

**Are Auditor and Audit Committee Report Changes Useful to Investors?  
Evidence from the United Kingdom**

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July 29, 2015

**Acknowledgements:** We appreciate helpful comments and suggestions from Lee Biggerstaff, Jonathan Shipman, Quinn Swanquist, and Rob Whited and from workshop participants at Boston College, Georgia State University, University of Arkansas, University of Connecticut, University of Illinois, University of Massachusetts-Amherst, University of Pittsburgh, and the University of Tennessee Neel Corporate Governance Center. We also thank Hannah Alexander, Amanda Prevost, and Justin Short for their research assistance. Finally, we greatly value the insights provided by Marek Grabowski of the United Kingdom Financial Reporting Council.

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**ABSTRACT**

Recently, U.S. and international regulators have proposed significant changes to auditor and audit committee reporting with the stated intention of delivering more useful information to stakeholders. Whether new disclosure requirements achieve this intended benefit is unknown. We exploit the exogenous shock of the recent changes to auditor and audit committee reports in the United Kingdom and use abnormal trading volume to test the usefulness of these new reports to investors. We find that abnormal trading volume significantly increased following the implementation of the new disclosure regime, and that abnormal trading volume increased more for companies with weaker information environments. Additionally, we find evidence that companies employing auditors that tend to provide more (less) detailed audit reports experience more (less) abnormal trading volume. Overall, it appears that additional required disclosures from audit committees and auditors provide useful information to investors.

## 1. INTRODUCTION

The external auditor plays a critical role in the capital markets by monitoring management and protecting shareholders' interests through an independent examination of a public company's financial statements. As an additional monitoring mechanism, the audit committee oversees the financial reporting process, including the appointment and performance of the external auditor. Despite the important functions of both the auditor and the audit committee, the only communication they provide to investors, regulators, and other stakeholders are standardized reports. In the United States and many other countries, the audit report follows a "pass/fail" model that varies little between companies and offers minimal insight into the audit process. Similarly, the audit committee report is typically boilerplate and presents limited information on the committee's oversight of the external auditor.

Many stakeholders have expressed concern that the current reports provide little informational value and desire a revision to existing standards (Blake et al. 2011; Turner et al. 2010). In response to these concerns, regulators worldwide have taken action to improve the transparency of the audit report as well as the audit committee report (Cohn 2014; IAASB 2015). Of particular interest to this study, the Public Company Accounting Oversight Board (PCAOB) issued a proposed rule on August 13, 2013 that would require a discussion of critical audit matters ("CAMs"), auditor independence, and tenure in the auditor report (PCAOB 2013).<sup>1</sup> Additionally, the Securities and Exchange Commission (SEC) issued a concept release in 2015 with the aim of helping investors understand and evaluate audit committee performance, which may help inform investment and voting decisions (Heller 2014; SEC 2015; White 2014; Whitehouse 2014). The effects of these reporting changes, however, are unknown ex-ante. This

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<sup>1</sup> The PCAOB plans to issue a revised proposal for this rule in the third quarter of 2015 (PCAOB 2015).

study examines whether new audit committee and auditor reporting requirements provide useful information to stakeholders by exploiting the exogenous shock created by the recent United Kingdom reporting changes.

Proponents believe that enhancing the audit report and the audit committee report will deliver new and useful information to investors by providing insights into the valuable perspective that these monitors have on companies and increasing investors' trust in the work performed by auditors and audit committees (Buller 2013; IAASB 2013; Melvin 2013; Touche 2014). Opponents, however, argue that revising reporting requirements will be fruitless as additional information will provide little, if any, incremental value to stakeholders given that investors may find the disclosures unnecessary, uninteresting, or too daunting to process in their trading decisions (Cardiff 2013; Cates 2013; Goff 2013). While some researchers have conducted experiments, focus groups, and interviews to gain insight into potential avenues for report improvements (Gray et al. 2011; Vanstraelen et al. 2012; Christensen et al. 2014; Kachelmeier et al. 2014), the lack of actual regulatory change has been a major limitation in the examination of the effects of these reforms on financial statement users.

As former Financial Accounting Standards Board (FASB) Chairman Dennis Beresford stated in his comment letter to the PCAOB, "once you have real world examples...then, it should be imperative to test how users would react to those disclosures and see if they would actually find them beneficial" (Beresford 2013). This study uses the "real world examples" provided by the recent reporting changes in the United Kingdom to examine the impact of additional disclosures on financial statement users. Specifically, we examine the Financial Reporting Council's (FRC) issuance of changes to the U.K. Corporate Governance Code and the International Standards on Auditing (U.K. and Ireland). The regulatory changes, which became

effective for financial statement years ending on or after September 30, 2013, stipulate that audit committees must include in their report, among other disclosures, the significant financial statement issues that the committee considered and how they addressed these issues (FRC 2012b).<sup>2</sup> Additionally, the FRC's revisions to the International Standard on Auditing 700 (U.K. and Ireland) instruct auditors to include the following important items in their reports: (1) a discussion of assessed risks of material misstatement, (2) information on the materiality threshold applied in the engagement, and (3) a description of the scope of the audit (FRC 2013).

Following prior literature (Beaver 1968; DeFond et al. 2007; Bamber et al. 2011; Landsman et al. 2012), we measure the usefulness of the reports to investors using abnormal trading volume as volume is the “most visible indicator of investors’ response to public disclosures” (Miller 2010). Greater usefulness would be indicated by an increase in abnormal trading volume. In the U.K., earnings announcements are typically released several weeks before the annual report and include substantially the same information as the annual report with the exception of the audit committee and auditor reports.<sup>3</sup> We therefore compare abnormal trading volume around the annual report issuance from the period prior to the regulatory reform to the initial implementation year for each company. This design allows for the isolation of the change in abnormal trading volume attributable to the new audit committee and auditor disclosures.

In an analysis of U.K. companies mandated to comply with the new reporting requirements, we find that abnormal trading volume significantly increases from the year prior to the reporting changes to the first year the new disclosures are required. These results are also economically significant as we document a 13.5 percent increase in the ratio of annual report trading volume to estimation period trading volume following the implementation of the new

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<sup>2</sup> Please refer to Section 2 for more information regarding the specifics of the new disclosure requirements.

<sup>3</sup> Please refer to Section 3 for more information.

reporting regime. These results provide statistically and economically significant evidence that enhanced auditor and audit committee reports are useful to investors.

As the reporting changes are unlikely to affect all companies equally, we also perform cross-sectional analyses to exploit the potential variation in the usefulness of the new disclosures. Specifically, we expect companies with weaker information environments (as proxied by lower analyst coverage) to benefit more from the enhanced auditor and audit committee reports. In line with this prediction, we find that abnormal trading volume increases more as the number of analysts following the firm decreases. Additionally, we perform an analysis of the differences in the usefulness of the new reports based upon the degree of detail that tends to be included in certain audit firms' reports under the new regime. We find that abnormal trading volume increases more for companies with more detailed auditor reports.

We also perform a "falsification" test by examining changes in abnormal trading volume around the earnings announcement date. Since the earnings announcement date precedes the date of the annual report where both the audit committee and auditor reports appear, we expect no change in abnormal trading volume from the pre- to the post-period around the earnings announcement date. Consistent with this expectation, trading volume only increases in reaction to the new reports, and not to the earlier release of earnings.

Furthermore, to account for temporal changes within companies that are not associated with the revised reporting requirements, we re-perform the tests using a strict change analysis. We find that the increase in abnormal trading volume is significantly greater from the year prior ( $t-1$ ) to the implementation year ( $t$ ) than the change in volume from the two years prior ( $t-2$ ) to the prior year ( $t-1$ ). These results provide further evidence of the increased usefulness of the reports due to the new auditor and audit committee disclosures and provide comfort that the

results are not driven by other factors that change over time.

In the analyses described above, we employ a balanced panel by requiring each sample firm to be present in both the pre and post periods. This technique uses each company as its own control, which alleviates the threat of time-invariant, firm-level correlated omitted variables (Carcello and Li 2013).<sup>4</sup> It is also important to note that the abnormal trading volume measure captures the event period volume *relative* to estimation period volume. This design mitigates the concern that other events occurring within a short time period before the annual report release for each company are driving the results.<sup>5</sup> As in any event study, however, there is still a concern that contemporaneous events may confound the analysis. To alleviate the concern that global changes and events could influence abnormal trading volume, we re-perform the analysis using two control groups. The first control group is comprised of U.S. companies. These companies are affected by global events that also impact U.K. companies, but they are not subject to the new U.K. reporting regime. The results show that abnormal trading volume increases more for U.K. companies compared to U.S. companies from the pre-period to the post-period. The second control group consists of companies listed on the Alternative Investment Market (AIM), which is a sub-market of the London Stock Exchange. These companies are not subject to the revised auditor and audit committee report requirements, but are affected by other U.K. specific events. The results indicate that compared to AIM companies, companies complying with the new reporting requirements experience a greater increase in abnormal trading volume. Thus, these additional analyses continue to reveal the significant impact enhanced auditor and audit committee disclosures have on the usefulness of the reports to investors and mitigate the threat

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<sup>4</sup> In untabulated analyses, we use firm fixed effects and our results remain quantitatively and qualitatively unchanged.

<sup>5</sup> The cross-sectional analyses discussed earlier also help mitigate the correlated omitted variable problem because the omitted variable would need to affect the groups differently to remain a concern.

that contemporaneous events are confounding the results of this study.

Finally, we perform an additional analysis to mitigate the concern that the results are driven by changes in management disclosure practices that may have occurred around the same time as the implementation of the new auditor and audit committee reports. The only management disclosure regulatory change that occurred during this timeframe was the formal requirement of a strategic review in the annual report. We randomly select a sample of companies and compare each company's strategic report in the current year annual report to its business review in the prior year annual report. Confirming the commonly held sentiment that the strategic report requirement did not materially change management's disclosures (Copnell 2013; Deloitte 2013), we do not find any significant differences in the primary disclosures. Therefore, the formal implementation of strategic reports is unlikely to impact our analysis.

By examining the effect of the United Kingdom's recent reporting regime changes on investors, this study provides relevant and timely information about a highly debated regulatory issue. We find that additional mandated auditor and audit committee disclosures provide investors with new and useful information that impacts their trading decisions. The release of additional useful information not only affects investors, but also has important implications for public companies, regulators, other financial statement users, and the overall capital markets. In addition to commenting on the effect of these changes in the United Kingdom (an important market to examine in isolation), this setting informs the debates occurring globally.<sup>6</sup> Regulatory bodies, including the PCAOB, the SEC, the International Auditing and Assurance Standards Board (IAASB), and the European Parliament, are also deliberating whether to enhance the audit committee and auditor report. In particular, given the legal and cultural similarities between the

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<sup>6</sup> The United Kingdom's market capitalization is over \$3 trillion, and was the fourth largest market in 2012 behind the United States, China, and Japan (WorldBank 2014).

United Kingdom and the United States, examining the U.K.'s revised regulations may offer insights for U.S. regulators as they consider similar changes.

The remainder of the paper is organized as follows. Section 2 provides background on auditor and audit committee reporting and develops the primary hypothesis. Section 3 outlines the research method and discusses the sample. Section 4 presents the results of the study and Section 5 describes additional analyses. The final section concludes.

## **2. BACKGROUND AND HYPOTHESIS DEVELOPMENT**

### **2.1 Background on the U.S. Audit Report**

“Audits of public companies can involve scores of auditors, thousands of hours, and millions in fees. The documentation in support of the auditor’s opinion is voluminous. Indeed, with the possible exception of senior financial management, in most cases, the auditor knows more about the financial statements and financial reporting risk of the audited company than other individuals, both inside and outside the company (including members of the audit committee). Notwithstanding this significant accumulated knowledge, the only communication between the auditor and investors is typically a boilerplate three-paragraph letter (hardly a “report,” despite the commonly used title) that is essentially identical for the overwhelming majority of all public companies” (Blake et al. 2011).

As described in the above quote, some stakeholders are frustrated with the limited information provided by the audit report despite the substantial work performed and insight obtained by the external auditor. While several groups have recommended changes to the standardized “pass/fail” model (AICPA 1978; NCFRR 1987), the U.S. audit report has only been substantially revised twice since its initial adoption in the United States during the 1940s: (1) the inclusion of a scope paragraph per SAS No. 58 in 1988 and (2) the requirement to report on internal control over financial reporting per Section 404 of the Sarbanes-Oxley Act of 2002.<sup>7</sup>

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<sup>7</sup> The American Institute of Accountants (AIA) and the New York Stock Exchange worked together to improve financial reporting and out of this cooperation, published a recommended audit report format in 1934. A standard

Studies that examine these previous changes to the U.S. auditor's report find mixed evidence as to whether the revised reports provide incremental value to financial statement users. Surveys of investors, bankers, and loan officers document that additional communication from auditors enhances users' understanding of the audit and impacts their investment decisions while other empirical research fails to find a significant impact of previous changes to the audit report (Beneish et al. 2008; Kelly and Mohrweis 1989; Miller et al. 1993).

Studies examining the current U.S. audit report conclude that the report has some "symbolic value, but conveys little communicative value" due to its standardized nature (Church et al. 2008). Prior research also reveals that users sometimes misinterpret the terminology included in the report as well as the level of assurance provided by the auditor (Asare and Wright 2012; Gray et al. 2011). Participants in a focus group conducted by Gray et al. (2011) suggest that audit reports would provide more meaningful information if client-specific content was included rather than the boilerplate report currently issued.<sup>8</sup> Furthermore, a survey of sophisticated financial statement users reports that 79 percent of the participants want more informative audit report disclosures regarding management's significant judgments and estimates (Carcello et al. 2011a). Additionally, 77 percent of the respondents desire auditor disclosures of the greatest financial statement and audit risks as well as the audit procedures performed to address the risks (Carcello et al. 2011a).<sup>9</sup>

In response to stakeholder dissatisfaction with the current auditor report, regulators have

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audit report, however, was not formally adopted until the AIA's members approved the adoption of auditing standards in 1948 (Carmichael and Winters 1982).

<sup>8</sup> Similarly, Turner et al. (2010) recommend an expanded audit report that varies from client to client and discusses several items including materiality, auditor independence, financial statement and reporting system quality, and business sustainability. Mock et al. (2013) determine that stakeholders "desire more information about the auditor, the audit, and the financial statements".

<sup>9</sup> Also refer to the CFA Institute's 2011 survey of its members. Fifty-eight percent of the respondents indicated that the auditor's report should provide more specific information about how the auditors reached their opinion (CFA 2011).

taken action to improve the transparency of the audit report. Most notably, the PCAOB proposed a new audit reporting model on August 13, 2013 (PCAOB 2013). The proposed changes are aimed at providing more insight into the audit process and creating a report that is entity- and engagement-specific. The revisions, if passed, would require a discussion of critical audit matters (“CAMs”) in order to increase transparency in the areas that were the most significant and/or most difficult in the audit.<sup>10</sup> The PCAOB’s proposal also requires additional information on the auditor’s independence, tenure, and responsibilities for fraud and financial statement notes (PCAOB 2013).<sup>11</sup>

Recent experimental studies reveal potential benefits and consequences of the PCAOB’s proposed rule. Christensen et al. (2014) examine the relevance of the PCAOB’s proposed rule, as it relates to critical audit matters, by performing an experiment with nonprofessional investors. The authors find that investors are more likely to alter their investment decision when the standard audit report contains a discussion of critical audit matters compared to investors that were provided with the standard audit report (Christensen et al. 2014). Kachelmeier et al. (2014), however, reveal a potential unintended consequence of the PCAOB’s proposal as their experiment suggests that the disclosure of a CAM is viewed as a “partial disclaimer of auditor responsibility for the area identified as a CAM”. Specifically, their experimental participants have less confidence and perceive less auditor responsibility for a misstatement in a financial

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<sup>10</sup> In particular, the proposed rule defines critical audit matters as “those matters addressed during the audit that (1) involved the most difficult, subjective, or complex auditor judgments; (2) posed the most difficulty to the auditor in obtaining sufficient appropriate evidence; or (3) posed the most difficulty to the auditor in forming the opinion on the financial statements” (PCAOB 2013).

<sup>11</sup> Audit reporting changes have either been adopted or are being considered in other countries. The IAASB adopted a new audit report model in January of 2015 that requires auditors to include key audit matters (“KAMs”), which are similar to the PCAOB’s “CAMs” (IAASB 2015). In addition, in April 2014, the European Parliament endorsed a draft agreement that requires audit reports to provide an assessment of the firm’s overall financial statements as well as detailed information about how the audit process allowed the auditor to appropriately assess the financial statements (Cohn 2014).

statement area disclosed in the auditor's report as a CAM than in a financial statement area not disclosed as a CAM (Kachelmeier et al. 2014).

## **2.2 Background on the U.S. Audit Committee Report**

Audit committees are an important component of a well-functioning financial reporting environment. They are responsible for overseeing managements' financial reporting processes as well as the audit processes of public companies (Beasley et al. 2009). While the importance of audit committees has been widely accepted and documented (see Carcello et al. (2011b) for a literature review), the communication between these committees and stakeholders is fairly limited. In the United States, the preparation of an audit committee report was voluntary until the SEC adopted a rule in 2000 that requires publicly listed companies to include a report in its annual proxy statement that states whether the committee fulfilled its responsibilities (SEC 2000).<sup>12</sup> This rule was enacted with the intention of promoting investor confidence in the financial reporting process (SEC 2000). While studies find that most listed companies properly adopted the newly mandated audit committee disclosures (Pandit et al. 2006; Rezaee et al. 2003), the level of voluntary disclosures is variable (Carcello et al. 2002; Pandit et al. 2006).

In recent years, the value of audit committee disclosures has been questioned. The National Association of Corporate Directors (NACD) reports that audit committee disclosures are minimalistic and do not adequately communicate the work performed by audit committees (NACD 2013). In its review of voluntary audit committee disclosures, Ernst & Young finds that only eight percent of sample companies disclosed specific matters discussed by audit committees and auditors (EY 2013a). Given the limited information provided by audit committee reports,

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<sup>12</sup> Prior studies find that very few companies voluntarily included a separate audit committee report in their annual report and, of the companies that did provide an audit committee report, Turpin and DeZoort (1998) document that the reports were boilerplate.

various groups have called for greater audit committee transparency. For instance, in response to the PCAOB's Concept Release on mandatory audit firm rotation issued on August 16, 2011, many comment letters opposed rotation but suggested increasing audit committee disclosures regarding the committee's role in the external audit process in order to improve auditor independence without the potential costs of rotation (EY 2013b). Even some audit committee members desire the expansion of audit committee disclosure as one delegate at the 2013 NACD meeting stated: "Frankly we don't do a good job of communicating what we do. The public doesn't see all the work we do, quarter after quarter" (NACD 2013).

Both the profession's Center for Audit Quality (CAQ) and the PCAOB's Investor Advisory Group (IAG) have formally supported audit committee report improvements in the United States. For example, on November 20, 2013 the CAQ issued a powerful "call to action" to "encourage all public company audit committees to thoughtfully reassess their reporting and communication with stakeholders and, if need be, to strengthen them in the future" (CAQ 2013). The IAG presented a report at a board meeting held on October 20, 2014 that evaluated the current state of audit committee regulation and noted the need for more transparency from audit committees in the United States (IAG 2014).<sup>13</sup> These requests from both the profession and the IAG have prompted regulatory action. The SEC issued a concept release in 2015 that explores possible changes to the audit committee report, with the objective of providing more useful information to investors (Heller 2014; SEC 2015; White 2014; Whitehouse 2014).

### **2.3 United Kingdom Reporting Regime Changes**

In the fall of 2012, the FRC issued changes to the U.K. Corporate Governance Code and the International Standards on Auditing (U.K. and Ireland). Effective for fiscal years ending on

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<sup>13</sup> Also, in April 2013, the Council of Institutional Investors revised its policies on audit committee reporting to include more information about the committee's role and operations (CII 2013).

or after September 30, 2013, this regulatory reform requires additional disclosures in the audit committee report as well as additional language in the auditor's report. Specifically, the FRC issued revised governance policies instructing audit committees to include in their report "the significant issues that the committee considered in relation to the financial statements and how these issues were addressed, having regard to matters communicated to it by the auditors" (FRC 2012b). Furthermore, if the auditor is not satisfied with the audit committee's reporting of the matters communicated by the auditor to the audit committee, then the auditor is obligated to include such information in the auditor's report (FRC 2012a). The revised standard also added the requirement to discuss the evaluation of the external audit as well as the process by which the external auditor is appointed or reappointed (FRC 2012b). In addition, the audit committee report must include information on audit firm tenure and state the timing of the most recent tendering of the audit contract (FRC 2012b).<sup>14</sup>

The FRC implemented further changes to the auditor's report when it issued revisions to the International Standard on Auditing (U.K. and Ireland) 700 in June 2013. These reforms also take effect for fiscal years ending on or after September 30, 2013 and instruct auditors to include a discussion of assessed risks of material misstatement, materiality, and the scope of the audit in their report (FRC 2013). Specifically, the auditor is required to describe risks that had the "greatest effect on the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team" (FRC 2013). With regard to materiality, the audit report should now include an explanation of how materiality was applied during the planning and performance of the audit as well as a disclosure of the specific materiality threshold employed in the audit (FRC 2013). Finally, the auditor is directed to provide information about how the scope

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<sup>14</sup> An additional piece of the regulation requires audit committees of FTSE 350 companies to retender the audit contract at least every 10 years on a "comply or explain" basis.

of the audit addressed the assessed risks of material misstatement as well as how the auditor's materiality determination influenced the scope of the audit (FRC 2013). Please refer to Appendix 1 for excerpts from an example of the new auditor and audit committee reports.<sup>15</sup>

The study of the United Kingdom's new reporting regime is informative to the debates occurring internationally. While investors have requested more disclosures from both auditors and audit committees, it is unknown ex-ante whether the new information will be useful to investors. The evidence thus far has been limited to surveys, focus groups, and experiments given that reporting reforms have not been implemented in the United States or a similar country until recently.<sup>16</sup> This study uses the U.K.'s reporting changes as a "quasi-natural experiment" to determine if investors did in fact find the new reports useful. Our analysis is particularly relevant to the reporting debate occurring in the United States as these two countries share similar levels of disclosure and securities regulation as well comparable cultures and accounting traditions (Hail and Leuz 2006; La Porta et al. 1997). Furthermore, as highlighted in the above discussion, the audit committee and auditor report changes being considered in the United States are similar to those recently implemented in the United Kingdom.

## **2.4 Hypothesis Development**

Prior literature examining overall disclosure environments generally finds that greater

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<sup>15</sup> For the complete audit committee and auditor reports, please refer to pages 44 – 46 and 130 – 135, respectively, of the Rolls-Royce 2013 annual report found at [http://www.rolls-royce.com/Images/RR\\_Full%20 Annual %20Report\\_tcm92-55530.pdf](http://www.rolls-royce.com/Images/RR_Full%20Annual%20Report_tcm92-55530.pdf).

<sup>16</sup> To our knowledge, the only country that previously introduced additional language in a standard audit report is France. As part of its Financial Security Act effective August 1, 2003, France requires auditors to make "justifications of assessments" related to accounting policy choice, significant accounting estimates, financial statement presentation, and internal controls (CNCC 2011). France's Financial Security Act is similar to the Sarbanes-Oxley Act. It was designed to improve investor confidence in the French capital markets by reinforcing investor protection, improving the supervision of financial activities, modernizing the external audit function, and improving corporate transparency. Given this broad range of issues, we do not use this regulatory change in France as a setting for testing the auditor's report. In addition, the study of the French auditor's report would limit the generalizability to the U.S. due to the significant differences between the two countries. For example, France operates under civil law while the U.S. operates under common law (La Porta et al. 1997).

disclosure requirements are associated with benefits to capital markets. Hail and Leuz (2006), for instance, find that companies in countries with greater disclosure requirements are associated with a significantly lower cost of capital. Similarly, Leuz and Verrecchia (2000) document that German companies switching to a higher standard of disclosure are associated with decreased information asymmetry as proxied by lower bid-ask spreads and higher trading volume. Lang et al. (2012) also reveal lower transaction costs and increased liquidity for companies with greater transparency. Furthermore, Blankespoor et al. (2014) find that voluntary disclosure of firm news through Twitter is associated with lower abnormal bid-ask spreads and greater liquidity.

In addition, academic studies have examined the information content of specific documents, including 10-K reports and audit opinions. Botosan (1997), for example, finds that greater voluntary disclosure in a firm's annual report is associated with a lower cost of equity capital for companies with low analyst coverage. By examining stock returns around 10-K filings, De Franco et al. (2011) determine that detailed footnote information can enhance the usefulness of annual reports. Campbell et al. (2014) examine the SEC mandate to include a risk factor section in 10-K filings and find that the disclosures provide valuable information to users as evidenced by the consideration of the risk factors in investor assessments of firm value. More specifically related to the audit environment, Gassen and Skaife (2009) find that mandating disclosure of going concern issues increased the information content of audit reports in Germany as measured by significant negative abnormal returns after the reforms compared to no market reaction prior.

Based on this prior disclosure research, it seems likely that enhanced audit committee and auditor disclosure requirements could improve the usefulness of the reports to investors in several ways. For one, the increased disclosures could provide investors with the auditors' and

audit committees' perspectives on companies, which would aid in investment decisions. In particular, the inclusion of critical financial statement risks in the audit committee and auditor reports could focus the attention of investors on "issues that would be pertinent to understanding the financial statements" (Buller 2013). Furthermore, increased knowledge of the audit process and the audit committee's oversight of the auditor may better equip investors in their evaluation of these monitors, which could impact the informational value investors assign to their reports. In addition, insight into the work performed by audit committees and auditors could build greater public trust and confidence in the entire financial reporting process (Touche 2014). Specifically related to the audit reporting enhancements, global asset manager Hermes stated in its comment letter to the FRC that "disclosing this information will provide shareholders with fuller insights into the audit process, potentially instilling greater confidence in the quality of the audit and the value added by the process, and so also instilling greater confidence in the quality of corporate reporting" (Melvin 2013). Similarly, clearer communication of the audit committee's activities and responsibilities should enhance "users' perceptions of audit quality" as it provides confirmation of the "active involvement of a high-quality, transparent audit committee" (IAASB 2013). In fact, a recent working paper finds that the U.K.'s new reporting regime is associated with a significant increase in audit quality (Reid et al. 2015). If, in addition to the actual increase in audit quality, the new reporting regime also serves to increase investors' trust in the audit committee's oversight and the auditor's procedures, then investors are likely to rely more on the information provided by auditors and audit committees in their trading decisions.

It, however, is possible that the additional disclosures required in audit committee and auditor reports may not be useful to investors for several reasons. First, the information provided may simply be of little interest to financial statement users. For example, even though KPMG

UK has been in favor of enhancing the audit report, the firm's comment letter to the FRC stated they do not "expect shareholders would find descriptions of just the audit process of great interest – as, for example, car drivers do not normally want a long description of an electronic diagnostic process when their car is serviced" (Cates 2013). It is therefore possible that investors may not view information provided about the auditor's process and the audit committee's work as relevant to their trading decisions. Furthermore, the additional information may not add any real substance as the disclosures do not alter the overall opinion of the auditors and audit committees (Cardiff 2013). In the case of the audit report, for instance, the main objective of the report is the pass/fail opinion, which remains unchanged by the inclusion of the additional audit process information. Second, there have been numerous regulatory and standard setting enhancements over the past decade that have "increased the investing public's confidence in the quality of a registrants' financial statements" (e.g., management certification of the financial statements in the U.S. and the audit partner signature requirement in the U.K.) (Goff 2013; Carcello and Li 2013). Additional disclosures in the audit committee and auditor reports may not provide any "meaningful benefit" given the insight investors currently have in the companies in which they invest (Goff 2013). Third, it is possible that investors may suffer from "information overload – a phenomenon in which ever-increasing amounts of disclosure make it difficult for an investor to wade through the volume of information she receives to ferret out the information that is most relevant" (White 2013). Prior studies examining the complexity of annual report disclosures have found some evidence of an "information overload" effect given findings that greater complexity is associated with users opting out of processing the disclosures (Miller 2010; You and Zhang 2008). It is therefore possible that investors may not find the additional disclosures valuable in their trading decisions if they view them as uninteresting, unnecessary, or

too daunting to process.

Given the call from investors for increased disclosures from auditors and audit committees (Carcello et al. 2011a; CFA 2011; Gray et al. 2011; Mock et al. 2013; PCAOB 2014), we predict that investors will process the new disclosures and find the reports more useful. We thus state the following hypothesis in alternative form:

***H1:** Additional required disclosures in audit committee and auditor reports increase the usefulness of the reports to investors.*

### **3. RESEARCH METHOD**

#### **3.1 Information Usefulness Analysis**

To test *H1*, we utilize a common proxy for information content: abnormal trading volume (Asthana et al. 2004; DeFond et al. 2007; Landsman et al. 2012). We focus on this measure as prior literature contends that volume is the “most visible indicator of investors’ response to public disclosures” (Miller 2010). Furthermore, trading volume captures changes in individual (i.e., unaggregated) investor expectations rather than market expectations (Bamber et al. 2011; Beaver 1968). This is an important aspect of the measure given that investors likely reacted differently to the new auditor and audit committee reports.

Abnormal trading volume also has the benefit of being calculated over a short time horizon, which allows us to take advantage of the unique relation between earnings announcements and annual report filings in the United Kingdom. Specifically, earnings announcements are released several weeks before the annual report, but contain largely the same information as the annual report.<sup>17,18</sup> The primary difference between the two filings in the

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<sup>17</sup>We randomly selected 40 companies and examined the earnings releases for each. The documents contain an average of 42 pages with many reports over 75 pages (maximum length: 132 pages). Furthermore, all of them contained a discussion of business strategy/results, financial statements, and condensed footnotes. It is also

United Kingdom is the inclusion of the audit report and the audit committee report.<sup>19</sup> Therefore, by examining differences in abnormal trading volume around the annual reports before and after the reporting revisions, we are able to isolate the change in volume attributable to the additional audit committee and auditor disclosures. We employ the following regression model to do so:

$$\begin{aligned}
 AVOL_{it} = & \beta_0 + \beta_1 POST_{it} + \beta_2 LN\_MVE_{it} + \beta_3 NUM\_ANALYST_{it} + \beta_4 LAG_{it} + \\
 & \beta_5 LEVERAGE_{it} + \beta_6 SD\_CFO_{it} + \beta_7 DISP_{it} + \beta_8 LOSS_{it} + \beta_9 UE_{it} + \\
 & \beta_{10} AVOL\_EA_{it} + IND\_FE + \varepsilon_{it}
 \end{aligned} \tag{1}$$

Abnormal trading volume (*AVOL*) equals the natural logarithm of the ratio of a firm's mean event-period volume to the firm's average estimation-period volume (DeFond et al. 2007; Landsman et al. 2012).<sup>20</sup> The event-period volume is the daily volume for a firm on the two-day window beginning on the firm's event date scaled by its shares outstanding during the event period (DeFond et al. 2007). The estimation-period volume is measured over the trading period beginning 61 days before the earnings announcement date and ending 40 days later (i.e., 21 days before the earnings release) (DeFond et al. 2007; Miller 2010).<sup>21</sup> The variable of interest, *POST*, equals one if the fiscal year is the first year of the new reporting regime and zero otherwise. In line with *H1*, we expect the coefficient on *POST* ( $\beta_1$ ) to be positive and significant as we predict that the new audit committee and auditor reports will be more useful to investors compared to the

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important to note that earnings were announced prior to the release of the annual report for each firm-year observation included in the sample.

<sup>18</sup> The Financial Conduct Authority (FCA) states that a preliminary statement of annual results (i.e., the earnings announcement) must show financial results consistent with the presentation to be adopted in the annual report, must include any significant additional information necessary to assess the reported results, and must give details of any likely modification of the auditor report to be included in the annual report (FCA 2012).

<sup>19</sup> Other governance reports, such as the nomination committee, ethics committee, and risk committee reports, would also be "new" information in the annual report compared to the earnings announcement. These reports, however, have not systematically changed across companies in the period examined in this study.

<sup>20</sup> As in Landsman et al. (2012), *AVOL* is highly skewed prior to taking the natural logarithm. The skewness coefficient before taking the natural log is 45.26 compared to a skewness coefficient of -0.29 after.

<sup>21</sup> Note that the estimation-period is measured relative to the earnings announcement date when calculating *AVOL*. This is done to ensure that the estimation period for the annual report date does not include the filing of the earnings release.

previously required reports.

Following prior literature (DeFond et al. 2007; Landsman et al. 2012), we include several controls in the model that may impact a firm's abnormal trading volume.<sup>22</sup> Firm size (*LN\_MVE*) is measured as the natural logarithm of the market value of equity at the firm's fiscal year-end. Since prior research finds mixed results for the association between firm size and abnormal trading activity, we do not make a prediction for this coefficient (Bamber et al. 2011). We also control for other aspects of a firm's information environment, including the number of analysts following the firm (*NUM\_ANALYST*), the reporting lag between the earnings announcement and the issuance of the annual report (*LAG*), leverage of the firm (*LEVERAGE*), the firm's cash flow volatility (*SD\_CFO*), and the standard deviation of analysts' earnings forecasts scaled by stock price (*DISP*).<sup>23</sup> Following prior literature, we expect analyst coverage to be positively related to abnormal trading volume while reporting lag is predicted to be negatively related to volume (DeFond et al. 2007; Landsman et al. 2012). Furthermore, abnormal trading activity during this time period could be attributed to the earnings reported by the firm. We therefore include an indicator for negative earnings (*LOSS*) and the absolute value of unexpected earnings (*UE*). As in DeFond et al. (2007) and Landsman et al. (2012), we predict that *LOSS* will be negatively related to abnormal trading volume. In addition, we control for the abnormal trading volume around the firm's earnings announcement date (*AVOL\_EA*) as the trading volume around the annual report date may be associated with the volume around the earnings release.<sup>24</sup> Finally, we

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<sup>22</sup> Following prior literature, equation (1) does not include a control for the type of auditor employed by the firm. In untabulated tests, the results remain quantitatively and qualitatively unchanged by the inclusion of an indicator for Big 4 auditors. We also eliminate six companies from the analysis that experienced an auditor switch and results remain unchanged in untabulated tests. Please refer to Section 5 for an additional analysis of auditor type.

<sup>23</sup> In untabulated tests, we replace *LAG* with (1) the time between the fiscal year-end and the earnings announcement and (2) the time between the fiscal year-end and the issuance of the annual report. The results of the analysis are unchanged using these alternate definitions of *LAG*.

<sup>24</sup> In untabulated tests, we eliminate this control variable and our results remain quantitatively and qualitatively

employ industry fixed effects (*IND\_FE*) to account for likely differences in trading volume across industries. Refer to Appendix 2 for complete variable definitions.

### 3.2 Sample

The regulatory changes in the United Kingdom apply to companies that are required to comply with the U.K. Corporate Governance Code. Only entities with a Premium listing of equity shares on the London Stock Exchange are subject to the Governance Code (FRC 2012b, 2013). We therefore obtain a record of all companies with a Premium listing on the London Stock Exchange from the exchange's website (N=937). Of these Premium listings, 428 observations relate to investment funds. Given the unique characteristics of investments funds, we exclude these listings and focus the analysis on commercial equity companies (N=509).

As the regulatory changes became effective for fiscal years ending on or after September 30, 2013, we obtain data related to the first annual report issued under the new regime ( $t$ ) as well as the last annual report filed under the previous standards ( $t-1$ ).<sup>25</sup> We employ a balanced panel by requiring the necessary data for each firm in both time periods. This approach allows us to compare the same companies in both the pre- and post-periods, which reduces the threat of firm-level correlated omitted variables (Doyle and Magilke 2013). We hand collect the annual report dates from Bloomberg for  $t$  and  $t-1$ , which results in the loss of 101 companies missing an annual report date for one or both periods.<sup>26</sup> We gather daily volume and relevant financial statement

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unchanged. Please refer to Section 5 for more information on earnings announcement tests.

<sup>25</sup> Only three companies, to our knowledge, voluntarily adopted these requirements in the prior reporting period: Vodafone Group, British Sky Broadcasting Group PLC, and Ashmore Group PLC. These observations are excluded from our analysis. In untabulated tests, we include data for these companies related to their voluntary adoption year and the prior year and the results remain quantitatively and qualitatively unchanged.

<sup>26</sup> We also hand collect annual report dates from Morningstar to ensure the validity of our dates. In 47 cases, the reported Morningstar date is earlier than the Bloomberg date. To assess the sensitivity of our results to having captured the earliest annual report issuance date, we perform two untabulated robustness tests: (1) we replace these 47 Bloomberg dates with the earlier Morningstar dates and (2) we eliminate the 47 observations. Our results remain qualitatively and quantitatively unchanged in both tests.

data for control variables from Datastream. In addition, we obtain analyst forecast data including earnings announcement dates from I/B/E/S on Datastream. After gathering all requisite data, the final sample is comprised of 293 companies (or 586 firm-year observations). Refer to Table 1 for more detail related to sample construction.

<Insert Table 1 Here>

## 4. RESULTS

### 4.1 Univariate Results

Table 2 presents the comparison of the means of *AVOL* and each control variable for the pre-period ( $POST=0$ ) and the post-period ( $POST=1$ ). Abnormal trading volume (*AVOL*) around the annual report release date significantly increased from -0.044 prior to the new reporting requirements to 0.091 during the first year of implementation of the new auditor and audit committee reports ( $p<0.05$ ).<sup>27</sup> These univariate results provide initial evidence in support of *H1*. Specifically, the preliminary findings indicate that the enhanced audit committee and auditor reports are associated with an improvement in the usefulness of the information to investors as measured by higher abnormal trading volume.

It is important to note that there are no statistically significant differences in any of the control variables between the pre-period and the post-period, which suggests that the sample companies did not meaningfully change in the two time periods examined. Table 2 also reveals that the companies included in this study are large companies (mean *LN\_MVE* of 14.357 in the post-period and 14.164 in the pre-period) that are covered by 11 to 12 analysts on average

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<sup>27</sup> We also compute *AVOL* without taking the natural logarithm to provide an easier interpretation of the abnormal trading volume ratio. This unlogged version has a mean of 1.44 in the pre-period and 2.06 in the post-period. The results using the unlogged version are quantitatively and qualitatively unchanged. It is also worth noting that negative means/medians of *AVOL* are common around annual report dates (Asthana et al. 2004; Miller 2010).

(*NUM\_ANALYST*). The average lag between the earnings announcement and the issuance of the annual report (*LAG*) is around 27 to 28 days in both periods. The analyst forecast dispersion (*DISP*) of the sample companies is low with a mean dispersion of 0.009 and 0.011 in the pre and post periods, respectively. Furthermore, only 14 – 15 percent of the companies record a loss (*LOSS*) in the pre and post periods, suggesting that the sample is comprised of profitable companies on average. Additionally, the mean unexpected earnings (*UE*) and cash flow volatility (*SD\_CFO*) of the sample companies in the post-period are 0.015 and 0.041, respectively. Finally, the abnormal trading volume around earnings announcements (*AVOL\_EA*) is 0.752 in the pre-period and 0.744 in the post-period.

<Insert Table 2 Here>

## 4.2 Multivariate Results

Table 3 presents the findings from the estimation of equation (1). *POST* is positively associated with *AVOL* ( $p < 0.05$ ), which suggests that abnormal trading volume significantly increased around the annual reports issued under the new reporting regime compared to the prior period. This result is also economically significant as we document a 13.5 percent increase in the ratio of annual report trading volume to estimation period trading volume from the pre-period to the post-period.<sup>28</sup> Thus, in support of *H1*, these results provide statistically and economically significant evidence that the enhanced auditor and audit committee reports are more useful to investors than the previously required reports.

<Insert Table 3 Here>

In regard to the control variables, we find that size (*LN\_MVE*) is positively related to

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<sup>28</sup> The increase is calculated as the percentage change in the dependent variable from the pre-period to the post-period since the dependent variable is in natural logarithm form. This percentage change is defined as  $e^z - 1$ , where  $z$  is the coefficient on the independent variable.

abnormal trading volume, suggesting the annual reports of larger companies are more useful to investors on average. Furthermore, as found in DeFond et al. (2007) and Landsman et al. (2012), the reporting lag (*LAG*) is related to lower abnormal trading volume, which indicates that the market on average views the annual reports of companies with shorter reporting lags as more useful and informative. Also, greater abnormal trading volume around earnings announcements is associated with greater abnormal trading volume around annual reports.

## **5. ADDITIONAL ANALYSES**

### **5.1 Cross-Sectional Tests**

In the main analysis, we find that revised audit committee and auditor reports are significantly more useful to investors. The reporting changes, however, are unlikely to affect all companies equally. In this section, we identify sources of potential variation in the usefulness of the additional disclosures and perform cross-sectional analyses to exploit this heterogeneity.

#### *5.1.1 Analyst Coverage Analysis*

We expect the enhanced auditor and audit committee disclosures to have a greater impact on companies with weaker information environments. We use analyst coverage as a proxy for the amount of information disclosed and available to investors about the firm (Botosan 1997; Miller 2010; Blankespoor et al. 2014). The more communication provided to investors from the firm or through analysts, the less disclosures from other parties, including auditors and audit committees, will likely impact investors' trading decisions. We therefore expect that additional disclosures in auditor and audit committee reports will have a greater effect on investors in companies with lower analyst following. To test this prediction, we estimate equation (1) on subsamples divided at the median analyst coverage (median *NUM\_ANALYST*=10). We also

estimate the models on the full sample and include an interaction of *POST* and *NUM\_ANALYST*.

Table 4 presents the results of this analysis. Column 1 reveals that companies with a high analyst following do not experience a significant increase in abnormal trading volume around the implementation of the auditor and audit committee report revisions. In column 2, however, we find that companies with low analyst coverage are associated with a significant increase in abnormal trading volume from the pre-period to the post-period ( $p < 0.05$ ). In the third column, we include the interaction of *POST* and *NUM\_ANALYST* and re-run the analysis on the full sample of companies. The negative coefficient on the interaction term suggests that the positive association between *POST* and abnormal trading volume is mitigated by a larger analyst following ( $p < 0.05$ ). In other words, as the information environment weakens (i.e., analyst following decreases), there is a greater increase in the usefulness of the reports as a result of the additional auditor and audit committee disclosures. Also, the joint test of *POST* and *POST*  $\times$  *NUM\_ANALYST* is positive and significant at the  $p < 0.05$  level, which is consistent with our main result presented in Table 3.

<Insert Table 4 Here>

### 5.1.2 Auditor Analysis

Audit firms likely implemented the revised audit report in slightly different ways. Therefore, the degree to which investors found a firm's new audit report useful may vary by auditor.<sup>29</sup> In fact, a recent study published by Citigroup reveals meaningful differences among the new U.K. audit reports issued by the Big 4 firms (Fisher and Deans 2014). The researchers conclude that "KPMG [includes] the most useful analysis of risk, while the lack of detail

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<sup>29</sup> In untabulated tests, we examine whether the impact of the auditor and audit committee report revisions on abnormal trading volume varies between companies with a Big 4 auditor versus companies with a non-Big 4 auditor. However, since Big 4 firms audit 91 percent of the companies in this study's main sample, it is not surprising that we do not find a differential impact based on whether the firm is audited by a Big 4 or non-Big 4 auditor.

provided means EY typically lags behind the other Big 4 in its discussion of risk” (Fisher and Deans 2014).<sup>30</sup> We explore whether investors respond to these differences in new reports issued by KPMG and EY. Based on Citigroup’s observation, we expect to find that the reports are more (less) useful to investors in companies audited by KPMG (EY) compared to the remaining Big 4 firms. To test this expectation, we create an indicator variable for companies audited by KPMG in the current year (*KPMG*) and another variable for companies audited by Ernst & Young in the current year (*EY*). We limit the sample to companies audited by a Big 4 firm in order to compare each of these audit firms to the remaining three. After eliminating six companies that switched auditors from the pre-period to the post-period, we estimate model (1) including one of the audit firm indicators (*EY* or *KPMG*) and the interaction of the auditor indicator and *POST*.

As shown in Table 5, we find that abnormal trading volume increased significantly more (less) for companies audited by KPMG (EY) compared to the remaining three audit firms from the pre-period to the post-period as indicated by the positive (negative) coefficient on the interaction of *POST x KPMG* (*POST x EY*) at the  $p < 0.10$  ( $p < 0.05$ ) level.<sup>31</sup> These tests provide evidence in support of Citigroup’s observation that the information contained in the reports issued by KPMG (EY) are more (less) useful than the reports issued by the other major audit firms under the new reporting regime. We also find that the joint test of *POST* and *POST x KPMG* from column 1 is positive and significant at the  $p < 0.05$  level, which is consistent with our

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<sup>30</sup> The Citigroup report appears to deem a report useful if the information provided is entity-specific and if there is a great degree of detail regarding risks, materiality, and scope. KPMG UK has also stated that they expect “shareholders to be more interested in matters like misstatements or disagreements with management identified during the audit and how these have been resolved” (Cates 2013). In fact, KPMG UK has now formally implemented an approach to reporting that goes further than the FRC’s requirements (Collins and Cates 2014).

<sup>31</sup> In untabulated tests, we find a significant difference in the change in abnormal trading volume due to the new reporting requirements for companies audited by KPMG compared to companies audited by EY at the  $p < 0.05$  level. We also find that the change in abnormal trading volume around the new reporting requirements for companies audited by EY is significantly lower compared to companies audited by PwC and Deloitte at the  $p < 0.05$  level. We, however, do not find a significant difference in the change in abnormal trading volume surrounding the new reporting regime for companies audited by KPMG compared to Deloitte and PwC ( $p = 0.19$ ).

main result presented in Table 3. While the joint test of *POST* and *POST x EY* from column 2 is insignificant, the coefficient on *POST* is positive and significant, which indicates that abnormal trading volume increased from the pre-period to the post-period for companies audited by Deloitte, PwC, or KPMG.

<Insert Table 5 Here>

## 5.2 Annual Report vs. Earnings Announcement Analysis

We perform a falsification test by estimating model (1) around the earnings announcement dates for the sample companies. Since the audit committee and auditor reports are not released to the market until the annual report is issued and the reporting requirements for earnings announcements did not change during this time period, we do *not* expect to find an increase in abnormal trading volume surrounding the earnings announcements of the sample companies. We, however, expect to find that abnormal trading volume significantly increased surrounding annual report dates relative to earnings announcement dates.

To perform this analysis, we drop *AVOL\_EA* from the model, add earnings announcement observations, and create an indicator variable (*ANNUAL*) equal to one if the observation relates to the annual report issuance and zero if it relates the earnings announcement release. In support of our predictions, Table 6 reports that we fail to find evidence that abnormal trading volume significantly changed from the pre-period to the post-period at the time of the earnings announcement as indicated by the insignificant coefficient on *POST*.<sup>32</sup> Furthermore, we find that the interaction, *POST x ANNUAL* is positive and significant at the  $p < 0.05$  level, which

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<sup>32</sup> While we did not expect to find a significant change in the abnormal trading volume around the earnings announcement dates from the prior year to the first year of implementation of the reporting requirements, it is possible that the new audit committee and auditor report requirements could impact management's disclosure practices around earnings releases over time. Future research could examine whether the information contained in earnings announcements change over time as a result of the auditor and audit committee reporting changes.

indicates that abnormal trading volume increased significantly more from the pre-period to the post-period surrounding the issuance of the annual report relative to earnings announcements. The joint test of *POST* and *POST x ANNUAL* is also significantly positive at the  $p < 0.05$  level, consistent with our main result reported in Table 3. This analysis provides additional comfort that the main findings of this study are not due to changes in management disclosure practices or overall changes in trading activity over time for the sample companies.

<Insert Table 6 Here>

### 5.3 Change Analysis

To account for temporal changes within companies not associated with the revised reporting standards, we re-run our main test using a strict change analysis. Specifically, we compare changes in abnormal trading volume from  $t-2$  to  $t-1$  with changes in abnormal trading volume from  $t-1$  to  $t$  (as in the above analyses,  $t$  represents the year the new reporting regime is implemented). We replace *POST* with *CHG\_POST*, which equals one for observations associated with changes from year  $t-1$  to year  $t$ . All other variables in the models, including abnormal trading volume, are also transformed to change variables. Table 7 reveals that *CHG\_POST* is associated with a highly significant increase in the year-to-year change in abnormal trading volume ( $p < 0.01$ ).<sup>33</sup> This result further supports the increase in abnormal trading volume after the revision of the auditor and audit committee report requirements. In addition, this analysis provides comfort that the documented findings are not driven by other factors that change year to year for companies.

<Insert Table 7 Here>

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<sup>33</sup> Note that the additional data requirements for  $t-2$  result in the loss of 136 firm-year observations.

## 5.4 Control Group Analysis

### 5.4.1 U.S. Control Group

While the use of a balanced sample reduces the threat of time-invariant firm-specific characteristics that may confound the analysis, it is possible that global changes and events occurring during the same timeframe as the revisions to the audit committee and auditor reporting standards could influence abnormal trading activity. We therefore re-perform the analysis using a control group of U.S. companies since these companies are impacted by global events that also affect U.K. companies, but they are not subject to the new U.K. reporting regime. The use of this control group therefore mitigates the concern that global changes might be correlated omitted variables (Carcello and Li 2013).

We gather data for all companies listed on the New York Stock Exchange (NYSE) that are included in Compustat, I/B/E/S, Audit Analytics, and Datastream. The final sample consists of 1,828 U.S. firm-year observations and 586 U.K. firm-year observations.<sup>34</sup> Using this sample, we estimate model (1), adding an indicator variable for the U.K. premium companies (*UK*) as well as an interaction of *POST* and *UK*. Since U.S. companies are not subject to the enhanced auditor and audit committee reporting requirements, we expect abnormal trading volume to increase more for U.K. companies compared to U.S. companies from the pre-period to the post-period. As such, we predict that the coefficient on *POST*  $\times$  *UK* will be positive. In line with this expectation, we find that *POST*  $\times$  *UK* is positive in column 1 of Table 8 ( $p < 0.05$ ). The joint test of *POST* and *POST*  $\times$  *UK* is also positive and significant at the  $p < 0.05$  level while *POST* is

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<sup>34</sup> Twenty-one of the U.K. Premium equity companies in the sample are cross-listed on the NYSE. We perform two untabulated tests related to these companies. First, we exclude the cross-listed observations and the results remain quantitatively and qualitatively the same. Second, we restrict the U.K. sample to the 21 companies cross-listed in the U.S. and the coefficient on *POST*  $\times$  *UK* is positive and significant ( $p = 0.064$ ) using this significantly reduced sample.

insignificant ( $p=0.60$ ), which indicates that the Premium U.K. (U.S.) companies did (did not) experience a significant increase in abnormal trading volume.

Furthermore, to ensure these results are not due to fundamental observable differences in U.K. and U.S. companies, we create a propensity score matched sample and re-perform the analysis to mitigate the possibility of functional form misspecification. The propensity score matching model employs *UK* as the dependent variable and uses all control variables from equation (1) measured at the end of year  $t-1$ .<sup>35</sup> Using the propensity scores generated from this model, we match U.K. companies to U.S. companies with the closest score.<sup>36</sup> Column 2 of Table 8 indicates that the results hold using this matched sample. Specifically, the coefficient on *POST*  $\times$  *UK* is significantly positive ( $p<0.01$ ). Furthermore, the joint test of *POST* and *POST*  $\times$  *UK* is positive and significant at the  $p<0.01$  level, similar to our overall result reported in Table 3. Taken together, these results continue to demonstrate the significant impact enhanced auditor and audit committee disclosures have on the usefulness of the reports to investors in companies required to comply with the regulatory changes.

<Insert Table 8 Here>

#### 5.4.2 AIM Control Group

In untabulated tests, we use companies listed on the London Stock Exchange that are not subject to the revised auditor and audit committee reporting requirements as an alternate control group (i.e., non-Premium equity companies). These companies are listed on the Alternative Investment Market (AIM), which is a sub-market of the London Stock Exchange. We gather data

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<sup>35</sup> Note that industry fixed effects are not included in the propensity score matching model.

<sup>36</sup> We employ a caliper of 3 percent within the matching process to ensure a reasonable level of matching. In addition, the matching process is performed without replacement – thus no observations are duplicated in the matched sample. It is important to note that untabulated tests confirm that there are no significant differences in the control variables of the U.K. and U.S. companies in the matched sample.

from Datastream and hand collect annual report dates from Bloomberg, which results in a sample of 100 AIM companies.<sup>37</sup> The AIM is designed for smaller, growing companies and thus consists of companies that are significantly different from the more established Premium equity companies.<sup>38</sup>

Given these significant differences and the potential for functional form misspecification, we generate a propensity score matched sample of Premium and AIM companies using a similar approach to that used to generate the matched U.S. sample. The propensity score matched sample consists of 168 firm-year observations (42 Premium and 42 AIM companies). Using this significantly reduced sample, we estimate equation (1) adding an indicator variable to denote Premium listing companies (*PREMIUM*) as well as an interaction of *PREMIUM* and *POST*. In untabulated tests, we find that the coefficient on *POST x PREMIUM* is significantly positive ( $p=0.08$ ). We also find that the joint test of *POST* and *POST x PREMIUM* is positive and significant at the  $p<0.01$  level while *POST* is insignificant ( $p=0.38$ ), which indicates that the Premium (AIM) companies did (did not) experience a significant increase in abnormal trading volume. This analysis provides some additional comfort that U.K. specific events (other than the new audit committee and auditor disclosures) are not confounding the results of the study.

### **5.5 Audit Committee Report vs. Auditor Report**

Since the audit committee report and the auditor report changes were implemented concurrently, it is difficult to disentangle the effects of these two reforms. However, we attempt to provide some initial evidence of the relative importance of auditor and audit committee reports by identifying companies that had “enhanced” audit committee reports in the prior period. In the

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<sup>37</sup> Given the nature of companies listed on the AIM, the availability of data is limited for these companies.

<sup>38</sup> In untabulated tests, we confirm these differences and find that all control variables from equation (1) are significantly different between the AIM and Premium companies at the  $p<0.01$  level except for *DISP*, *LEVERAGE*, and *AVOL\_EA*.

years leading up to the revisions of the U.K. regulations, several investor groups called for an improvement in audit committee reporting. Most notably, the Enhanced Disclosure Working Group led by Guy R. Jubb published a report in October 2011 to encourage more substantive disclosures in audit committee reports among other good governance practices that could be implemented by audit committees (EDWG 2011). We examine audit committee reports in  $t-1$  to determine which companies had voluntarily included in their reports disclosures related to the three disclosure areas now required by the FRC (i.e., financial reporting issues, external audit effectiveness and (re)appointment, and external auditor tenure). We deem audit committee reports with at least two of the three disclosure areas as an “enhanced” audit committee report.

In an untabulated analysis, we create an indicator variable,  $PY\_AC\_ENHANCED$ , equal to one if the prior year audit committee report is “enhanced” and zero otherwise, and we interact this variable with  $POST$ . Consistent with our previous results, the coefficient on  $POST$  is positive and significant at the  $p < 0.10$  level, which indicates that abnormal trading volume increased from the pre-period to the post-period for companies without enhanced audit committee reports (i.e., companies with both new audit committee and auditor reports). Interestingly, however, the joint test of  $POST$  and  $POST \times PY\_AC\_ENHANCED$  is also positive and significant at the  $p < 0.10$  level, which indicates that volume increased from the  $t-1$  to  $t$  for companies with only new auditor reports as their audit committee reports from the prior period were already enhanced. This suggests that changes to the auditor report alone were sufficient to result in a significant change in trading volume. Finally, the interaction term  $POST \times PY\_AC\_ENHANCED$  is not significant. Taken together, this analysis provides some evidence that investors found the audit report changes useful on their own as well as in conjunction with the audit committee report

changes, but the increase in volume is not significantly different for companies with only audit report changes compared to companies with both audit committee and audit report changes.<sup>39</sup>

## **5.6 Strategic Reports Review**

While several measures are employed to mitigate the concern of confounding events (i.e. balanced panel design, strict change analysis, and control groups), it still may be possible that other changes occurring over the same timeframe that only apply to U.K. Premium listed companies could impact the results. The only such change that we are aware of is the requirement to replace the business review section of the annual report with a strategic report that includes information on the company's strategy, business model, human rights, and gender diversity of its employees and directors (Deloitte 2013). While the requirement went into effect for fiscal years ending on or after September 30, 2013, the U.K. Corporate Governance Code has recommended this reporting model on a 'comply or explain' basis since 2010 (Deloitte 2013). Furthermore, as KPMG Partner Tim Copnell states, "The requirement for a Strategic Report...is essentially the same as the Business Review it replaces...It is not clear how much a change in requirements this represents" (Copnell 2013). We randomly selected 40 Premium companies and compared the company's strategic report in the current year's annual report to its business review in the prior year's annual report. Each report contained the same primary disclosures. As we did not note any exceptions, this review supports the commonly held sentiment that the strategic reports did not materially change management's disclosures and therefore this regulatory change is unlikely to impact our analysis.

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<sup>39</sup> From this analysis, it may be possible to infer that audit committee report changes alone did not change the usefulness of the reports to investors. We, however, are cautious in making this conclusion based upon this preliminary analysis.

## 6. CONCLUSION

While substantial revisions to audit committee and auditor reporting are being discussed worldwide, archival research has been unable to examine the impact of these reforms. We exploit the United Kingdom's recent regulatory changes to fill this void. Using a balanced sample of U.K. companies required to comply with the reporting revisions, we find that additional audit committee and auditor disclosures are useful to investors as proxied by significantly higher abnormal trading volume surrounding the release of the new reports. Furthermore, we find abnormal trading volume increased more for companies with weaker information environments, suggesting that the new disclosures particularly benefit investors in these companies. We also find evidence that companies employing auditors that tend to provide more (less) detailed audit reports experience more (less) abnormal trading volume. In addition, the results are robust to the use of control samples, a strict change analysis, and a falsification test using earnings announcement dates.

By examining the impact of the U.K.'s new audit committee and auditor reporting requirements on the usefulness of those reports, this study provides important information for public companies, audit firms, audit committees, investors, regulators, other financial statement users, and the overall capital markets. The results reveal that additional required auditor and audit committee disclosures can provide investors with useful information that impacts their trading decisions. Our analysis not only reveals the effects of these regulatory changes in the United Kingdom, but also provides evidence that may be useful to other standard setters as they consider changes to their auditor and audit committee reports, particularly U.S. standard setters.

In conclusion, we outline the following limitations and opportunities for future research. This study provides relevant and timely information to regulators, investors, professional groups,

and other stakeholders by examining the first year of implementation of the audit committee and audit reporting standards in the United Kingdom. Whether the documented effects persist in future years is unknown and would be an important research question in its own right. Additionally, while there are numerous regulatory and cultural commonalities between the United Kingdom and the United States, there are three differences between these countries that may be important to consider: (1) litigation tends to play a greater role in the development and enforcement of regulations in the U.S. than in the U.K., (2) U.S. financial accounting standards are more ‘rules-based’ while the U.K.’s standards are more ‘principles-based’, and (3) the U.K.’s FRC sets auditing, governance, and accounting standards while several regulatory bodies are responsible for setting these standards in the U.S., namely the PCAOB, SEC, and FASB. This last difference between the countries presents an additional challenge to the United States as more than one regulator would need to be involved to institute both audit committee and auditor reporting changes. The results of this paper therefore need to be interpreted with these considerations in mind and future research could illuminate the possible impact of these differences on audit committee and audit report reforms. Notwithstanding the above, this research informs a highly relevant regulatory debate on the effects of changing auditor and audit committee reports.

## References

- AICPA. 1978. The Commission on Auditors' Responsibilities: Report, Conclusions, and Recommendations. New York, NY.
- Asare, S. K., and A. M. Wright. 2012. Investors', Auditors', and Lenders' Understanding of the Message Conveyed by the Standard Audit Report on the Financial Statements. *Accounting Horizons* 26 (2):193-217.
- Asthana, S., S. Balsam, and S. Sankaraguruswamy. 2004. Differential Response of Small versus Large Investors to 10-K Filings on EDGAR. *The Accounting Review* 79 (3):571-589.
- Bamber, L. S., O. E. Barron, and D. E. Stevens. 2011. Trading Volume Around Earnings Announcements and Other Financial Reports: Theory, Research Design, Empirical Evidence, and Directions for Future Research. *Contemporary Accounting Research* 28 (2):431-471.
- Beasley, M. S., J. V. Carcello, D. R. Hermanson, and T. L. Neal. 2009. The Audit Committee Oversight Process. *Contemporary Accounting Research* 26 (1):65-122.
- Beaver, W. H. 1968. The Information Content of Annual Earnings Announcements. *Journal of Accounting Research* 6:67-92.
- Beneish, M. D., M. B. Billings, and L. D. Hodder. 2008. Internal Control Weaknesses and Information Uncertainty. *The Accounting Review* 83 (3):665-703.
- Beresford, D. R. 2013. Comment Letter on PCAOB Rule Making Docket Matter No. 34: Proposed Auditing Standards on the Auditor's Report and the Auditor's Responsibilities Regarding Other Information and Related Amendments.
- Blake, K., J. V. Carcello, N. J. Harrison, M. J. Head, B. E. Roper, A. Simpson, T. Sondhi, R. M. Tarola, L. E. Turner, M. Williams, and A. Yerger. 2011. Response of a Subgroup of the PCAOB's Investor Advisory Group to the PCAOB's Concept Release Concerning Reports on Audited Financial Statements and Related Amendments to PCAOB Standards. *Current Issues in Auditing* 5 (2):C21-C50.
- Blankespoor, E., G. S. Miller, and H. D. White. 2014. The Role of Dissemination in Market Liquidity: Evidence from Firms' Use of Twitter™. *The Accounting Review* 89 (1):79-112.
- Botosan, C. A. 1997. Disclosure Level and the Cost of Equity Capital. *The Accounting Review* 72 (3):323.
- Buller, S. E. 2013. BlackRock Comment Letter on PCAOB Rule Making Docket Matter No. 34: Proposed Auditing Standards on the Auditor's Report and the Auditor's Responsibilities Regarding Other Information and Related Amendments.

- Campbell, J., H. Chen, D. Dhaliwal, H.-m. Lu, and L. Steele. 2014. The Information Content of Mandatory Risk Factor Disclosures in Corporate Filings. *Review of Accounting Studies* 19 (1):396-455.
- CAQ. 2013. Enhancing the Audit Committee Report: A Call to Action. Available from <http://www.auditcommitteecollaboration.org/EnhancingtheAuditCommitteeReport-ACalltoAction.pdf>.
- Carcello, J. V., N. J. Harrison, G. Sauter, and A. Yerger. 2011a. Improving the Auditor's Report. Presented at the PCAOB Investor Advisory Group Meeting on March 16, 2011.
- Carcello, J. V., D. R. Hermanson, and T. L. Neal. 2002. Disclosures in Audit Committee Charters and Reports. *Accounting Horizons* 16 (4):291-304.
- Carcello, J. V., D. R. Hermanson, and Y. Zhongxia. 2011b. Corporate Governance Research in Accounting and Auditing: Insights, Practice Implications, and Future Research Directions. *AUDITING: A Journal of Practice & Theory* 30 (3):1-31.
- Carcello, J. V., and C. Li. 2013. Costs and Benefits of Requiring an Engagement Partner Signature: Recent Experience in the United Kingdom. *The Accounting Review* 88 (5):1511-1546.
- Cardiff, M. 2013. Grant Thornton UK Comment Letter on FRC Revision to ISA (UK and Ireland) 700: Requiring the auditor's report to address risks of material misstatement, materiality and a summary of audit scope.
- Carmichael, D. R., and A. J. Winters. 1982. The Evolution of Audit Reporting. *Auditing Symposium VI: Proceedings of the 1982 Touche Ross/University of Kansas Symposium on Auditing Problems*.
- Cates, T. 2013. KPMG UK Comment Letter on FRC Revision to ISA (UK and Ireland) 700: Requiring the auditor's report to address risks of material misstatement, materiality and a summary of audit scope.
- CFA. 2011. Usefulness of the Independent Auditor's Report: Survey to the CFA Institute Financial Reporting Survey Pool.
- Christensen, B. E., S. M. Glover, and C. J. Wolfe. 2014. Do Critical Audit Matter Paragraphs in the Audit Report Change Nonprofessional Investors' Decision to Invest? . *AUDITING: A Journal of Practice and Theory* 33 (4):71-93.
- Church, B. K., S. M. Davis, and S. A. McCracken. 2008. The Auditor's Reporting Model: A Literature Overview and Research Synthesis. *Accounting Horizons* 22 (1):69-90.
- CII. 2013. Policies on Corporate Governance. Section 2.13a: Audit Committee Responsibilities Regarding Independent Auditors.

- CNCC. 2011. Footprint Consultant Study on the perception of the statutory auditor's justification of assessments.
- Cohn, M. 2014. European Parliament Moves Ahead on Audit Firm Reforms. Available at <http://www.accountingtoday.com/news/european-parliament-moves-ahead-on-audit-firm-reforms-70226-1.html>.
- Collins, S., and T. Cates. 2014. KPMG UK Sharing audit insights: Our approach to reporting our findings.
- Copnell, T. 2013. Strategic report - An opportunity (not to be) missed? *KPMG UK Research* October 23, 2013.
- De Franco, G., M. H. F. Wong, and Z. Yibin. 2011. Accounting Adjustments and the Valuation of Financial Statement Note Information in 10-K Filings. *The Accounting Review* 86 (5):1577-1604.
- DeFond, M., M. Hung, and R. Trezevant. 2007. Investor Protection and the Information Content of Annual Earnings Announcements: International Evidence. *Journal of Accounting and Economics* 43 (1):37-67.
- Deloitte. 2013. A new beginning: Annual report insights 2013. Available at <http://www.deloitte.com/assets/Dcom-UnitedKingdom/Local/Assets/Documents/Services/Audit/uk-audit-a-new-beginning-printer-friendly-13.pdf>.
- Doyle, J. T., and M. J. Magilke. 2013. Decision Usefulness and Accelerated Filing Deadlines. *Journal of Accounting Research* 51 (3):549-581.
- EDWG. 2011. Audit Committee Reports: Global Disclosure Guidelines. *Enhanced Disclosure Working Group* October 2011.
- EY. 2013a. Audit committee reporting to shareholders: 2013 proxy season update.
- . 2013b. Audit committee reporting to shareholders: going beyond the minimum. Join the conversation on audit committee transparency. February 2013.
- FCA. 2012. LR 9.7A.1 Preliminary statement of annual results.
- Fisher, T., and S. Deans. 2014. New UK Auditor's Reports Update. *Citigroup Research* September 3, 2014.
- FRC. 2012a. International Standard on Auditing (UK and Ireland) 700: The independent auditor's report on financial statements. Revised October 2012.
- . 2012b. The UK Corporate Governance Code. Revised September 2012.
- . 2013. International Standard on Auditing (UK and Ireland) 700: The independent auditor's report on financial statements. Revised June 2013.

- Gassen, J., and H. A. Skaife. 2009. Can Audit Reforms Affect the Information Role of Audits? Evidence from the German Market. *Contemporary Accounting Research* 26 (3):867-898.
- Goff, P. G. 2013. TIAA-CREF Comment Letter on PCAOB Rule Making Docket Matter No. 34: Proposed Auditing Standards on the Auditor's Report and the Auditor's Responsibilities Regarding Other Information and Related Amendments.
- Gray, G. L., J. L. Turner, P. J. Coram, and T. J. Mock. 2011. Perceptions and Misperceptions Regarding the Unqualified Auditor's Report by Financial Statement Preparers, Users, and Auditors. *Accounting Horizons* 25 (4):659-684.
- Hail, L., and C. Leuz. 2006. International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter? *Journal of Accounting Research* 44 (3):485-531.
- Heller, M. 2014. Investors Suggest External Auditor Review of Audit Committees. *CFO.com*. October 24, 2014.
- IAASB. 2013. A Framework for Audit Quality: Consultation Paper. January 2013.
- . 2015. International Standard on Auditing 701. *Communicating Key Audit Matters in the Independent Auditor's Report*. January 2015.
- IAG. 2014. Report from the Working Group on the Relationship and Role of the Auditor with the Audit Committee. *PCAOB Investor Advisory Group Meeting*. October 20, 2014.
- Kachelmeier, S. J., J. J. Schmidt, and K. Valentine. 2014. The Effect of Disclosing Critical Audit Matters in the Auditor's Report on Perceived Auditor Responsibility for Misstatements. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2481284](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2481284).
- Kelly, A. S., and L. C. Mohrweis. 1989. Bankers' and Investors' Perceptions of the Auditor's Role in Financial Statement Reporting: The Impact of SAS No. 58. *AUDITING: A Journal of Practice & Theory* 9 (1):87.
- La Porta, R., F. Lopez-De-Silanes, A. Shleifer, and R. W. Vishny. 1997. Legal Determinants of External Finance. *Journal of Finance* 52 (3):1131-1150.
- Landsman, W. R., E. L. Maydew, and J. R. Thornock. 2012. The Information Content of Annual Earnings Announcements and Mandatory Adoption of IFRS. *Journal of Accounting and Economics* 53 (1-2):34-54.
- Lang, M., K. V. Lins, and M. Maffett. 2012. Transparency, Liquidity, and Valuation: International Evidence on When Transparency Matters Most. *Journal of Accounting Research* 50 (3):729-774.
- Leuz, C., and R. E. Verrecchia. 2000. The Economic Consequences of Increased Disclosure. *Journal of Accounting Research* 38 (3):91-124.

- Melvin, C. 2013. Hermes Comment Letter on FRC Revision to ISA (UK and Ireland) 700: Requiring the auditor's report to address risks of material misstatement, materiality and a summary of audit scope.
- Miller, B. P. 2010. The Effects of Reporting Complexity on Small and Large Investor Trading. *The Accounting Review* 85 (6):2107-2143.
- Miller, J. R., S. A. Reed, and R. H. Strawser. 1993. Bank Loan Officers' Perceptions of the New Audit Report. *Accounting Horizons* 7 (1):39-52.
- Mock, T. J., J. Bédard, P. J. Coram, S. M. Davis, R. Espahbodi, and R. C. Warne. 2013. The Audit Reporting Model: Current Research Synthesis and Implications. *AUDITING: A Journal of Practice & Theory* 32 (Supplement 1):323-351.
- NACD. 2013. Audit Committee Chair Advisory Council: Summary of Proceedings. June 19, 2013.
- NCFRR. 1987. *Report of the National Commission on Fraudulent Financial Reporting (NCFRR)*.
- Pandit, G. M., V. Subrahmanyam, and G. M. Conway. 2006. Are the Audit Committee Reports Disclosing Enough After the Sarbanes-Oxley Act?: A Study of NYSE Companies. *Managerial Auditing Journal* 21 (1/2):34-45.
- PCAOB. 2013. Proposed Auditing Standards: The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion. August 13, 2013.
- . 2014. Standing Advisory Group (SAG) Meeting Transcript. June 24, 2014.
- . 2015. Standard-Setting Agenda. March 31, 2015.
- Reid, L. C., J. V. Carcello, C. Li, and T. L. Neal. 2015. Impact of Auditor and Audit Committee Report Changes on Audit Quality and Costs: Evidence from the United Kingdom. Working Paper, University of Pittsburgh, University of Tennessee.
- Rezaee, Z., K. O. Olibe, and G. Mimmier. 2003. Improving Corporate Governance: The Role of Audit Committee Disclosures. *Managerial Auditing Journal* 18 (6/7):530-537.
- SEC. 2000. Final Rule: Audit Committee Disclosure. January 10, 2000. Available at <http://www.sec.gov/rules/final/34-42266.htm>.
- . 2015. Concept Release: Possible Revisions to Audit Committee Disclosures. July 1, 2015. Available at: <http://www.sec.gov/rules/concept/2015/33-9862.pdf>.
- Touche, W. 2014. PCAOB Public Meeting on the Auditor's Reporting Model. April 3, 2014. Available at [http://pcaobus.org/Rules/Rulemaking/Docket034/04032014\\_Transcript.pdf](http://pcaobus.org/Rules/Rulemaking/Docket034/04032014_Transcript.pdf).

- Turner, J. L., T. J. Mock, P. J. Coram, and G. L. Gray. 2010. Improving Transparency and Relevance of Auditor Communications with Financial Statement Users. *Current Issues in Auditing* 4 (1):A1-A8.
- Turpin, R. A., and F. T. DeZoort. 1998. Characteristics of Firms that Include an Audit Committee Report in Their Annual Report. *International Journal of Auditing* 2 (1):35-48.
- Vanstraelen, A., C. Schelleman, R. Meuwissen, and I. Hofmann. 2012. The Audit Reporting Debate: Seemingly Intractable Problems and Feasible Solutions. *European Accounting Review* 21 (2):193-215.
- White, M. J. 2013. The Path Forward on Disclosure. October 15, 2013. Available at <http://www.sec.gov/News/Speech/Detail/Speech/1370539878806-.U0w418dw1Ns>.
- . 2014. Remarks at the Financial Accounting Foundation Trustees Dinner. *U.S. Securities and Exchange Commission Speech*. May 20, 2014.
- Whitehouse, T. 2014. SEC Plans Early 2015 Concept Release on Audit Committee Upgrades. *Compliance Week*. October 22, 2014.
- WorldBank. 2014. Market capitalization of listed companies. Available at <http://data.worldbank.org/indicator/CM.MKT.LCAP.CD>.
- You, H., and X.-j. Zhang. 2008. Financial Reporting Complexity and Investor Underreaction to 10-K Information. *Review of Accounting Studies* 14 (4):559-586.

## Appendix 1: New U.K. Audit and Audit Committee Report Excerpts

### Part A: Excerpts from the 2013 Rolls-Royce Audit Report

#### 1. Risk Disclosure Excerpt:

##### *Our assessment of risks*

In arriving at our opinions set out in this report, the risks that had the greatest effect on our audit and the key procedures we applied to address them are set out below. Those procedures were designed in the context of the financial statements as a whole and, consequently, where we set out findings we do not express any opinion on these individual risks.

[Note: This audit report contained 10 risk disclosures. We only included one example below.]

##### *Valuation of Daimler AG's put option*

- **The risk** As part of the shareholder agreements, for a period of six years from 1 January 2013 Daimler AG has the option to require the Group to purchase its 50 percent interest in RRPSH. The estimated amount of the purchase price of this option has been recognised as a financial liability on the Group balance sheet. The purchase price is based on averaging three valuations, which are based on both internal and external metrics, at the date the option is exercised. The external metrics include price/earnings ratios for comparable companies and those implicit in comparable transactions. There is judgement involved in choosing appropriate comparable companies and transactions and in predicting what these might be at a future date.
- **Our response** We analysed the shareholder agreements and tested the reasonableness of the estimate of the purchase price of the option, including assessing whether the Group's judgement as to which external metrics should be used was appropriate, and the accuracy of its calculation. We also assessed whether or not the estimates showed any evidence of management bias with a particular focus on the risk that the liability might be understated given its visibility.
- **Our findings** We found that the resulting estimate was acceptable but mildly optimistic resulting in a somewhat lower liability being recorded than might otherwise have been the case.

#### 2. Materiality and Scope Disclosure Excerpt:

##### *Our application of materiality and an overview of the scope of our audit*

The materiality for the Group financial statements as a whole was set at £86 million. This has been calculated with reference to a benchmark of profit before taxation (representing 4.9% of reported and 'underlying' profit before taxation) which we consider to be one of the principal considerations for members of the company in assessing the financial performance of the Group. We agreed with the audit committee to report to it the following misstatements that we identified through our audit: (i) all material corrected misstatements; (ii) uncorrected misstatements with a value in excess of £4 million for income statement items (or £8 million for balance sheet reclassifications); and (iii) other misstatements below that threshold that we believe warranted reporting on qualitative grounds.

In order to gain appropriate audit coverage of the risks described above and of each individually significant reporting component: (a) audits for Group reporting purposes were carried out at 13 key reporting components located in the following countries: United Kingdom (9 key reporting components), USA (1), Germany (2) and Norway (1). In addition, audits for Group reporting purposes were performed at a further 20 reporting components. Together these covered 90 percent of revenue, 87 percent of underlying profit before taxation and 85 percent of total assets; and (b) specified reporting procedures were carried out over key risk areas at a further 12 reporting components, none of which are considered to be key. In total our procedures covered 98 percent of revenue, 99 percent of underlying profit before taxation and 94 percent of total assets.

Detailed audit instructions were sent to the auditors of all these reporting components. These instructions covered the significant audit areas that should be covered by these audits (which included the relevant risks of material misstatement detailed above) and set out the information required to be reported back to the group audit team. The group audit team visited the following locations: United Kingdom, USA, Germany, Norway and Singapore. Telephone meetings were also held with the auditors at these locations and the majority of the other locations that were not physically visited. The audits undertaken for Group reporting purposes at the reporting components were all performed to materiality levels set by, or agreed with, the group audit team. These materiality levels were set individually for each component and ranged from £0.5 million - £50 million.

## **Part B: Excerpts from the 2013 Rolls-Royce Audit Committee Report**

### **1. Significant Issues Disclosure Excerpt:**

In 2013, our work focused on:

**[Note: This audit committee report contained 7 significant issues. We only included one example below.]**

- carrying values of the principal intangible assets in Civil aerospace – we considered the business plans for the relevant engine programmes, including the key assumptions on which they are based, and which support the value in use assessments for the intangible assets. We were satisfied that no impairments were required.

### **2. External Audit Evaluation and Reappointment Disclosure Excerpt:**

The external audit is a continuous process. At the start of the audit cycle, KPMG presented their audit strategy, identifying their assessment of the key risks for the purposes of the audit and the scope of their work. For 2013, these risks were: the implementation of a new consolidation system; the business combination and Daimler's put option in respect of Rolls-Royce Power Systems Holding GmbH; impairment of intangible assets; long-term contractual arrangements; warranties and guarantees; RRSAs; customer financing arrangements; contingent liabilities; valuation of derivatives; valuation of pension liabilities; recoverability of tax assets and adequacy of tax provisions; the adjustments between the reported results and the Group's underlying performance; and the form and content of the annual report. More detail is set out in KPMG's report on pages 130 to 135. KPMG reports to the committee at both the half and full-year setting out their assessment of the Group's judgements and estimates in respect of these risks and the adequacy of the reporting. I meet the lead audit partner in private before each meeting and the whole committee meets with KPMG in private at least once a year.

Following the completion of the audit, we reviewed the effectiveness and performance of KPMG with feedback from committee members, senior finance personnel and Internal Audit, covering overall quality, independence and objectivity, business understanding, technical knowledge, quality and continuity of personnel, responsiveness and cost effectiveness. We also considered the reports on KPMG by the FRC's Audit Quality Review Team. The audit of Rolls-Royce was not subject to their review in 2013. KPMG were appointed as auditors in 1990 and this appointment has not been subject to a tender process since that date. The lead audit partner is required to rotate every five years and other key audit partners are required to rotate every seven years. Jimmy Daboo took over as lead audit partner in 2013 and has had no previous involvement with Rolls-Royce in any capacity. No contractual obligations restrict our choice of external auditors. We concluded that KPMG provides an effective audit and the committee and the Board have recommended their reappointment at the 2014 AGM.

### **3. Audit Tendering Disclosure Excerpt:**

The Group is a complex and technologically advanced business with a long cycle from the development of an engine to its eventual retirement. We believe that KPMG's knowledge of this, built up over a number of years, enhances the effectiveness of the audit and that the existing professional requirements, such as the rotation of audit personnel, maintain independence. However, the UK Corporate Governance Code now requires the external audit contract be tendered at least every ten years. The FRC has proposed non-binding transitional arrangements with respect to audit tendering, including a suggestion that tendering should normally fit the five-yearly cycle with respect to the lead partner.

We plan to recommend a tender of the audit during the tenure of the current lead partner which, subject to KPMG's annual reappointment, is due to end following the 2017 audit. This will also satisfy the requirements proposed by the Competition Commission. However, before we make such a recommendation, we will satisfy ourselves that, if the tender resulted in a change of auditor: (i) it would not be unnecessarily disruptive, taking account of any other activities; and (ii) appropriate plans are in place to ensure audit effectiveness is maintained. During the year, we approved a tender plan prepared by management to be used when the audit is tendered but we do not plan to tender the audit during 2014. The EU is also finalising requirements which would require mandatory rotation of auditors. The draft proposals would require us to appoint a different firm by 2020 at the latest. Once finalised, we will take account of the EU requirements in our assessment of when to recommend an audit tender.

## Appendix 2: Variable Descriptions

### Main analysis dependent and test variables

<i>AVOL</i>	The natural logarithm of the ratio of a firm's mean event-period volume to the firm's average estimation-period volume (DeFond et al. 2007; Landsman et al. 2012). Daily trading volume obtained from Datastream.
<i>POST</i>	Indicator variable equal to 1 if the fiscal year is the first year of the new reporting regime, 0 otherwise.

### Main analysis control variables

<i>ANNUAL</i>	Indicator variable equal to 1 if the observation is related to the issuance of the annual report and 0 if the observation is related to the earnings announcement.
<i>AVOL_EA</i>	The natural logarithm of the ratio of a firm's mean event-period volume around the earnings announcement date to the firm's average estimation-period volume. Daily trading volume obtained from Datastream and earnings announcement dates obtained from I/B/E/S on Datastream.
<i>DISP</i>	The standard deviation of analysts' earnings forecasts scaled by stock price. Analyst forecast data obtained from I/B/E/S on Datastream.
<i>EY</i>	Indicator variable equal to 1 if the company is audited by Ernst & Young, 0 otherwise. Obtained from company annual reports.
<i>IND_FE</i>	Industry fixed effects based on two-digit industry codes. Obtained from Datastream.
<i>KPMG</i>	Indicator variable equal to 1 if the company is audited by KPMG, 0 otherwise. Obtained from company annual reports.
<i>LAG</i>	The number of calendar days between the earnings announcement date and the annual report release date. Earnings announcement dates obtained from I/B/E/S on Datastream. Annual report dates hand collected from Bloomberg.
<i>LEVERAGE</i>	Total liabilities at the end of year $t$ divided by total assets at the end of year $t$ . Obtained from Datastream.
<i>LN_MVE</i>	The natural logarithm of the market value of equity measured at end of year $t$ . Obtained from Datastream.
<i>LOSS</i>	Indicator variable equal to 1 if the company's reported earnings per share is less than 0, 0 otherwise. Obtained from Datastream.
<i>NUM_ANALYST</i>	The number of analysts that follow a firm during the year of the earnings announcement. Obtained from I/B/E/S on Datastream.
<i>SD_CFO</i>	Standard deviation of a firm's cash flow from operations over the prior five years, where cash flow from operations is scaled by total assets at the end of each year. Data obtained from Datastream.
<i>UE</i>	The absolute value of the difference between actual earnings per share and the most recent mean analyst estimate of earnings prior to the earnings release, scaled by the closing price at the end of year $t$ . Data obtained from I/B/E/S on Datastream.
<i>UK</i>	Indicator variable equal to 1 if the firm has a Premium listing of equity on the LSE and 0 if the firm is a firm listed on the NYSE.

### Table 1: Sample Construction

Table 1 presents the sample selection process for the main analysis performed in this study. The final sample is comprised of 293 firm observations or 586 firm-year observations.

	<b>Firm Observations</b>
Premium Equity Listings on London Stock Exchange	937
Less: Investment Funds	(428)
Premium Equity Commercial Companies	509
Less: Companies missing annual report dates in Bloomberg	(101)
Less: Companies missing data necessary to calculate <i>AVOL</i>	(82)
Less: Companies missing data necessary to compute control variables	(33)
Final Sample (firm observations)	293
Final Sample (firm-year observations)	586

**Table 2: Univariate Results**

Table 2 presents the differences in means between the pre-period and post-period for our variable of interest (*AVOL*) as well as each control variable in equation (1). All variables are defined in Appendix 2. \*\* indicates significance at the 0.05 level (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

		<i>POST=0</i> (N=293)	<i>POST=1</i> (N=293)	Difference	p-value	
AVOL	+	-0.044	0.091	0.135	0.039	**
LN_MVE		14.164	14.357	0.193	0.203	
NUM_ANALYST		11.700	11.416	-0.283	0.664	
LAG		27.048	27.956	0.908	0.446	
LEVERAGE		0.172	0.170	-0.002	0.882	
SD_CFO		0.042	0.041	-0.002	0.668	
DISP		0.009	0.011	0.002	0.502	
LOSS		0.143	0.150	0.007	0.816	
UE		0.010	0.015	0.005	0.193	
AVOL_EA		0.752	0.744	-0.008	0.914	

**Table 3: Regression Results**

Table 3 presents the regression results for the estimation of equation (1). All variables are defined in Appendix 2. Robust p-values adjusted for firm clustering effects are presented in parentheses below the coefficients. \*, \*\*, and \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

VARIABLES		AVOL
POST	+	0.127** (0.037)
LN_MVE	?	0.069* (0.052)
NUM_ANALYST	+	0.007 (0.183)
LAG	-	-0.005** (0.026)
LEVERAGE	?	-0.018 (0.938)
SD_CFO	?	-0.577 (0.401)
DISP	?	0.217 (0.901)
LOSS	-	-0.061 (0.301)
UE	?	0.498 (0.670)
AVOL_EA	?	0.338*** (0.000)
Constant		Yes
Industry Fixed Effects		Yes
Observations		586
R-squared		0.184

**Table 4: Analyst Following Analysis**

Table 4 presents the analyst following analysis. Columns (1) and (2) present the results for the subsamples of companies with high analyst coverage and low analyst coverage (divided at the median *NUM\_ANALYST*). Column (3) presents the regression results using the full sample of companies including an interaction of *POST*  $\times$  *NUM\_ANALYST*. All variables are defined in Appendix 2. Robust p-values adjusted for firm clustering effects are presented in parentheses below the coefficients. \*, \*\*, and \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

VARIABLES		High Analyst	Low Analyst		Full
		Coverage	Coverage		Sample
		(1)	(2)		(3)
		AVOL	AVOL		AVOL
POST	+	-0.036 (0.559)	0.313** (0.012)	?	0.343** (0.034)
LN_MVE	?	0.059 (0.135)	0.097 (0.147)	?	0.070* (0.050)
NUM_ANALYST	+	-0.003 (0.713)	-0.017 (0.632)	?	0.016* (0.072)
POST $\times$ NUM_ANALYST				-	-0.019** (0.020)
LAG	-	-0.005** (0.035)	-0.006* (0.073)	-	-0.005** (0.028)
LEVERAGE	?	-0.519** (0.014)	0.425 (0.307)	?	-0.008 (0.972)
SD_CFO	?	-1.074** (0.015)	1.438 (0.481)	?	-0.547 (0.423)
DISP	?	2.032** (0.048)	-5.446*** (0.003)	?	0.312 (0.860)
LOSS	-	-0.223** (0.018)	0.076 (0.700)	-	-0.072 (0.271)
UE	?	1.634 (0.243)	-0.695 (0.600)	?	0.364 (0.758)
AVOL_EA	?	0.428*** (0.000)	0.296*** (0.000)	?	0.340*** (0.000)
Constant		Yes	Yes		Yes
Industry Fixed Effects		Yes	Yes		Yes
Observations		305	281		586
R-squared		0.245	0.224		0.190
JOINT TEST:					
POST + POST $\times$ NUM_ANALYST				+	0.324** (0.017)

**Table 5: Auditor Analysis**

Table 5 presents the auditor analysis. Column (1) reports the regression results including an indicator for companies audited by *KPMG* and the interaction of *KPMG* and *POST*. Column (2) presents the results including an indicator for companies audited by *EY* and the interaction of *EY* and *POST*. All variables are defined in Appendix 2. Robust p-values adjusted for firm clustering effects are presented in parentheses below the coefficients. \*, \*\*, and \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

VARIABLES		(1) AVOL		(2) AVOL
POST	?	0.068 (0.418)	?	0.163** (0.047)
KPMG	?	-0.049 (0.689)		
POST x KPMG	+	0.270* (0.088)		
EY			?	0.234 (0.108)
POST x EY			-	-0.326** (0.048)
LN_MVE	?	0.059 (0.145)	?	0.061 (0.140)
NUM_ANALYST	+	0.007 (0.197)	+	0.008 (0.173)
LAG	-	-0.004* (0.064)	-	-0.004* (0.066)
LEVERAGE	?	-0.017 (0.945)	?	-0.017 (0.945)
SD_CFO	?	-0.336 (0.656)	?	-0.205 (0.780)
DISP	?	-0.836 (0.599)	?	-0.797 (0.623)
LOSS	-	-0.035 (0.389)	-	-0.034 (0.395)
UE	?	2.034* (0.072)	?	2.325** (0.036)
AVOL_EA	?	0.282*** (0.000)	?	0.287*** (0.000)
Constant		Yes		Yes
Industry Fixed Effects		Yes		Yes
Observations		504		504
R-squared		0.163		0.162
<b>JOINT TESTS:</b>				
POST + POST x KPMG	+	0.338** (0.029)		
POST + POST x EY			+	-0.163 0.355

**Table 6: Annual Report vs. Earnings Announcement Analysis**

Table 6 presents a falsification test that examines changes in abnormal volume from the pre- to the post-period around earnings announcement dates. All variables are defined in Appendix 2. Robust p-values adjusted for firm clustering effects are presented in parentheses below the coefficients. \*, \*\*, and \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

VARIABLES		AVOL
POST	?	-0.008 (0.909)
ANNUAL	?	-0.796*** (0.000)
POST x ANNUAL	+	0.143** (0.040)
LN_MVE	?	0.015 (0.649)
NUM_ANALYST	+	0.008 (0.133)
LAG	-	-0.004** (0.048)
LEVERAGE	?	0.110 (0.599)
SD_CFO	?	-0.366 (0.536)
DISP	?	0.581 (0.637)
LOSS	-	-0.103 (0.150)
UE	?	0.350 (0.817)
Constant		Yes
Industry Fixed Effects		Yes
Observations		1,172
Annual Report		586
Earnings Announcement		586
R-squared		0.169
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JOINT TEST:		
POST + POST x ANNUAL	+	0.135** (0.035)

**Table 7: Change Analysis**

Table 7 presents the results for the estimation of equation (1) using a strict change analysis. *CHG\_POST* equals one for observations associated with changes from year  $t-1$  to year  $t$  (where  $t$  represents the year the new reporting regime is implemented). All other variables, including the dependent variable, are also transformed to yearly change variables. Robust p-values adjusted for firm clustering effects are presented in parentheses below the coefficients. \* and \*\*\* indicate significance at the 0.10 and 0.01 levels, respectively (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

VARIABLES		CHG_AVOL
CHG_POST	+	0.393*** (0.003)
CHG_LN_MVE	?	0.049 (0.802)
CHG_NUM_ANALYST	+	-0.009 (0.713)
CHG_LAG	-	-0.005* (0.076)
CHG_LEVERAGE	?	-1.075 (0.275)
CHG_SD_CFO	?	0.002 (0.999)
CHG_DISP	?	-0.120 (0.958)
CHG_LOSS	-	-0.036 (0.412)
CHG_UE	?	1.177 (0.363)
CHG_AVOL_EA	?	0.365*** (0.000)
Constant		Yes
Industry Fixed Effects		Yes
Observations		450
R-squared		0.176

**Table 8: Regression Results using U.S. Control Group**

Table 8 presents the regression results for the estimation of equation (1) using U.S. companies as a control group. Column (1) presents the results for a full sample of U.S. and U.K. companies. Column (2) presents the analysis using a propensity score matched sample. All variables are defined in Appendix 2. Robust p-values adjusted for firm clustering effects are presented in parentheses below the coefficients. \*, \*\*, and \*\*\* indicate significance at the 0.10, 0.05, and 0.01 levels, respectively (based on one-tailed tests when a direction is predicted, two-tailed otherwise).

VARIABLES		Full Sample		Propensity Score
		(1) AVOL		(2) AVOL
POST	?	-0.011 (0.598)	?	-0.082* (0.081)
UK	?	-0.292*** (0.000)	?	-0.388*** (0.000)
POST x UK	+	0.153** (0.018)	+	0.271*** (0.002)
LN_MVE	?	0.013 (0.320)	?	0.029 (0.276)
NUM_ANALYST	+	-0.002 (0.492)	+	-0.004 (0.320)
LAG	-	-0.011*** (0.000)	-	-0.007*** (0.000)
LEVERAGE	?	0.030 (0.641)	?	0.087 (0.588)
SD_CFO	?	-0.336 (0.384)	?	-0.777 (0.172)
DISP	?	-0.660 (0.704)	?	1.056 (0.161)
LOSS	-	-0.043 (0.142)	-	-0.159** (0.032)
UE	?	0.776 (0.275)	?	1.295 (0.120)
AVOL_EA	?	0.406*** (0.000)	?	0.329*** (0.000)
Constant		Yes		Yes
Industry Fixed Effects		Yes		Yes
Total Observations		2,414		844
	UK Observations	586		422
	US Observations	1,828		422
R-squared		0.249		0.174
JOINT TEST:				
POST + POST x UK	+	0.142** (0.021)	+	0.189*** (0.008)