159 0.000***	1.000

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively.

Table 12: Pearson Correlation Matrix United States

	DTA	DDA	SB4	MTA	MDA	DSiz	MSiz	DLev	MLev	DMTB	MMTB	DCFO	MCFO	DLPrb	MLPrb	DCFSD	MCFSD	DSalSD	MSalSD	DSGSD	MSGSD
DTA	1.000																				
DDA	0.900 0.000***	1.000																			
SB4	-0.022 0.000***	-0.022 0.000***	1.000																		
MTA	-0.699 0.000***	-0.635 0.000***	0.011 0.000***	1.000																	
MDA	-0.658 0.000***	-0.704 0.000***	-0.003 0.006***	0.879 0.000***	1.000																
DSiz	0.047 0.000***	0.036 0.009***	-0.028 0.000***	-0.009 0.000***	-0.005 0.000***	1.000															
MSiz	-0.197 0.000***	-0.202 0.000***	0.010 0.000***	0.123 0.000***	0.121 0.000***	-0.369 0.000***	1.000														
DLev	0.057 0.000***	0.048 0.000***	0.004 0.005***	-0.082 0.000***	-0.066 0.000***	0.027 0.000***	0.042 0.000***	1.000													
MLev	-0.085 0.000***	-0.074 0.000***	0.013 0.000***	0.099 0.000***	0.075 0.000***	-0.022 0.000***	0.103 0.000***	-0.609 0.000***	1.000												
DMTB	0.070 0.000***	0.062 0.000***	-0.007 0.000***	-0.072 0.000***	-0.070 0.000***	0.012 0.000***	-0.027 0.000***	0.711 0.000***	-0.429 0.000***	1.000											
MMTB	0.063 0.000***	-0.049 0.000***	-0.000 0.889	0.084 0.000***	0.057 0.000***	0.009 0.000***	-0.007 0.000***	-0.553 0.000***	0.740 0.000***	-0.519 0.000***	1.000										
DCFO	0.278 0.000***	0.249 0.000***	-0.033 0.000***	-0.200 0.000***	-0.194 0.000***	0.117 0.000***	-0.270 0.000***	-0.045 0.000***	-0.086 0.000***	0.169 0.000***	-0.040 0.000***	1.000									
MCFO	-0.174 0.000***	-0.164 0.000***	0.011 0.000***	-0.054 0.000***	-0.005 0.706	-0.103 0.000***	0.197 0.000***	-0.073 0.000***	0.049 0.000***	-0.048 0.000***	0.122 0.000***	-0.501 0.000***	1.000								
DLPrb	0.183 0.000***	0.173 0.000***	-0.024 0.000***	-0.175 0.000***	-0.163 0.000***	0.110 0.000***	-0.267 0.000***	0.110 0.000***	-0.116 0.000***	0.091 0.000***	-0.106 0.000***	0.273 0.000***	-0.413 0.000***	1.000							
MLprb	0.151 0.000***	0.149 0.000***	-0.007 0.000***	-0.189 0.000***	-0.169 0.000***	-0.008 0.000***	-0.178 0.000***	0.076 0.000***	-0.083 0.000***	0.032 0.000***	-0.083 0.000***	0.059 0.000***	-0.265 0.000***	0.002 0.000***	1.000						
DCFSD	-0.033 0.000***	-0.042 0.000***	-0.018 0.000***	-0.004 0.000***	-0.020 0.000***	0.446 0.000***	0.275 0.000***	0.044 0.000***	0.010 0.000***	-0.006 0.000***	-0.005 0.000***	0.008 0.000***	0.052 0.000***	-0.025 0.000***	-0.046 0.000***	1.000					
MCFSD	-0.065 0.000***	-0.074 0.000***	0.044 0.000***	0.009 0.000***	0.004 0.000***	-0.180 0.000***	0.667 0.000***	0.044 0.000***	0.042 0.000***	0.006 0.000***	-0.016 0.000***	-0.064 0.000***	0.086 0.000***	-0.080 0.000***	-0.055 0.000***	0.294 0.000***	1.000				
DSalSD	-0.063 0.000***	-0.076 0.000***	0.037 0.001***	0.061 0.000***	0.058 0.000***	0.536 0.000***	0.356 0.000***	0.051 0.000***	0.040 0.000***	-0.009 0.000***	0.006 0.000***	-0.051 0.000***	0.052 0.000***	-0.062 0.000***	-0.109 0.000***	0.600 0.000***	0.305 0.000***	1.000			
MSalSD	-0.117 0.000***	-0.128 0.000***	0.079 0.000***	0.077 0.000***	0.065 0.000***	-0.265 0.000***	0.846 0.000***	0.049 0.000***	0.080 0.000***	-0.009 0.000***	0.003 0.000***	-0.178 0.000***	0.176 0.000***	-0.195 0.000***	-0.156 0.000***	0.271 0.000***	0.641 0.000***	0.330 0.000***	1.00		
DSGSD	-0.103 0.000***	-0.098 0.000***	0.017 0.000***	0.070 0.000***	0.088 0.000***	-0.037 0.000***	0.110 0.000***	-0.016 0.000***	0.021 0.000***	-0.030 0.000***	0.024 0.000***	-0.138 0.000***	0.156 0.000***	-0.169 0.000***	-0.104 0.000***	0.011 0.000***	0.024 0.000***	0.005 0.000***	0.040 0.000***	1.000	
MSGSD	0.129 0.000***	0.114 0.000***	-0.014 0.000***	-0.143 0.000***	-0.109 0.000***	-0.004 0.002***	-0.084 0.000***	-0.024 0.000***	-0.007 0.000***	-0.046 0.000***	-0.029 0.000***	0.113 0.000***	-0.153 0.000***	0.131 0.000***	0.288 0.000***	0.039 0.000***	0.026 0.000***	0.021 0.000***	0.008 0.000***	-0.064 0.000***	1.000

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively.

Table 13: Multicollinearity

Panel A: United Kingdom			Panel B: United States		
Variable	VIF	1/VIF	Variable	VIF	1/VIF
SAMEBIG4	1.02	0.985121	SAMEBIG4	1.01	0.989249
Min_TA	3.74	0.267153	Min_TA	4.86	0.205759
Min_DA	3.06	0.326597	Min_DA	4.52	0.221157
Min_Size	3.46	0.289204	Min_Size	6.67	0.149970
Diff_Size	2.74	0.364530	Diff_Size	3.39	0.295110
Min_MTB	4.23	0.236242	Min_MTB	2.70	0.370483
Diff_MTB	3.15	0.317408	Diff_MTB	2.42	0.413892
Min_Leverage	4.03	0.248096	Min_Leverage	2.87	0.248830
Diff_Leverage	3.02	0.331156	Diff_Leverage	2.83	0.353042
Min_CFO	1.87	0.535868	Min_CFO	2.01	0.498532
Diff_CFO	1.74	0.573856	Diff_CFO	1.73	0.577601
Min_Loss_Prob	1.40	0.714111	Min_Loss_Prob	1.35	0.741968
Diff_Loss_Prob	1.37	0.729298	Diff_Loss_Prob	1.40	0.712654
Min_Sales_SD	2.10	0.476066	Min_Sales_SD	3.87	0.258159
Diff_Sales_SD	2.41	0.415231	Diff_Sales_SD	2.96	0.338168
Min_CFO_SD	1.92	0.520462	Min_CFO_SD	2.00	0.500730
Diff_CFO_SD	1.84	0.542798	Diff_CFO_SD	1.86	0.538422
Min_SGR_SD	1.31	0.762922	Min_SGR_SD	1.19	0.837809
Diff_SGR_SD	1.06	0.939852	Diff_SGR_SD	1.07	0.934988
Mean VIF	2.39		Mean VIF	2.67	

The Variance Inflation Factor (VIF) is a measure of identifying the existence of multicollinearity. As a rule of thumb, a VIF value below 10 is acceptable and indicates the non-existence of multicollinearity, although a value below 5 is preferred. Panel A presents the VIF values for the independent variables in the United Kingdom setting, whereas Panel B presents these for the United States. Evidently, all VIF values are below 5 and therefore the assumption is made that multicollinearity does not exist in either regression model.

Table 14: OLS Results for Hypothesis 3 – Reversal of *ACCSTD* Variable

	Panel A: Y = Difference_TA			Panel B: Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.065	85.28	0.000***	0.103	141.84	0.000***
SAMEBIG4	-0.004	-4.42	0.000***	-0.003	-2.97	0.003***
ACCSTD_R	-0.014	-27.16	0.000***	-0.005	-9.91	0.000***
*SAMEBIG*ACCSTD_R*	0.004	3.88	0.001***	0.002	2.39	0.017**
Min_TA	-0.645	-277.40	0.000***	-0.044	-20.55	0.000***
Min_DA	-0.057	-22.81	0.000***	-0.676	-296.72	0.000***
Diff_Size	-0.002	-27.48	0.000***	-0.003	-43.74	0.000***
Min_Size	-0.007	-66.57	0.000***	-0.009	-83.13	0.000***
Diff_Leverage	-0.000	-17.05	0.000***	-0.000	-8.37	0.000***
Min_Leverage	-0.001	-21.87	0.000***	-0.000	-11.50	0.000***
Diff_MTB	0.000	23.37	0.000***	0.000	12.52	0.000***
Min_MTB	0.001	25.73	0.000***	0.000	15.22	0.000***
Diff_CFO	-0.002	-1.84	0.066**	-0.017	-18.84	0.000***
Min_CFO	-0.190	-135.71	0.000***	-0.171	-132.63	0.000***
Diff_Loss_Prob	-0.016	-65.52	0.000***	-0.014	-58.33	0.000***
Min_Loss_Prob	-0.033	-54.67	0.000***	-0.028	-48.81	0.000***
Diff_CFO_SD	-0.000	-7.08	0.000***	0.000	5.41	0.000***
Min_CFO_SD	0.000	10.97	0.000***	0.000	23.50	0.000***
Diff_Sales_SD	0.001	28.94	0.000***	0.002	34.09	0.000***
Min_Sales_SD	0.004	41.25	0.000***	0.003	38.99	0.000***
Diff_SGR_SD	-0.001	-11.85	0.000***	0.000	2.16	0.031**
Min_SGR_SD	-0.001	-0.99	0.320	-0.013	-13.81	0.000***
Industry FE	Yes			Yes		
Adjusted R^2	0.5619			0.5469		
Number of obs.	668,583			668,583		
F-val. (sign.)	23286.44	(0.000***)		23267.90	(0.000***)	

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *SAMEBIG4* represents audit style, and is a dummy variable coded as 1 when a firm-pair shares the same Big 4 auditor and operates in the same 2-digit industry, and 0 otherwise. *ACCSTD_R* is a reversal of the dummy variable *ACCSTD* used in the original tests of H3. Here, the dummy variable is coded as 1 when a firm reports under US GAAP and 0 under UK GAAP. The variable of interest is *SAMEBIG4*ACCST_R*, which is the interaction effect between accounting standards and audit style. Robust standard errors are applied, due to heteroskedacity. The remainder of the control variables is defined in Appendix B.

Table 15: OLS Results with Industry- and Year Fixed Effects

	Y = Difference_TA			Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.042	66.48	0.000***	0.098	161.09	0.000***
SAMEBIG4	-0.001	-4.53	0.000***	-0.001	-4.73	0.000***
ACCSTD	0.014	22.35	0.000***	0.007	12.29	0.000***
*SAMEBIG4*ACCSTD*	-0.002	-2.34	0.019**	-0.002	-2.65	0.008***
Min_TA	-0.797	-291.46	0.000***	0.053	20.51	0.000***
Min_DA	-0.090	31.53	0.000***	-0.767	-288.51	0.000***
Diff_Size	-0.002	-28.70	0.000***	-0.002	-31.64	0.000***
Min_Size	-0.007	-62.98	0.000***	-0.008	-67.90	0.000***
Diff_Leverage	-0.000	-19.92	0.000***	-0.000	-15.80	0.000***
Min_Leverage	-0.001	-22.67	0.000***	-0.001	-19.18	0.000***
Diff_MTB	0.000	25.25	0.000***	0.000	22.40	0.000***
Min_MTB	0.001	26.89	0.000***	0.001	23.76	0.000***
Diff_CFO	-0.013	-13.23	0.000***	-0.016	-17.17	0.000***
Min_CFO	-0.200	-141.14	0.000***	-0.169	-128.06	0.000***
Diff_Loss_Prob	-0.017	-68.26	0.000***	-0.013	-54.58	0.000***
Min_Loss_Prob	-0.034	-56.76	0.000***	-0.026	-45.03	0.000***
Diff_CFO_SD	-0.000	-3.27	0.001***	0.000	2.72	0.007***
Min_CFO_SD	0.000	10.17	0.000***	0.000	24.99	0.000***
Diff_Sales_SD	0.001	29.02	0.000***	0.001	24.42	0.000***
Min_Sales_SD	0.004	41.50	0.000***	0.003	29.85	0.000***
Diff_SGR_SD	-0.000	-9.15	0.000***	0.000	1.06	0.289
Min_SGR_SD	-0.002	-1.67	0.095**	-0.006	-5.70	0.000***
Industry Fixed Effects	Yes			Yes		
Year Fixed Effects	Yes			Yes		
Adjusted R^2	0.5778			0.5592		
Number of obs.	668,585			668,585		
F-val. (sign.)	24862.25	(0.000***)		23481.95	(0.000***)	

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).

Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *SAMEBIG4* represents audit style, and is a dummy variable coded as 1 when a firm-pair shares the same Big 4 auditor and operates in the same 2-digit industry, and 0 otherwise. *ACCSTD* is a dummy variable coded as 1 when a firm reports under UK GAAP and 0 under US GAAP. The variable of interest is *SAMEBIG4*ACCST,* which is the interaction effect between accounting standards and audit style. Robust standard errors are applied, due to the presence of heteroskedacity. Additionally, industry- as well as year fixed effects are applied to control omitted variables. The control variables are defined in Appendix B.

Table 16: OLS Results with Industry- and Year Fixed Effects: Exclusion of Years 2008-2009

	Y = Difference_TA			Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.041	59.58	0.000***	0.093	140.79	0.000***
SAMEBIG4	-0.001	-4.60	0.000***	-0.001	-4.68	0.000***
ACCSTD	0.011	15.11	0.000***	0.007	10.57	0.000***
*SAMEBIG4*ACCSTD*	-0.002	-1.85	0.064*	-0.003	-2.87	0.004***
Min_TA	-0.802	-255.16	0.000***	0.046	15.75	0.000***
Min_DA	0.097	29.52	0.000***	-0.760	-258.17	0.000***
Diff_Size	-0.002	-27.15	0.000***	-0.002	-29.87	0.000***
Min_Size	-0.007	-57.39	0.000***	-0.008	-62.77	0.000***
Diff_Leverage	-0.000	-10.20	0.000***	-0.000	-8.70	0.000***
Min_Leverage	-0.001	-17.32	0.000***	-0.001	-14.06	0.000***
Diff_MTB	0.000	15.72	0.000***	0.000	15.02	0.000***
Min_MTB	0.001	22.63	0.000***	0.001	18.98	0.000***
Diff_CFO	-0.008	-7.04	0.000***	-0.011	-11.29	0.000***
Min_CFO	-0.195	-123.59	0.000***	-0.160	-110.51	0.000***
Diff_Loss_Prob	-0.017	-61.79	0.000***	-0.013	-48.21	0.000***
Min_Loss_Prob	-0.030	-45.91	0.000***	-0.022	-35.21	0.000***
Diff_CFO_SD	-0.000	-4.39	0.000***	0.000	1.32	0.186
Min_CFO_SD	0.000	4.00	0.000***	0.000	16.78	0.000***
Diff_Sales_SD	0.002	27.80	0.000***	0.001	23.01	0.000***
Min_Sales_SD	0.004	39.95	0.000***	0.003	31.92	0.000***
Diff_SGR_SD	-0.000	-8.65	0.000***	0.000	0.52	0.605
Min_SGR_SD	0.001	0.53	0.598	-0.006	-5.57	0.000***
Industry Fixed Effects	Yes			Yes		
Year Fixed Effects	Yes			Yes		
Adjusted R^2	0.5645			0.5510		
Number of obs.	543,407			543,407		
F-val. (sign.)	19304.07	(0.000***)		18420.77	(0.000***)	

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *SAMEBIG4* represents audit style, and is a dummy variable coded as 1 when a firm-pair shares the same Big 4 auditor and operates in the same 2-digit industry, and 0 otherwise. *ACCSTD* is a dummy variable coded as 1 when a firm reports under UK GAAP and 0 under US GAAP. The variable of interest is *SAMEBIG4*ACCST*, which is the interaction effect between accounting standards and audit style. Robust standard errors are applied, due to the presence of heteroskedacity. In addition to this industry- as well as year fixed effects are applied in this regression. Years 2008 and 2009 are excluded from this estimation to mitigate potential bias resulting from the economic crisis. The control variables are defined in Appendix B.

Table 17: OLS Results for Exclusion of Auditor Switches

	Y = Difference_TA			Y = Difference_DA		
Variable	**Coeff.**	**t-stat**	**p-value**	**Coeff.**	**t-stat**	**p-value**
Intercept	0.062	99.73	0.000***	0.092	153.75	0.000***
SAMEBIG4L	-0.001	-4.51	0.000***	-0.001	-6.81	0.000***
ACCSTD	0.009	17.30	0.000***	0.004	8.64	0.000***
*SAMEBIG4L*ACCSTD*	-0.003	-3.17	0.002***	-0.003	-3.38	0.000***
Min_TA	-0.571	-257.53	0.000***	-0.117	-271.42	0.000***
Min_DA	-0.134	-56.48	0.000***	-0.597	-57.03	0.000***
Diff_Size	-0.003	-31.90	0.000***	-0.003	-39.01	0.000***
Min_Size	-0.009	-91.92	0.000***	-0.009	-91.95	0.000***
Diff_Leverage	-0.001	-20.84	0.000***	-0.001	-14.08	0.000***
Min_Leverage	-0.001	-27.02	0.000***	-0.001	-20.03	0.000***
Diff_MTB	0.001	21.99	0.000***	0.001	13.24	0.000***
Min_MTB	0.001	26.67	0.000***	0.001	19.23	0.000***
Diff_CFO	-0.001	-1.31	0.191	-0.004	-3.80	0.000***
Min_CFO	-0.205	-130.75	0.000***	-0.152	-105.27	0.000***
Diff_Loss_Prob	-0.015	-53.87	0.000***	-0.011	-39.68	0.000***
Min_Loss_Prob	-0.034	-48.45	0.000***	-0.023	-35.05	0.000***
Diff_CFO_SD	-0.001	-4.31	0.000***	0.001	9.29	0.000***
Min_CFO_SD	0.001	9.82	0.000***	0.001	27.57	0.000***
Diff_Sales_SD	0.002	37.40	0.000***	0.001	28.91	0.000***
Min_Sales_SD	0.005	53.68	0.000***	0.003	31.85	0.000***
Diff_SGR_SD	-0.001	-11.25	0.000***	-0.001	-2.65	0.001***
Min_SGR_SD	0.001	0.34	0.732	0.005	5.58	0.000***
Adjusted R^2	0.5507			0.5298		
Number of obs.	544,913			544,913		

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
Panels A and B report the OLS regression results for total accruals and discretionary accruals as dependent variables respectively. The dependent variables are the absolute difference in total- and discretionary accruals between firm pairs that operate in the same industry. *SAMEBIG4L* is a dummy variable coded as 1 if a firm pair had the same Big 4 auditor in the current, as well as in the previous fiscal year. *ACCSTD* is a dummy variable coded as 1 when a firm reports under UK GAAP and 0 under US GAAP. The variable of interest is *SAMEBIG4L*ACCST*, which measures the interaction effect between accounting standards and audit style, while controlling for auditor switches. Robust standard errors are applied, due to the presence of heteroskedacity. The control variables are defined in Appendix B.

Table 18: Accruals Comparability for Auditor Switches

Time	Coeff.	t-stat	p-value	n
t-1				
Y = *Difference_TA*	0.016	2.24	0.025**	6,043
Y = *Difference_DA*	0.014	1.90	0.058**	6,043
t+1				
Y = *Difference_TA*	-0.005	-3.68	0.000***	4,909
Y = *Difference_DA*	-0.004	-2.54	0.011**	4,909

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
This table illustrates the differences between the accrual comparability coefficients the year before firms switch auditor and the year thereafter. For year *t*-1 the *SAMEBIG4* variable has been reversed, so that it equals 1 for firms that do not have the same Big 4 auditor and 0 otherwise. The aim of this table is to identify whether changes in accrual comparability around auditor switches are attributable to audit style, rather than any omitted variables. The findings are robust to the original results and eliminate bias resulting from omitted variables.

Table 19: OLS Results for Cash Flow from Operations

Y = Diff_CFO			
Variable	**Coeff.**	**t-stat**	**p-value**
Intercept	0.234	253.48	0.000***
SAMEBIG4	-0.000	-3.84	0.000***
Min_TA	-0.384	-102.44	0.000***
Min_DA	0.087	21.10	0.000***
Diff_Size	-0.008	-63.25	0.000***
Min_Size	-0.026	-167.80	0.000***
Diff_Leverage	-0.003	-83.83	0.000***
Min_Leverage	-0.006	-79.87	0.000***
Diff_MTB	0.003	118.80	0.000***
Min_MTB	0.006	83.54	0.000***
Min_CFO	-0.672	-390.55	0.000***
Diff_Loss_Prob	-0.018	-45.68	0.000***
Min_Loss_Prob	-0.121	-145.02	0.000***
Diff_CFO_SD	0.000	66.19	0.000***
Min_CFO_SD	0.000	84.53	0.000***
Diff_Sales_SD	0.003	38.52	0.000***
Min_Sales_SD	0.008	60.74	0.000***
Diff_SGR_SD	-0.002	-25.47	0.000***
Min_SGR_SD	0.021	14.17	0.000***
Adjusted R^2	0.4220		
Number of obs.	668,583		

*, ** and *** indicate significance at the 10, 5 and 1 percent level respectively (two-tailed).
This table reports the OLS regression results for cash flow from operations as dependent variable. The dependent variable is the absolute difference in cash flow from operations between firm pairs that operate in the same industry. *SAMEBIG4* is a dummy variable coded as 1 if a firm pair has the same Big 4 auditor and 0 otherwise. Robust standard errors are applied, due to possible heteroskedacity. The control variables are defined in Appendix B.