

# **Informativeness of Key Audit Matters: Evidence from China\***

**Beng Wee Goh**  
bwgoh@smu.edu.sg  
School of Accountancy  
Singapore Management University

**Jimmy Lee**  
jimmylee@smu.edu.sg  
School of Accountancy  
Singapore Management University

**Dan Li**  
lidan@sem.tsinghua.edu.cn  
School of Economics and Management  
Tsinghua University

**Muzhi Wang**  
wangmzh@cufe.edu.cn  
School of Accountancy  
Central University of Finance and Economics

June 2023

**Key words:** Expanded audit report; information content; key audit matters

**JEL Classifications:** M41; M42; M48

---

\* We thank the Editor (Ann Vanstraelen), and two anonymous reviewers for their constructive feedback that substantially improves this paper. We also thank Ryan Ballesteros (discussant), Donghui Wu, Yuan Zhang, participants at the 2020 Auditing Section Midyear Meeting and workshop participants at Tsinghua University and Central University of Finance and Economics for helpful comments and suggestions. We thank the School of Accountancy Research Center (SOAR) at Singapore Management University for financial support. Goh gratefully acknowledge funding from the Lee Kong Chian Fellowship, Dan Li greatly appreciates the financial support of National Natural Science Foundation of China (No. 72172073), and Muzhi Wang greatly appreciates the financial support of National Natural Science Foundation of China (No. 72002230).

# Informativeness of Key Audit Matters: Evidence from China

## Abstract

This study examines whether the key audit matters (KAMs) disclosed in expanded audit reports as a part of recent regulatory reforms are informative for investors in an emerging economy setting. Using the recent adoption of expanded audit reports for firms listed exclusively in Mainland China, we find robust evidence that the abnormal trading volume and earnings response coefficients (ERCs) are higher and that stock price synchronicity is lower during the postadoption period than during the preadoption period. In additional tests, we find some evidence that KAMs are more informative for non-state-owned enterprises (non-SOEs), smaller firms, and firms that have a smaller analyst following. Finally, we also find that investors respond to the characteristics of KAM disclosures, providing corroborative evidence of the informativeness of these disclosures. Overall, our study provides systematic evidence that KAMs are incrementally informative for investors in an emerging economy.

**Keywords:** expanded audit report; information content; key audit matters

**JEL Classifications:** M41; M42; M48

**Data Availability:** The data are available from the public sources cited in the text.

## **1. Introduction**

Prompted by the global financial crisis, the investment community has been calling for more transparency and insights into the audit process and auditor roles. Standard setters have responded by mandating that auditors provide disclosures of the key risks identified in the audit process rather than providing only a pass/fail opinion. In 2013, for the first time, the auditors of U.K. listed companies were required to discuss those key audit matters (KAMs) identified in the audit process and indicate how they are addressed in the audit report. Other jurisdictions have followed the lead of the U.K. in introducing similar disclosure requirements.<sup>1</sup>

Regulators hope that KAM disclosures will make audit reports more relevant and informative for financial statement users (e.g., FRC 2013a; PCAOB 2017). However, prior empirical studies find mixed evidence regarding the informativeness of the KAMs disclosed in expanded audit reports across jurisdictions (e.g., Gutierrez et al. 2018; Bedard et al. 2019; Liao et al. 2019; Reid et al. 2019; Burke et al. 2022; Lennox et al. 2022); hence, whether KAM disclosures provide information that is useful for investors continues to be debated. Our study provides new insights into this debate by examining KAM informativeness in a large and important emerging economy, i.e., China.

On December 23, 2016, the Chinese Institute of Chartered Public Accountants (CICPA) issued the Chinese Standards of Audit (CSA) No. 1504, which requires auditors to disclose KAMs in audit reports (CICPA 2016). This new auditing standard is quite similar in its definition and guidelines to its international counterpart, ISA 701, issued by the International Auditing and Assurance Standards Board (IAASB) in 2015. Because KAM disclosure is the only additional disclosure requirement in the expanded audit report under the new auditing standard, examining

---

<sup>1</sup> We provide more details regarding these disclosure requirements in Section 2.

the consequences of KAM disclosures and the adoption of the expanded audit report are equivalent in China.

We argue that KAM disclosures can be incrementally informative for investors regarding a firm's risk of material misstatement. Specifically, KAM disclosures could direct the attention of investors toward important misstatement risk areas, and the additional disclosures of the procedures taken by the auditors to address these complex accounting issues can mitigate investors' perception of the firm's risk of material misstatements, hence increasing investors' reliance on financial reports. This effect is likely to be especially salient in the Chinese setting because of the limited firm-level reporting and lack of alternative sources of information (e.g., information production and dissemination by the media are state controlled and censored in China), which makes these additional KAM disclosures more useful for investors. Furthermore, the prevalence of earnings management in China suggests that investors are more vulnerable to management's expropriation of firm resources; hence, there would be a stronger demand for KAM disclosures to better assess firms' earnings quality.

Notwithstanding the above arguments, KAM disclosures may reveal information about audit risks that are unanticipated and previously unknown to investors. It is possible that investors could become more suspicious about the quality of a firm's financial reporting despite the new discussion of the auditor's efforts in addressing these risks in audit procedures, especially when auditor independence in China is weaker than that in most developed economies. Moreover, the Chinese stock market is dominated by individual investors in terms of trading (Allen et al. 2020). To the extent that individual investors are unsophisticated and unable to decipher KAM disclosures properly, these disclosures might lead to a greater divergence of opinion and different interpretations of new information. Under these circumstances, investors may react negatively to

KAM disclosures and/or have a more negative perception of financial misstatement risk, hence relying less on financial reports in making their trading decisions.

We empirically examine the informativeness of those KAMs disclosed in expanded audit reports using a sample of firms listed exclusively on the Mainland China stock exchanges from FY 2014 to 2018. We use a pre-post research design for our analyses, and our main proxies for KAM informativeness are (1) cumulative absolute abnormal returns and abnormal trading volume, (2) the earnings response coefficient (ERC), and (3) stock price synchronicity. We find limited or no evidence that the three-day abnormal returns surrounding the date of the issuance of annual reports (which contain the expanded audit reports and the KAMs therein) are significantly greater during the postadoption period than during the preadoption period. However, we find that the abnormal trading volume significantly increases following the adoption of expanded audit reports. This result provides evidence that investors react to the new information in KAMs. Next, we find that the ERC is significantly higher after the adoption of expanded audit reports, which is consistent with the notion that KAMs enhance investor perceptions of a firm's financial reporting quality. Finally, we find that stock price synchronicity significantly decreases following the adoption of expanded audit reports, suggesting that KAMs facilitate the flow of firm-specific information to the capital market. All the above results are robust to using a difference-in-differences (DID) analysis, alternative measures for KAM informativeness, and the entropy balancing method.

Next, we provide additional insights by conducting several cross-sectional tests and further analyses. First, we examine whether KAMs are more informative in circumstances in which there is greater investor demand for information. We find that the increase in the abnormal trading volume during the postadoption period is more pronounced among non-state-owned enterprises

(non-SOEs), smaller firms, and firms that have a smaller analyst following. We also find that the increase (decrease) in the ERC (price synchronicity) during the postadoption period is more pronounced among non-SOEs, smaller firms and firms with a smaller analyst following (smaller firms and firms with a smaller analyst following). Second, we find that audit report downloads relative to annual report downloads are significantly greater during the postadoption period than during the preadoption period, providing a stronger inference that the investor reaction we previously documented is more likely attributable to KAMs than to annual reports. Third, we find that after the adoption of the expanded audit report, when firms report earnings together with the audit report, the market reaction to positive earnings surprises significantly increases, while the market reaction to negative earnings surprises remains unchanged. These results suggest that KAM disclosures enhance the credibility of good news but not that of bad news.

In the final analysis, we examine whether the characteristics of KAM content are related to investors' response to KAMs. We find that KAM disclosures that are less similar to the disclosures of industry peers convey more firm-specific information and hence result in a higher abnormal trading volume surrounding KAM disclosures, a higher ERC, and a lower stock price synchronicity. In addition, we find that the length of KAM disclosures in audit reports is positively associated with stock price synchronicity. Next, we find that KAM disclosures are more informative when auditors provide more discussion of their efforts in addressing the risks in the identified KAMs relative to the risk disclosures. Finally, we find some evidence that these discussions of auditors' efforts in addressing KAMs are important for investors, especially regarding how they perceive revenue surprises in the presence of a revenue-recognition KAM. Overall, these results provide corroborative evidence that KAM disclosures are informative and that investors respond to the characteristics of these disclosures.

Our study contributes to the ongoing debate regarding the consequences of audit report reforms worldwide by documenting systematic evidence that KAMs are incrementally informative for investors in China, which is the world's largest emerging economy and, hence, economically significant.<sup>2</sup> Therefore, our study extends and complements existing studies, such as those conducted by Gutierrez et al. (2018), Reid et al. (2019), and Lennox et al. (2022), who find limited or no evidence that KAMs are incrementally informative in a developed economy, such as the U.K.<sup>3</sup> Our results are consistent with those reported by Altawalbeh and Alhajaya (2019), who find that KAM disclosures are associated with an increased abnormal trading volume in Jordan, a much smaller emerging economy than China. Our study extends the study by Altawalbeh and Alhajaya (2019) by exploiting the rich market depth of China to explore cross-sectional variation in institutional features (such as SOEs and the information environment) and KAM disclosure characteristics that affect KAM informativeness.

Overall, our findings suggest that KAMs are incrementally informative for investors in a setting in which this information is less likely to be available from alternative public sources, and hence, the demand for such information is presumably high. This finding is in line with the view of regulators that “expanded auditor reporting may be relatively more informative for companies

---

<sup>2</sup> In 2020, China was the second largest economy worldwide and the largest exporter and second largest importer of goods and services. In addition, China has the second largest stock exchanges (Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange) in terms of market capitalization (World Bank Open Data: <https://data.worldbank.org/>).

<sup>3</sup> China offers two advantages in examining KAM informativeness. First, the findings in concurrent studies of the new audit reporting model in the U.K. could potentially be confounded because, under the new regulation, audit committees are also required to issue their own separate reports regarding critical accounting matters and state whether annual reports are “fair, balanced and understandable.” In addition, the expanded audit report in the U.K. requires auditors to explain how they apply the concept of materiality and to explain how the scope of the audit addresses the assessed missstatement risks and the applied materiality thresholds (FRC 2013b). Because the new auditing standard in China requires auditors to disclose only KAMs, we can better examine any market reactions to the KAM content without the confounding effects of audit committee reports or other additional disclosure requirements in the expanded audit report. Second, the firms listed on the stock exchanges in both Mainland China and Hong Kong are required to adopt the new audit reporting standards for financial reports issued on or after January 1, 2017, while all other firms listed on only the stock exchanges in Mainland China are required to adopt it for financial reports issued on or after January 1, 2018. This phased adoption offers a quasinatural experimental research setting that allows us to conduct DID analysis to provide stronger inference.

where alternative sources of information are less available” (PCAOB 2017). Our finding also supports the theoretical model proposed by Chen et al. (2019), who show that audit quality disclosure increases auditors’ effort incentives if and only if the underlying financial reporting quality is relatively weak. Given that developing and emerging economies, such as China, have weaker financial reporting quality compared to other economies, our results suggest that additional risk disclosures (which are informative of audit quality) can induce greater audit effort and, hence, a higher audit quality, which can enhance the decision usefulness of financial reports for investors. Our study supports Zeng et al. (2021), who find that audit quality has significantly increased following the KAM disclosure mandate in China, and extends their study by examining the capital market consequences of the KAM rule.<sup>4</sup> In addition, Zeng et al. (2021) show that KAM disclosure characteristics (such as number, specificity, similarity, readability, and length) signal auditors’ concerns regarding clients’ earnings quality and their audit effort. Consistent with the abovementioned study, we also find that KAM disclosure characteristics affect KAM disclosure informativeness.

Altogether, our study and concurrent studies can help inform standard setters and regulators worldwide, especially those in developing economies who would otherwise be skeptical regarding the usefulness of KAMs in expanded audit reports. Our study further suggests that standard setters and regulators should calibrate the disclosures in audit reports to suit the unique institutional environment of each country. Finally, our findings based on the Chinese setting may be generalizable to other large developing economies with weak institutions and a strong SOE presence, such as Brazil, India and Russia.

## **2. Background, Institutional Setting, and Research Question**

---

<sup>4</sup> Consistent with Zeng et al. (2021), Li et al. (2019) find that KAM disclosures in New Zealand have been followed by an improvement in audit quality, as evidenced by a significant increase in audit fees.

## **2.1 Background and Related Literature Concerning the Informativeness of KAMs**

In response to the demand for more informative audit reports, standard setters, regulators, and auditors worldwide have taken steps to promote audit reporting reforms. The Financial Reporting Council (FRC) in the U.K. first introduced new requirements for auditors to discuss the key risks identified in an audit and how these risks are addressed in the audit report in effect for periods commencing on or after October 1, 2013.<sup>5</sup> Other regulators have followed the lead of the FRC by mandating an increased number of auditor risk disclosures. In January 2015, the IAASB released the new International Standards on Auditing (ISA 701), *Communicating Key Audit Matters in the Independent Auditor's Report*, which requires auditors to include KAMs in their audit reports (IAASB 2015) for fiscal years ending on or after December 15, 2016.<sup>6</sup> More recently, the Public Company Accounting Oversight Board (PCAOB) in the U.S. finalized its reform of audit reporting in June 2017, mainly requiring auditors to discuss critical audit matters (CAMS), auditor tenure, and audit firm independence in audit reports (PCAOB 2017).<sup>7</sup> KAMs and CAMs are similar (in terms of intent and content) to the audit risk disclosure requirements of the FRC.

Empirical studies report mixed findings regarding whether KAMs provide incremental information to investors in various jurisdictions. Early studies have examined KAM informativeness in the U.K. setting. Reid et al. (2019) find that the new auditor reporting regime

---

<sup>5</sup> France implemented an expanded audit report requirement in 2003 that requires external auditors to disclose justifications of assessments (JOAs) in audit reports. This requirement is similar to the KAM disclosure requirement (see Bedard et al. 2019 for details regarding the key differences between JOAs and KAMs), and JOAs are considered a precursor to KAMs, as viewed by the IAASB (Minutti-Meza 2021). Then, France adopted ISA 701 in 2017 and, thus, has KAM disclosure requirements similar to those in other jurisdictions in the European Union.

<sup>6</sup> KAMs, which are selected from matters communicated with those charged with governance, are the matters that in the auditor's professional judgment, are of most significance in the audit of the financial statements of the current period (IAASB 2015).

<sup>7</sup> The U.S. CAM requirement is outlined in PCAOB Auditing Standard 3101 and has been in effect in fiscal years ending on or after June 30, 2019, for audits of large-accelerated filers and fiscal years ending on or after December 15, 2020, for audits of all other companies (PCAOB 2017). CAMs are defined as issues communicated to the audit committee that relate to material financial statement accounts and involve challenging, subjective, or complex auditor judgment.

is associated with a significant increase in the ERC, suggesting that investors perceive earnings to be more credible after the adoption of the new regime. However, Gutierrez et al. (2018) fail to find any evidence that the regulatory change in the U.K. or the variation in expanded audit reports' content significantly affect investors' reaction (proxied by abnormal stock returns and abnormal trading volume), audit fees, and audit quality. Similarly, Lennox et al. (2022) find that risk disclosures in audit reports generally lack incremental information content using short window market reaction tests. Their finding that approximately 65% of the risks disclosed by auditors in audit reports have already been previously disclosed by management or the audit committee suggests that risk disclosures lack incremental information content because investors already know about these risks before their disclosure in audit reports.

Subsequent studies examining the informativeness of risk disclosures in expanded audit reports issued in other jurisdictions also report mixed findings. On the one hand, Altawalbeh and Alhajaya (2019) find that KAM disclosures are associated with abnormal trading volume in Jordan, an emerging economy. On the other hand, other studies find that JOA or KAM disclosures are not associated with significant investor reactions in developed economies, such as France, Hong Kong and New Zealand (Bedard et al. 2019; Liao et al. 2019; and Almulla and Bradbury 2019, respectively). Studies examining the consequences of expanded audit reports in the U.S. also provide mixed evidence. For example, Burke et al. (2022) find that CAM disclosures in the U.S. do not provide incremental information to the market or significantly change audit fees or quality. In contrast, Drake et al. (2021) find that the disclosure of tax-related CAMs is associated with a lower likelihood of tax-related earnings management, as measured using the reported tax expense and reserves for unrecognized tax benefits.

Two recent studies have examined KAM disclosures in China. Zeng et al. (2021) find that the KAM disclosure rule in China improves audit quality, proxied by discretionary accruals, small positive earnings surprises, below-the-line items, the type of audit opinion, and audit fees. Moreover, Liao et al. (2021) find that the auditor reporting of KAMs in China is not significantly associated with stock price crash risk. Neither Zeng et al. (2021) nor Liao et al. (2021) examine investors' reaction to KAM disclosures as proxied by short window market reaction, the ERC and stock price synchronicity, which we thus examine in this study.

## 2.2 Institutional Setting

Prior to 2016, audit reports in China followed those of other jurisdictions in terms of their content and format; auditors essentially issued a pass/fail opinion indicating whether a company's financial statements complied with financial reporting standards. On December 23, 2016, the CICPA followed the lead of the IAASB and issued the CSA No. 1504, *Communicating Key Audit Matters in the Independent Auditor's Report*, which requires auditors to address those KAMs identified during an audit.<sup>8</sup> According to the CICPA (CSA 1504), "Communications on key audit matters are expected to provide incremental information for financial statement users and help them learn the most important issues based on auditors' professional judgment. Communication on key audit matters can also help financial statement users know more about the firm and the critical management estimates involved in audited financial statements." This new auditing standard is quite similar in its definition and guidelines to its international counterpart, ISA 701, issued by the IAASB in 2015. In particular, CSA 1504 requires the auditor to disclose those KAMs identified during an audit, explain why the auditor believes that these issues are KAMs and explain

---

<sup>8</sup> China harmonized its Chinese Accounting Standards (CAS) with the International Financial Reporting Standards (IFRS) for listed companies effective January 1, 2007. Additionally, the CSA were fully converged with the International Standards of Auditing (ISA) and have been effective for audits of financial statements as of January 1, 2011.

how the auditor addressed these identified KAMs in the audit process. In China, audit reports and financial statements are released along with annual reports;<sup>9, 10</sup> a separate audit committee report is also released if the company is listed on the SSE.<sup>11</sup>

This new auditing standard has been implemented in two stages. A small number of companies listed on the stock exchanges in both Mainland China and Hong Kong (“AH-share firms”) were required to adopt the new audit reporting standards for financial reports issued on or after January 1, 2017. All other companies listed only on the stock exchanges in Mainland China (“A-share firms”) were required to adopt it for financial reports issued on or after January 1, 2018.<sup>12</sup>

China provides an interesting setting in which to examine KAM informativeness. First, in contrast to the U.K. and other developed nations, the information environment is generally poor in China, as it lacks institutional arrangements that provide the incentive to supply high-level

---

<sup>9</sup> The format of annual reports in China is substantially similar to that in the U.S. The main content includes the company background, selected key financial data and analyses, segment information, management discussion and analysis (MD&A), corporate governance, audit reports, financial statements and footnotes. There are two policy releases surrounding the adoption period of the expanded audit reports as follows: 1) an additional disclosure requirement for firms with major asset restructuring effective in FY 2017 or later (issued on September 21, 2017) and 2) an additional disclosure requirement for firms with modified audit opinions effective in FY 2018 or later (issued on April 24, 2018). In untabulated sensitivity tests, our results are robust to 1) removing observations with major asset restructuring during the postadoption period and 2) removing observations with modified audit opinions during the postadoption period. Otherwise, we are not aware of any concurrent change in the annual report disclosure requirement that affects the broad sample of firms.

<sup>10</sup> As stated in the Conceptual Framework in the CAS (<https://www.casc.org.cn/2018/0815/202818.shtml>), the main audience of financial statements (which are a part of annual reports) is similar to that in the U.S. and other jurisdictions as follows: investors, banks or creditors, regulators, and the general public.

<sup>11</sup> The audit committee report is a standard template that contains information regarding the audit committee (such as the composition and background of audit committee members) and the agenda of each audit committee meeting. This report requirement was implemented in 2013 for companies listed in the SSE. We are not aware of any concurrent change in the disclosure requirement of the audit committee report during the adoption period of the expanded audit report.

<sup>12</sup> In China, all listed firms have a fiscal year ending on December 31 and are required to issue their annual reports before April 30 of the following year. Therefore, AH-share firms are required to adopt the new audit reporting for FY 2016 and after, and A-share firms are required to do so for FY 2017 and after. AH-share firms were required to adopt the new audit reporting at an earlier date than were other A-share firms because AH-share firms are also listed in Hong Kong, and Hong Kong required Hong Kong listed companies to adopt the new audit reporting for fiscal year-ends on or after December 15, 2016.

corporate transparency to public markets (Piotroski and Wong 2012). For example, state-controlled firms constitute a significant share of listed companies, and the government retains the right to appoint their chief executive officers (CEOs). Because the government can use internal reporting mechanisms and performance measures to monitor CEOs directly, these SOEs have lower incentives to supply high-quality external reports for control purposes. Furthermore, politically connected firms have incentives to suppress bad news to hide inefficiencies and rent-seeking activities and pursue political objectives (Piotroski et al. 2015).<sup>13</sup> The opaque information environment and lack of alternative sources of information in China suggest that greater disclosure requirements could be associated with greater capital market benefits for public markets.<sup>14</sup>

Second, earnings management tends to be a greater concern in countries with weak institutional frameworks and investor protection than in other countries (Leuz et al. 2003). In China, earnings management is exacerbated by regulatory pressure and financial needs. For example, there are stringent regulatory requirements with which to comply to remain listed on the exchange.<sup>15</sup> As a result, Chinese firms engage in both accrual-based and real earnings management to achieve specific profit targets and to avoid losses (Piotroski and Wong 2012). Furthermore, the prevalence of related party transactions and group and pyramidal ownership structures afford more opportunities to manage earnings in China (Jian and Wong 2010; Piotroski et al. 2015). Given that

---

<sup>13</sup> Due to the limited supply of corporate reporting and disclosure practices, investors have to rely on alternative sources, such as financial intermediaries or media, for firm-specific information. However, the market of financial analysts is not well developed in China, as Chinese analysts face limited information and incentives when making firm-level forecasts (Ang and Ma 1999; Chen et al. 2013). In addition, most media outlets in China are controlled by the government, and hence, the firm-specific information disseminated by these media outlets tends to be biased and constrained (Piotroski and Wong 2012).

<sup>14</sup> Consistent with this notion, Chen et al. (2000) find that Chinese investors react strongly and negatively to modified audit opinions and argue that the lack of competing information sources in the Chinese market may explain why announcements of initial modified audit opinions attract so much investor attention.

<sup>15</sup> Specifically, according to the guidelines introduced by the China Securities Regulatory Commission (CSRC) in 1998, a listed firm is designated a special treatment (ST) firm if it reports a net loss in two consecutive years. An ST firm's semiannual report must be audited. If it reports a net loss in three consecutive years, then it will be suspended from normal trading.

outside investors in China are more vulnerable to earnings management, we expect investors to have a stronger demand for corporate disclosures to better assess a firm's earnings quality.

### **2.3 Research Question Formulation**

We argue that KAM disclosures can be incrementally informative for investors regarding a firm's risk of material misstatement. Specifically, the additional disclosure of specific financial statement risks in auditor reports could focus the attention of investors on "issues that would be pertinent to understanding the financial statements" (Buller 2013) and help investors prioritize the most significant financial reporting risks (CFA Institute 2013). Furthermore, KAM disclosure involves not only an auditor discussion of significant matters related to challenging, subjective, or complex auditor judgment but also a discussion of the steps and procedures taken by auditors to address these complex accounting issues to mitigate financial reporting risks. This additional information content can mitigate investors' perception of the firm's risk of material misstatements.

To illustrate, many KAMs are related to revenue recognition, an example of which is provided in Appendix 1. In the example, the auditor flagged the revenue recognition of the express service segment of YTO Express as a KAM because it accounts for a significant proportion of total revenue, and due to numerous transactions with many franchisees, the inherent risk of misstatement is high. More importantly, the auditor discussed the measures taken to address or mitigate this risk in the audit process, which includes reviewing the franchise contract, interviewing management, testing the internal control of sales and payment cycles, applying substantive analytical procedures to the detailed data of accounts receivable, etc. Such additional disclosures are particularly informative for investors who may otherwise be skeptical of the quality of the reported revenue and, hence, refrain from trading based on this information.<sup>16</sup> This situation

---

<sup>16</sup> Consistent with our line of reasoning, Burke et al. (2022, p.12) also argue that an expanded audit report can result in a stronger market reaction because it increases "transparency for investors through the provision of audit-specific

is especially pertinent in China, which, as we discussed earlier, is marked by financial opacity and prevalent earnings management. Disclosures regarding the auditor's risk assessment of the reported revenue and response to ensure the adequacy of the revenue recognition disclosures could give investors more assurance regarding the reliability of the reported revenue.<sup>17</sup> In sum, to the extent that the new KAM disclosures are incrementally informative about a firm's financial misstatement risk, we should expect greater investor reliance on these financial reports in their trading decisions.

Notwithstanding the above arguments, KAM disclosures may reveal information about audit risks that is unanticipated and previously unknown to investors. For example, in the earlier illustration, the auditor raised a KAM and pointed investors toward revenue as an area of "risk." It is possible that investors could become more suspicious about the quality of the firm's financial reporting despite the new discussion of the auditor's efforts in addressing these risks in audit procedures. This situation is especially true in China, where auditor independence is weaker than that in most developed economies (Chen et al. 2000; Piotroski and Wong 2012); hence, investors may be doubtful of auditors' efforts in addressing these risk areas.<sup>18</sup> In addition, the Chinese stock market is dominated by individual investors in terms of trading (Allen et al. 2020). While KAM disclosures might provide new information, to the extent that individual investors are

---

information. Auditor-provided information in areas that require subjective estimates and measurements may be particularly informative for investors seeking to understand the disclosures of increasingly complex operations."

<sup>17</sup> Supporting this argument, Reid et al. (2019) contend that with the enhanced risk disclosure requirements, auditors may feel more accountable for their work and, therefore, perform additional procedures and/or existing procedures with heightened "professional skepticism to improve the quality of financial reports." In addition, Zeng et al. (2021) find that KAM disclosures in China result in an improvement in audit quality as proxied by discretionary accruals, small positive earnings surprises, below-the-line items, the type of audit opinion, and audit fees.

<sup>18</sup> Auditor independence in China is weaker than that in most developed economies because audit firms and the Chinese accounting profession are not only regulated but also supervised by local governments (Chen et al. 2000; Piotroski and Wong 2012). This practice creates conflicts of interest between politically connected managers and auditors in the same local region. Given that external auditors in China lack independence and that China's weak institutional environment generally results in lower-quality audits by Big 4 auditors (Ke et al. 2015), investors may not find the KAMs disclosed by auditors, especially those pertaining to the steps and procedures taken to mitigate the financial reporting risks identified in the KAMs, sufficiently credible or provide incremental information.

unsophisticated and, thus, unable to decipher additional risk disclosures, there could be greater divergence of opinion and different interpretations of the new information; this situation could lead to greater information asymmetry among market participants. Moreover, KAMs could make unsophisticated investors more skeptical of the quality of accounting reports and discount the value relevance of these disclosures. Based on these arguments, investors may react negatively to KAM disclosures and/or have a more negative perception of financial misstatement risk, hence relying less on financial reports in their trading decisions.<sup>19</sup>

Finally, there is empirical evidence that the economic effects of disclosure regulations tend to be limited in China. For example, He et al. (2012) argue that in emerging markets, such as China, the intended benefits of improved transparency through the mandatory adoption of high-quality accounting standards, such as the IFRS, may fail to materialize because an accounting system oriented toward providing value-relevant information to investors may not fit those environments in which accounting plays a more important contracting role than an information role. Under these circumstances, investors may not find KAMs incrementally informative in the Chinese setting.

Based on the above opposing arguments, we formulate our research question as follows:

*RQ: Are KAMs in expanded audit reports in China incrementally informative?*

### **3. Research Design**

#### **3.1 Pre-Post Adoption Model**

We employ a pre-post research design and focus on the full sample of firms listed

---

<sup>19</sup> In contrast, Lennox et al. (2022) find that KAM disclosures in the U.K. are not incrementally informative because information about KAMs is already available from other sources (e.g., previous annual reports, conference calls or EAs) before the adoption of the expanded audit report. To the extent that unsophisticated individual investors in China did not pay attention to these sources or had a more difficult time locating these sources compared to their sophisticated counterparts before the adoption of the expanded audit report, these unsophisticated investors are then more likely to find KAM disclosures incrementally informative after the adoption due to the ease of assessing such information.

exclusively in Mainland China (A-share firms) from FY 2014 to 2018 to examine the adoption effect of expanded audit reports that contain KAMs.<sup>20</sup> This design allows us to examine whether our variables of interest (e.g., market reaction and trading volume) change from the preadoption to postadoption of expanded audit reports. Accordingly, we create an indicator variable, *POST*, that equals one for FY 2017 and 2018 and zero otherwise.

### 3.2 Market Reaction Tests

If KAM disclosures convey value-relevant information regarding financial statement risk areas and how auditors address these risks that investors were previously unaware of or if KAM disclosures update investors' prior beliefs and expectations regarding financial reporting quality, then we would expect investors to react in the short window surrounding these disclosures. Following Gutierrez et al. (2018), we employ the following two main proxies for investors' reaction to KAMs: 1) the three-day cumulative absolute abnormal returns and 2) the average of the three-day abnormal trading volume surrounding the annual report filing date, which contains the expanded audit report and the KAMs therein. According to theoretical models of disclosure (e.g., Kim and Verrecchia 1997; Verrecchia 2001), absolute abnormal returns (or price reactions) reflect the average change in investors' beliefs in response to the incremental information disclosed in an announcement event, and the abnormal trading volume (or volume reaction) reflects the price reaction and/or individual investors' differential response to an announcement event.<sup>21,22</sup> The

---

<sup>20</sup> As previously highlighted, AH-share firms (i.e., firms listed on both the Mainland China and Hong Kong stock exchanges) are required to issue expanded audit reports for financial reports issued on or after January 1, 2017 (i.e., FY 2016 and after), and all other A-share firms (i.e., firms listed only on the Mainland China stock exchange) are required to do so for only those financial reports issued on or after January 1, 2018 (i.e., FY 2017 and after). We focus only on A-share firms in our main analysis because these firms have the same adoption date. Subsequently, we utilize the sample of AH-share firms in our DID analysis (see Section 4.3).

<sup>21</sup> According to the model proposed by Kim and Verrecchia (1997), differences in individual investors' responses to an announcement event can be driven by 1) investors having preannouncement private information of differing quality or 2) investors having different interpretations of the announcement.

<sup>22</sup> Relatedly, Lambert et al. (2011) demonstrate in their theoretical model that in the presence of imperfect competition (i.e., market illiquidity), information asymmetry (i.e., the different precision levels of information among investors)

greater decision usefulness of KAMs is reflected in an absolute price reaction and an increase in the abnormal trading volume on the report filing date. We focus on both price and volume reactions because Kandel and Pearson (1995) empirically show that volume reactions might exist in the absence of price reactions, which, according to the theoretical model by Kim and Verrecchia (1997), could be the result of individual investors' differential interpretation of an announcement. This notion is particularly pertinent in the Chinese context, where the information environment is relatively poor and dominated by individual investors (Allen et al. 2020) and the market is relatively illiquid;<sup>23</sup> this situation might exacerbate different interpretations of information disclosure or increase information asymmetry among market participants. In this context, we are better able to explain whether the price and volume reaction to KAMs in expanded audit reports is due to an increase in information precision and/or differential interpretations of the expanded risk disclosure.

Accordingly, we estimate the following ordinary least squares (OLS) regression model to examine investors' reactions to KAMs (the variable definitions are outlined in Appendix 2):

$$ABCAR (AVOL) = \delta POST + \sum \beta_n CONTROLS + Industry FE + Audit firm FE + \varepsilon \quad (1)$$

We calculate (1) *ABCAR* as the absolute value of the three-day cumulative abnormal returns and (2) *AVOL* as the average three-day abnormal trading volume; both are measured around the audit report filing date. We control for firm characteristics (*CONTROLS*), such as the market value of the firm (*LnMV*), leverage (*LEV*), market-to-book ratio (*MTB*), institutional shareholdings

---

can affect the cost of equity, even after controlling for the effect of the average precision of investors' information. Bhattacharya et al. (2012) provide empirical evidence supporting this theoretical assertion and find that information quality (proxied by earnings quality) has both direct (via information precision) and indirect (via information asymmetry) effects on the cost of equity.

<sup>23</sup> In the context of the model proposed by Lambert et al. (2011), information asymmetry affects the cost of equity when the market is illiquid (i.e., the stock price is less informative). Leippold et al. (2021) show that liquidity is the most important predictor of stock returns in the Chinese stock market, suggesting that the Chinese market is relatively illiquid, and hence, the effect of information asymmetry is likely to be more pronounced compared to that in more developed markets, such as the U.S.

(*INST*), the number of analysts following the firm (*Analysts*), firm performance (*ΔEPS* and *ROA*), and firm risk using stock return volatility (*SDRET*) and beta (*BETA*). We also control for the presence of a modified audit opinion (*MAO*), discretionary accruals (*DACC*), the natural logarithm of audit fees (*LAF*), small positive earnings surprises (*SP*), and the adoption of below-the-line items or noncore earnings (*BL*) to mitigate concerns that our findings are attributed to contemporaneous increases in audit quality. When the dependent variable is *AVOL*, we further include *ABCAR*, which is an important factor related to trading behavior (Bamber et al. 2011). We include industry and audit firm fixed effects in all regression models to account for unobserved heterogeneity across industries and audit firms.<sup>24</sup> Finally, we also cluster standard errors by firm and report announcement date.<sup>25</sup>

### 3.3 ERC Test

According to Fischer and Verrecchia (2000), the information content of earnings reports should increase as investors' perceived information credibility increases. Hence, if KAMs in expanded audit reports enhance investor perceptions of financial reporting credibility, then we expect a larger stock price reaction to unexpected earnings after the issuance of expanded audit reports. In contrast, if the expanded audit reports contain KAM disclosures that reveal information about audit risks that are unanticipated and previously unknown, investors might have a more negative perception of financial reporting credibility, and hence, we expect a weaker stock price reaction to unexpected earnings after the issuance of expanded audit reports. We test the following OLS regression model (the variable definitions are outlined in Appendix 2):

---

<sup>24</sup> Our results are qualitatively similar when we include firm fixed effects. Following Gutierrez et al. (2018), we also calculate the standard errors using the bootstrap method with 1,000 replications given that the theoretical distribution of the test statistic is unknown and the sample sizes are small. The results are qualitatively similar.

<sup>25</sup> We cluster by report announcement date because Chinese listed companies are likely to issue annual reports from the middle to the end of April (the due date is April 30), and hence, their market reactions could be correlated.

$$\begin{aligned}
CAR = & \gamma UE + \delta POST + \sum \beta_n CONTROLS + \sum \varphi_n UE * CONTROLS \\
& + Industry FE + Audit firm FE + \varepsilon
\end{aligned} \tag{2}$$

The dependent variable is *CAR*, which is the three-day cumulative abnormal return surrounding the earnings announcement (EA) date. *UE*, or unexpected earnings, is calculated as the change in earnings per share (EPS) over the year, deflated by the prior fiscal year-end stock price. Following Reid et al. (2019), we control for firm-specific variables that have been shown to be associated with ERC (*CONTROLS*), namely, *LnMV*, *MTB*, *LEV*, net operating cash flow (*CFO*), sales volatility (*SDSales*), *Analysts*, and a loss indicator (*Loss*).<sup>26</sup> In addition, we control for *MAO*, *DACC*, *LAF*, *SP* and *BL* to mitigate concerns that our findings are attributed to contemporaneous increases in audit quality, and we further control for the interaction between *UE* and the control variables. Finally, we include industry and audit firm fixed effects.

### 3.4 Stock Price Synchronicity Test

If there is a limited supply of firm-specific information for the market, then the firm-level stock return is highly correlated with the market return, resulting in a high price synchronicity (Roll 1988). Jin and Myers (2006) find that Chinese firms display the highest level of stock price synchronicity among the 40 countries included in their study, suggesting a limited supply of firm-specific information among Chinese firms. To the extent that KAMs in expanded audit reports better direct investors' attention to key financial reporting areas that deserve more attention (PCAOB 2017), we expect risk disclosures to facilitate the flow of firm-specific information into the market, thus causing investors to rely more (less) on firm-specific (common) information in their trading decisions.<sup>27</sup> Consequently, stock price synchronicity should decrease after the

---

<sup>26</sup> We follow previous studies and calculate the unexpected earnings using last year's earnings as a benchmark in our main tests (e.g., Guan et al. 2016). We obtain qualitatively similar results using analysts' forecasts as a benchmark (see Section 4.3).

<sup>27</sup> The PCAOB believes that the information provided in CAMs will be used by various types of investors in several

adoption of expanded audit reports.<sup>28</sup> Our OLS regression model is as follows (the variable definitions are outlined in Appendix 2):

$$SYNC = \delta POST + \sum \beta_n CONTROLS + Industry\ FE + Audit\ firm\ FE + \varepsilon \quad (3)$$

We calculate stock price synchronicity (*SYNC*) by estimating the  $R^2$  value (i.e., goodness of fit) of the stock return regression, as described by Gul et al. (2010), where the estimation window is the 30 trading days after the release of an audit report.<sup>29</sup> Then, we obtain  $SYNC = \ln(R^2/(1 - R^2))$ .<sup>30</sup> Following Gul et al. (2010), we control for factors that are associated with stock price synchronicity (*CONTROLS*). We include the percentage of shares held by the top shareholder (*TOPHOLD*) and its squared term (*TOPHOLD2*) to capture the inverted U-shaped relationship between stock price synchronicity and ownership concentration. Furthermore, we control for foreign holdings using the percentage of qualified foreign investor holdings (*QFII*) and the

---

different ways, such as informing and framing. Framing refers to the notion that CAMs provide investors with a new perspective of financial statements and guide their attention to related financial statement accounts and disclosures. This approach should facilitate their analysis of financial statements by highlighting potentially relevant information or reducing the costs to process or search for information. Consistent with this framing view, Sirois et al. (2018) find that KAMs have an attention-directing impact because participants access KAM-related disclosures more rapidly and pay more attention to them when KAMs are communicated in an audit report.

<sup>28</sup> Prior studies suggest that the interpretation of stock price synchronicity is unclear in international settings, especially in China where stock markets are relatively illiquid (Gassen et al. 2020; Hu et al. 2019). We address this concern in several ways. First, Hu et al. (2019) find that lower stock price synchronicity does not imply higher stock price informativeness in China only for short-time intervals, especially in intraday data. In our tests, we measure stock price synchronicity estimated in the 30-day window (90-day window as a robustness test) following the release of the audit report, which should alleviate concerns of an unclear interpretation of our results using this measure. Second, Gassen et al. (2020) demonstrate that measures of stock price synchronicity are predictably biased downward as a result of stock illiquidity. To address such potential bias, we follow Jiang et al. (2019) and control for stock illiquidity by adjusting our measure of stock price synchronicity to account for the percentage of zero-return trading days (a proxy for stock illiquidity), and our results are robust (untabulated). Third, using the same setting in China, Gul et al. (2010) validate the measure of stock price synchronicity as a measure of price informativeness by showing that the amount of earnings information reflected in stock returns is lower for firms with high synchronicity. Based on these factors, we believe that our measure of stock price synchronicity can capture firm-specific information being incorporated into stock prices for our Chinese setting. However, to the extent that stock price synchronicity also captures noise, our results should be interpreted with this caveat in mind.

<sup>29</sup> We run the regression  $R_{it} = \beta_0 + \beta_1 R_{mt} + \beta_2 R_{mt-1} + \beta_3 R_{indt} + \beta_4 R_{indt-1} + \varepsilon_{it}$ , where  $R_{it}$  is the daily stock return of a given firm,  $R_{mt}$  is the daily stock return of the entire A-share market, and  $R_{indt}$  is the daily average stock return of a given industry.

<sup>30</sup> We use *SYNC* as the dependent variable because the  $R^2$  value is bounded between zero and one, and hence, OLS regression models may yield biased coefficients (Kronmal 1993; Angrist and Pischke 2008).

issuance of B shares (*BSHARE*).<sup>31</sup> We also include an indicator for SOEs (*SOE*), which is found to be positively related to stock price synchronicity. The other control variables include firm size, measured by the natural logarithm of total assets (*SIZE*); *MTB*; *LEV*; average stock turnover (*VOL*); and *ROA*. Finally, we control for *MAO*, *DACC*, *LAF*, *SP* and *BL* to mitigate concerns that our findings are attributed to contemporaneous increases in audit quality, and we include industry and audit firm fixed effects.

## 4. Sample and Empirical Results

### 4.1 Sample Selection and Descriptive Statistics

We obtain accounting and market data from the China Stock Market & Accounting Research (CSMAR) and Wind databases. Panel A of Table 1 presents our sample selection procedures. We begin by considering all firms listed in China from FY 2014 to 2018 (15,679 observations). We retain firms that are publicly listed before 2014 to ensure that the firms have complete audited financial information for our sample years. After deleting nonfinancial firms and firms with missing data of the required variables, we obtain 7,325 firm-year observations, including 7,025 observations of A-share firms (1,405 unique firms) in the main sample and 300 observations of AH-share firms (60 unique firms) used exclusively in the DID analysis (Section 4.3). Table 1, Panel B, which presents the sample distribution by industry, indicates that our sample firms are mostly concentrated in the manufacturing sector.

Table 2 presents the tests of the overall differences in the means of all variables used in our main sample of A-share firms. All continuous variables are winsorized at the 1<sup>st</sup> and 99<sup>th</sup> percentiles. The table shows that the abnormal trading volume (*AVOL*) increases from the

---

<sup>31</sup> B shares are listed for trading by primarily foreign investors denominated in U.S. dollars in the SSE or Hong Kong dollars in the Shenzhen Stock Exchange. Firms that issue B shares comprise a small proportion of the total market (approximately 4% in our sample).

preadoption to postadoption period, but there is no significant change in abnormal returns (*ABCAR*) over the same period. This result provides some preliminary evidence that the market reacts more to KAMs in terms of abnormal trading volume after the new audit reporting requirement.

As previously discussed, if KAMs in expanded audit reports facilitate the flow of firm-specific information to the market, then stock price synchronicity should decrease after the adoption of expanded audit reports. Table 2 shows that *SYNC* decreases from the preadoption to postadoption period, providing some evidence that KAMs provide more firm-specific information for investors. Regarding the control variables used in our main regressions, we find that numerous variables significantly differ between the postadoption period and the preadoption period. These differences indicate the importance of performing a multivariate regression analysis to control for these differences in characteristics between the pre- and postadoption periods.

## 4.2 Main Results

Table 3 presents the regression results of our market reaction tests. Column 1 presents the results using abnormal returns as a proxy for market reaction. The coefficient on *POST* is positive but not significant at the conventional level. Regarding control variables, the market reaction to expanded audit reports is smaller among larger firms and firms with higher betas but is larger among firms with higher analyst following, firms with higher stock return volatility, and firms with modified audit opinions. Hence, we do not find KAMs in expanded audit reports to be incrementally informative when using abnormal returns as a proxy for market reaction.

Column 2 of Table 3 presents the results using the abnormal trading volume as a proxy for market reaction. The coefficient on *POST* is positive and significant ( $p < 0.01$ ), suggesting that the abnormal trading volume is greater after the adoption of expanded audit reports. This result

supports the notion that KAMs contain new information that is useful for investors. One potential reason why we find a significant trading volume reaction but a nonsignificant stock price reaction could be individual investors' differential responses to the new KAM disclosures in expanded audit reports (Kim and Verrecchia 1997); hence, significant trading volume exists even in the absence of price changes (Kandel and Pearson 1995). Regarding control variables, we find that a larger absolute CAR value, a smaller firm size, higher leverage, lower institutional holding, a larger change in EPS, higher stock return volatility, and a lower beta are associated with a higher abnormal trading volume.

Table 4, Column 1, presents the regression results of our ERC test for the full sample. We find that the coefficient on *UE\*POST* is positive and significant ( $p<0.01$ ), indicating that the market reacts more strongly to earnings surprises after the adoption of expanded audit reports. Hence, these results are consistent with the notion that KAMs in expanded audit reports enhance investors' perceptions of financial reporting quality, providing further support for KAM informativeness. Regarding control variables, we find that firms with higher market-to-book ratios and lower sales volatility, as well as profitable firms, have higher ERCS.

In our sample, 48.5% of the firms (3,405 observations) have their EA on the same day as the audit report filing date, while 51.5% of the firms (3,620 observations) have an EA before the audit report filing date.<sup>32</sup> We rerun our ERC test separately for these two subsamples, the results of which are presented in Table 4, Columns 2 and 3. We find that the coefficient on *UE\*POST* is positive and significant ( $p<0.01$ ) in the subsample of firms with EA on the same day as the audit

---

<sup>32</sup> In China, companies are not required to make an EA before the issuance of their annual report. A-share companies listed on the SSE are required to make an EA only if the earnings information has been leaked to the market before the release of the annual report or if there is an earnings-related rumor interfering with the market. The EA requirements of A-share companies listed in the Shenzhen Security Exchange (SZSE) are almost identical and mandate companies to make an EA if they are about to provide management forecasts for the first fiscal quarter (Q1) earnings but the annual report is not ready for issuance.

report filing date, but the coefficient on  $UE^*POST$  is positive but nonsignificant at conventional levels in the subsample of firms with an earlier EA relative to the audit report filing date. The chi-square test of the difference in coefficients on  $UE^*POST$  between these two groups is also significant ( $p<0.05$ ), suggesting that investors react more strongly to earnings surprises after the adoption of expanded audit reports only when the EA is accompanied by the release of the audit report. This result also provides further corroborative evidence that KAM disclosures in the expanded audit report are informative regarding earnings quality.

Finally, Table 5 reports the results of our stock price synchronicity test. The coefficient on  $POST$  is significantly negative ( $p<0.05$ ), suggesting that stock price synchronicity decreases after the adoption of expanded audit reports. This result is consistent with the notion that KAMs in expanded audit reports facilitate the flow of firm-specific information to the capital market, thus enabling investors to focus more on firm-level information for decision making. This finding further supports KAM informativeness.

### 4.3 Robustness Checks

In the Online Appendix, we perform three sets of additional sensitivity analyses. In our main analyses, we use a pre-post adoption research design. To mitigate concerns that our results are driven by concurrent events surrounding the expanded audit report mandate, we perform a propensity-score-matched DID analysis.<sup>33</sup> In the second set of robustness tests, we consider various alternative measures of KAM informativeness. Finally, in the third set of robustness tests, we utilize the entropy balancing technique to address covariate imbalance in the pre- and postadoption samples. Our results remain robust to these additional sensitivity tests.

---

<sup>33</sup> As previously discussed, a small number of AH-share firms adopted the new mandate one year before the other A-share firms did. Hence, we exploit this staggered adoption of expanded audit reports to provide stronger evidence in our main results.

## **5. Additional Analyses**

### **5.1 Cross-Sectional Analysis - Demand for Audit Reports**

In our cross-sectional analyses, we examine whether KAMs are more informative in circumstances in which there is greater investor demand for information. We find some evidence that the increase in KAM informativeness during the postadoption period is more pronounced among non-SOEs, smaller firms, and firms that have a smaller analyst following. These results are discussed in greater details in the Online Appendix.

### **5.2 Investors' Attention to Expanded Audit Reports (Relative to Annual Reports)**

Audit reports are issued concurrently with annual reports. To further support the notion that the investor reaction that we documented earlier is more likely attributable to expanded audit reports than to annual reports, we examine the number of downloads of audit reports relative to the number of downloads of annual reports during the pre- and postadoption periods. We find that the number of audit report downloads relative to that of annual report downloads significantly increases during the postadoption period relative to the preadoption period. This finding supports the notion that the investor reaction we documented earlier is more likely due to the information content of expanded audit reports than to annual reports *per se*. These results are discussed in greater details in the Online Appendix.

### **5.3 ERCs Conditional on Positive and Negative Earnings Surprises**

Prior studies suggest that good news is less credible than is bad news (Hutton et al. 2003; Rogers and Stocken 2005). Therefore, if the expanded audit reports are informative about financial misstatement risks and enhance the credibility of reported earnings, then we expect the informational value of the expanded audit report to be higher for good news than for bad news. In a corroborating analysis, we find that postadoption, investors react more strongly to a positive

earnings surprise at the EA when it is accompanied by an enhanced audit report, which increases the credibility of the good news. In contrast, without the release of the audit reports at the EA, investors react less to positive earnings surprises, which is consistent with the lower credibility of good news, particularly in the absence of the audit report. These results suggest that KAM disclosures in the expanded audit report enhance the credibility of good news but not that of bad news. These results are discussed in greater details in the Online Appendix.

#### **5.4 Analyses of KAM Content**

In the final analysis to corroborate whether investors are indeed responding to KAM disclosures, we explore the content of KAM disclosures and investigate whether the attributes of KAM disclosures (“attribute”) and how auditors address and/or respond to the KAM in the audit procedures (“response”) are related to investors’ response to these disclosures. In addition, we also examine whether investors incorporate information contained in the KAM disclosures in their response to revenue surprises. Therefore, we manually hand-collected the number of KAMs disclosed in audit reports (*KAM\_Number*) and the number of words in KAM disclosures (*KAM\_Totalword*). We also examine the textual characteristics of KAM disclosures, such as their readability (*KAM\_Readscore*) and their similarity to the disclosures of peer firms in the same industry (*KAM\_Simscore*), which we obtain from the Chinese Research Data Services (CNRDS) and WinGo databases. Finally, we examine auditors’ effort in addressing the KAMs (*KAM\_EFFORT*), and we elaborate on how we measure this construct later (the definitions of these KAM variables are outlined in Appendix 2).

Table 6 presents the results of the KAM content analyses. In Panel A, we report the descriptive statistics of the KAM attributes. The mean and median *KAM\_Number* are approximately 2, and the mean and median *KAM\_Totalword* are approximately 1,100 words. Panel

B presents the correlations between these KAM attributes. Unsurprisingly, the number of KAMs disclosed (*KAM\_Number*) is highly correlated with the length of KAM disclosures (*KAM\_Totalword*). We also find that lengthy KAM disclosures (*KAM\_Totalword*) are less readable (*KAM\_Readscore*). KAM disclosures that are more similar to the disclosures of industry peers (*KAM\_Simscore*) report more KAMs (*KAM\_Number*), are lengthier (*KAM\_Totalword*) and are more readable (*KAM\_Readscore*).

Panel C reports the KAM attributes by industry. Except for *KAM\_Totalword*, there is substantial variation in each attribute in each industry, and the average coefficient of variation (standard deviation divided by the mean) of each attribute in each industry ranges from 5.9% (*KAM\_Totalword*) to 33.3% (*KAM\_Simscore*). This finding suggests that KAM disclosures are not purely industry-level boilerplate disclosures but convey firm-specific information. Panel D presents the top 10 KAM topics disclosed in expanded audit reports. Unsurprisingly, the most frequently discussed topics relate to revenue: revenue recognition (32.7%) and accounts receivable allowance (13.0%). The other frequently discussed topics relate to asset impairment or write-downs: goodwill impairment (13.3%), inventory write-downs (11.1%) and property, plant, and equipment (PPE) impairment (4.0%). This frequency of these discussed topics could be due to the difficulty and subjectivity involved in assessing the amount of asset write-downs.

In Panel E, we empirically examine whether the KAM attributes are related to investors' response to KAM disclosures.<sup>34</sup> In Column 1, we find that *KAM\_Simscore* is negatively associated with *AVOL* ( $p<0.10$ ), suggesting that KAM disclosures that are less similar to the disclosures of industry peers convey more firm-specific information and, hence, result in higher levels of

---

<sup>34</sup> For the KAM content regression analyses, we additionally include time fixed effects to account for the unobserved heterogeneity of KAM disclosure practices across time after the adoption of expanded audit reports because firms vary in their adherence to the new disclosure regulation across time.

abnormal trading surrounding KAM disclosures. In Column 3, we find that *KAM\_Simscore* is positively associated with *SYNC* ( $p<0.05$ ), suggesting that KAM disclosures that are less similar to those of industry peers convey more firm-specific information, resulting in less synchronous stock prices. Interestingly, we find that *KAM\_Totalword* is positively associated with *SYNC* ( $p<0.10$ ), suggesting that KAM disclosures that are lengthier convey less firm-specific information and, thus, are associated with more synchronous stock prices. One potential explanation for this result is that KAM disclosures that are lengthy are more complex and difficult for investors to understand (e.g., Li 2008; Bonsall et al. 2017); hence, investors rely more on industry/market information than on complex firm-specific KAM disclosures in making their trading decisions.

Next, in Panel F, we empirically examine whether auditors' effort in addressing KAMs is related to investors' response to KAM disclosures. Therefore, we construct a variable, *KAM\_EFFORT*, calculated as the average number of words in each KAM audit procedure (i.e., the second column of our example in Appendix 1) divided by the average number of words in each KAM description (i.e., the first column of our example in Appendix 1), and include this variable in the main tests. The intuition behind this proxy for auditors' effort is that when auditors communicate more (in terms of the number of words) regarding how audit procedures address the identified KAM relative to the description of the risks in the identified KAM, it signifies the extent of the audit effort expended to address the risk identified in the KAM. Disclosures regarding greater audit effort in addressing risks relative to risk assessment disclosures could give investors more assurance about financial reports (i.e., financial reporting risks are mitigated), thus invoking stronger investor reactions. Consistent with our expectations, Panel F shows that auditors' effort in addressing the risks identified in KAMs is associated with a stronger market reaction ( $p<0.10$  for *KAM\_EFFORT* in Column 1), a higher ERC ( $p<0.10$  for *UE\*KAM\_EFFORT* in Column 2),

and lower price synchronicity (Column 3), although the latter is weakly significant ( $p<0.10$  for *KAM\_EFFORT*, one tailed). This result suggests that investors react to how auditors respond to KAMs.

Finally, we examine whether investors incorporate information in KAM disclosures in their response to revenue surprises. In particular, we focus on KAM disclosures where 1) auditors identify revenue recognition as a KAM (*KAM\_REV*) and 2) auditors disclose the audit procedures and effort to address KAMs (*KAM\_EFFORT*). To this end, we follow the revenue and expenses response coefficient model in Ertimur et al. (2003) to examine whether investors respond differently to revenue surprises, conditional on whether auditors identify revenue recognition as a KAM (the variable definitions are outlined in Appendix 2):

$$\begin{aligned} CAR_{AR} = & \gamma UR + \delta KAM\_REV + \epsilon UEX + \zeta UEX*KAM\_REV \\ & + \sum \beta_n CONTROLS + \sum \varphi_n UEX*CONTROLS + Industry\ FE + Audit\ firm\ FE + \varepsilon \end{aligned} \quad (4)$$

In this test, the dependent variable is  $CAR_{AR}$ , which is the three-day cumulative abnormal return surrounding the audit report filing date to capture investors' response to KAM disclosures in the audit report. The result of estimating the above regression model is presented in Table 6, Panel G, Column 1. We do not document a significant coefficient on  $UR*KAM\_REV$ , which suggests that investors do not respond differently to revenue surprises when auditors identify revenue recognition as a KAM. However, when we partition the sample based on audit effort (*KAM\_EFFORT\_high*), we find that the coefficient on  $UR*KAM\_REV$  remains nonsignificant when audit effort is high (Column 2), but the coefficient on  $UR*KAM\_REV$  is negative and significant ( $p<0.10$ ) when audit effort is low (Column 3). The chi-square test of the difference in coefficients on  $UR*KAM_EFFORT$  between these two groups is also significant ( $p<0.10$ ). This result suggests that investors react less positively to revenue surprises when auditors identify

revenue recognition as a KAM and demonstrate low-level effort in addressing KAMs in their KAM disclosures. This finding suggests that the discussion of auditors' efforts in addressing KAMs is important for investors, especially regarding how they perceive revenue surprises in the presence of a revenue-recognition KAM.

Overall, the results in this section provide corroborative evidence that KAM disclosures are informative and that investors respond to the characteristics of these disclosures.

## **6. Conclusion**

In this study, we examine KAM informativeness in expanded audit reports in a large and important emerging economy, i.e., China. We find that the abnormal trading volume and ERC increase and stock price synchronicity decreases during the postadoption period compared to during the preadoption period of expanded audit reports. These results are robust to a DID research design, using alternative measures for KAM informativeness and the entropy balancing technique. We also find that expanded audit reports are more informative for non-SOEs, smaller firms, and firms that have a smaller analyst following. Finally, some evidence suggests that the characteristics of KAM content are related to investors' responses to KAMs.

There are a few important caveats in this study. First, because an annual report is published for the first time along with an audit report, our findings could potentially be affected by the information disclosed in an annual report that is not controlled for in the empirical research design. Second, prior studies argue that trading volume captures information content and investor disagreement regarding new information. Hence, our trading volume tests can only establish information content in KAM disclosures, but we cannot completely rule out KAM disclosures leading to more investor disagreement; thus, our findings should be interpreted with caution. Similarly, our results on stock price synchronicity can establish only whether investors rely more

on firm-specific information in their trading decisions. To the extent that stock price synchronicity also captures noise, especially in illiquid stock markets such as China (Gassen et al. 2020; Hu et al. 2019), our results on stock price synchronicity should also be interpreted with caution. Notwithstanding these caveats, our findings complement existing studies that find that KAMs in expanded audit reports are not incrementally informative in a large and developed economy, such as the U.K. Our findings in China may also be generalizable to other large developing economies with weak institutions and a strong SOE presence, such as Brazil, India and Russia.

## REFERENCES

- Allen, F., J. Qian, C. Shan, and J.L. Zhu. 2020. The development of the Chinese stock market. In M. Amstad, G. Sun, and W. Xiong (Ed.). *The Handbook of China's Financial System*. Princeton, NJ: Princeton University Press.
- Almulla, M., and M.E. Bradbury. 2019. Auditor, client, and investor consequences of the enhanced auditor's report. Working paper, BDO Auckland and Massey University.
- Altawalbeh, M.A.F., and M.E.S. Alhajaya. 2019. The investor reaction to the disclosure of key audit matters: Empirical evidence from Jordan. *International Business Research* 12 (3): 50-57.
- Ang, J. S., and Y. Ma. 1999. Transparency in Chinese stocks: A study of earnings forecasts by professional analysts. *Pacific-Basin Finance Journal* 7 (2): 129-155.
- Angrist, J. D., and Pischke, J.-S. 2008. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press.
- Ball, R., S.P. Kothari, and A. Robin. 2000. The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics* 29 (1): 1-51.
- 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.
- Bedard, J., N. Gonthier-Besacier, and A. Schatt. 2019. Consequences of expanded audit report: Evidence from the justifications of assessments in France. *Auditing: A Journal of Practice and Theory* 38 (3): 23-45.
- Bhattacharya, N., F. Ecker, P.M. Olsson, and K. Schipper. 2012. Direct and mediated associations among earnings quality, information asymmetry, and the cost of equity. *The Accounting Review* 87 (2): 449-482.
- Bonsall IV, S.B., A.J. Leone, B.P. Miller, and K. Rennekamp. 2017. A plain English measure of financial reporting readability. *Journal of Accounting and Economics* 63, 329-357.
- 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.
- Burke, J.J., R. Hoitash, U. Hoitash, and S. Xiao. 2022. The disclosure and consequences of U.S. critical audit matters. *The Accounting Review*, forthcoming.
- Chapman, K. L., G.S. Miller, and H.D. White. 2019. Investor relations and information assimilation. *The Accounting Review* 93 (2): 105-131.
- CFA Institute. 2013. Comment letter to the Financial Reporting Council on the proposed revision of ISA 700 (UK and Ireland). April 17, 2013.
- Chen, Z., B. Ke, and Z. Yang. 2013. Minority shareholders' control rights and the quality of corporate decisions in weak investor protection countries: A natural experiment from China. *The Accounting Review* 88: 1211-1238.
- Chen, Q., X. Jiang, and Y. Zhang. 2019. The effects of audit quality disclosure on audit effort and investment efficiency. *The Accounting Review* 94 (4): 189-214.
- Chen, C.J., X. Su, and R. Zhao. 2000. An emerging market's reaction to initial modified audit opinions: Evidence from the Shanghai Stock Exchange. *Contemporary Accounting Research* 17 (3): 429-455.

- Chinese Institute of Certified Public Accountants (CICPA). 2016. China Standards on Auditing 1504: Communicating Key Audit Matters in the Independent Auditor's Report. Beijing. Available at: [http://www.cicpa.org.cn/news/201612/t20161228\\_49409.html](http://www.cicpa.org.cn/news/201612/t20161228_49409.html) (CN)
- Drake, K.D., N.C. Goldman, S.J. Lusch, and J.J. Schmidt. 2021. Does the initial disclosure of tax-related critical audit matters constrain tax-related earnings management? Working paper, University of Arizona.
- Ertimur, Y., J. Livnat, and M. Martikainen. 2003. Differential market reactions to revenue and expense surprises. *Review of Accounting Studies* 8, 185-211.
- Ferri, F., R. Zheng, and Y. Zou. 2018. Uncertainty about managers' reporting objectives and investors' response to earnings reports: Evidence from the 2006 executive compensation disclosures. *Journal of Accounting and Economics* 66 (2-3): 339-365.
- Financial Reporting Council (FRC). 2013a. Consultation paper: Revision to ISA (UK and Ireland) 700 – Requiring the auditor's report to address risks of material misstatement, materiality, and a summary of the audit scope. London.
- Financial Reporting Council (FRC). 2013b. ISA (UK and Ireland) 700 – The independent auditor's report on financial statements (June 2013). London.
- Fischer, P.E., and R.E. Verrecchia. 2000. Reporting bias. *The Accounting Review* 75(2): 229-245.
- Gassen, J., H.A., Skaife, and D. Veenman. (2020). Illiquidity and the measurement of stock price synchronicity. *Contemporary Accounting Research* 37 (1): 419–456.
- Gipper, B., C. Leuz, and M. Maffett. 2020. Public oversight and reporting credibility: Evidence from the PCAOB audit inspection regime. *The Review of Financial Studies* 33 (10): 4532-4579.
- Guan, Y., L.N. Su, D. Wu, and Z. Yang. 2016. Do school ties between auditors and client executives influence audit outcomes? *Journal of Accounting and Economics* 61 (2-3): 506-525.
- Gul, F.A., J.B. Kim, and A.A. Qiu. 2010. Ownership concentration, foreign shareholding, audit quality, and stock price synchronicity: Evidence from China. *Journal of Financial Economics* 95 (3): 425-442.
- Gutierrez, E., M. Minutti-Meza, K.W. Tatum, and M. Vulcheva. 2018. Consequences of adopting an expanded auditor's report in the United Kingdom. *Review of Accounting Studies* 23 (4): 1543-1587.
- Hainmueller, J. 2012. Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political Analysis* 20 (1): 25-46.
- He, X., T.J. Wong, and D. Young. 2012. Challenges for implementation of fair value accounting in emerging markets: Evidence from China. *Contemporary Accounting Research* 29 (2): 538-562.
- Hu, Y., T. Zhao, and L. Zhang. (2019). Does low price synchronicity mean more informativeness in stock prices? Empirical evidence on information integration speed in the Chinese stock market. *Emerging Markets Finance and Trade* 55 (5): 1014–1033.
- Hutton, A.P., G.S. Miller, and D.J. Skinner. 2003. The role of supplementary statements with management earnings forecasts. *Journal of Accounting Research* 41 (5): 867-890.
- International Auditing and Assurance Standards Board (IAASB). 2015. International Standard on Auditing (ISA) 701, Communicating Key Audit Matters in the Independent Auditor's Report. New York. Available at: <https://www.iaasb.org/publications/international-standard-auditing-isa-701-new-communicating-key-audit-matters-independent-auditors-4>
- Jian, M., and T.J. Wong. 2010. Propping through related party transactions. *Review of Accounting Studies* 15 (1): 70-105.

- Jiang, H., D. Zhou, and J.H. Zhang. 2019. Analysts' information acquisition and stock price synchronicity: A regulatory perspective from China. *Accounting Horizons* 33 (1): 153-179.
- Jin, L., and S.C. Myers. 2006. R2 around the world: New theory and new tests. *Journal of Financial Economics* 79 (2): 257-292.
- Kandel, E., and N. Pearson. 1995. Differential interpretation of public signals and trade in speculative markets. *Journal of Political Economy* 103: 831-872.
- Ke, B., C.S. Lennox, and Q. Xin. 2015. The effect of China's weak institutional environment on the quality of Big 4 audits. *The Accounting Review* 90 (4): 1591-1619.
- Kim, O., and R.E. Verrecchia. 1997. Pre-announcement and event-period private information. *Journal of Accounting and Economics* 24: 395-419.
- Kothari, S.P., A.J. Leone, and C.E. Wasley. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39 (1): 163-197.
- Kronmal, R. A. 1993. Spurious correlation and the fallacy of the ratio standard revisited. *Journal of the Royal Statistical Society. Series A (Statistics in Society)* 156 Part 3: 379-392.
- Lambert, R.A., C. Leuz, and R.E. Verrecchia. 2011. Information asymmetry, information precision, and the cost of capital. *Review of Finance* 16: 1-29.
- Lang, M., and R. Lundholm. 1993. Cross-sectional determinants of analyst ratings of corporate disclosures. *Journal of Accounting Research* 31: 246-71.
- Lang, M., and R. Lundholm. 1996. Corporate disclosure policy and analyst behavior. *The Accounting Review* 71: 467-92.
- Leippold, M., Q. Wang, and W. Zhou. 2021. Machine learning in the Chinese stock market. *Journal of Financial Economics* 145 (2): 64-82.
- Lennox, C. S., J.J. Schmidt, and A. Thompson. 2022. Why are expanded audit reports not informative to investors? Evidence from the United Kingdom. *Review of Accounting Studies*, forthcoming.
- Leuz, C., D. Nanda, and P.D. Wysocki. 2003. Earnings management and investor protection: an international comparison. *Journal of Financial Economics* 69 (3): 505-527.
- Li, F. 2008. Annual report readability, current earnings, and earnings persistence. *Journal of Accounting and Economics* 45, 221-247.
- Li, H., D. Hay, and D. Lau. 2019. Assessing the impact of the new auditor's report. *Pacific Accounting Review* 31 (1): 110-132.
- Liao, L., M. Minutti-Meza, Y. Zhang, and Y. Zou. 2019. Consequences of the adoption of the expanded auditor's report: Evidence from Hong Kong. Working Paper, Southwestern University of Finance & Economics, University of Miami, and The George Washington University.
- Liao, L., D. Sharma, Y. Yang, and R. Zhao. 2021. Adoption and content of key audit matters and stock price crash risk. Working paper, Nanjing Audit University.
- McMullin, J. L., and B. Schonberger. 2020. Entropy-balanced accruals. *Review of Accounting Studies* 25: 84-119.
- Minutti-Meza, M., 2021. The art of conversation: The expanded audit report. *Accounting and Business Research* 51 (5): 548-581.
- Piotroski J.D., and T.J. Wong. 2012. Institutions and information environment of Chinese listed firms: Capitalizing China. University of Chicago Press 201-242.

- Piotroski, J.D., T.J. Wong, and T. Zhang. 2015. Political incentives to suppress negative information: Evidence from Chinese listed firms. *Journal of Accounting Research* 53 (2): 405-459.
- Public Company Accounting Oversight Board (PCAOB). 2017. The auditor's report on an audit of financial statements when the auditor expresses an unqualified opinion and related amendments to PCAOB standards. Washington. Available at: <https://pcaobus.org/Rulemaking/Docket034/2017-001-auditors-report-final-rule.pdf>
- Reid, L.C., J.V. Carcello, C. Li, and T.L. Neal. 2019. Impact of auditor report changes on financial reporting quality and audit costs: Evidence from the United Kingdom. *Contemporary Accounting Research*. 36 (3): 1501-39.
- Rogers, J.L., and P.C. Stocken. Credibility of management forecasts. *The Accounting Review* 80 (4): 1233-1260.
- Roll, R., 1988.  $R^2$ . *Journal of Finance* 43, 541–566.
- Shipman, J.E., Q.T. Swanquist, and R.L. Whited. 2017. Propensity score matching in accounting research. *The Accounting Review* 92 (1): 213-244.
- Shroff, N., R.S. Verdi, and B.P. Yost. 2017. When does the peer information environment matter? *Journal of Accounting and Economics* 64 (2-3): 183-214.
- Sirois, L.P., J. Bédard, and P. Bera. 2018. The informational value of key audit matters in the auditor's report: Evidence from an eye-tracking study. *Accounting Horizons* 32 (2): 141-162.
- Touche, W. 2014. PCAOB Public Meeting on the Auditor's Reporting Model. April 3, 2014.
- Verrecchia, R.E. 2001. Essays on disclosure. *Journal of Accounting and Economics* 32: 97-180.
- Wang, Q., T.J. Wong, and L. Xia. 2008. State ownership, institutional environment, and auditor choice: Evidence from China. *Journal of Accounting and Economics* 46 (1): 112-134.
- Zeng, Y., J.H. Zhang, J. Zhang, and M. Zhang. 2021. Key audit matters reports in China: Their descriptions and implications of audit quality. *Accounting Horizons* 35 (2): 167-192.

## APPENDIX 1

### Excerpt from the YTO Express 2018 Annual Report, KAM section of the audit report (translated from Chinese)

KAM	How our audit addresses the KAM
<p>(1) Revenue recognition of express service</p> <p>Item description</p> <p>YTO Express's revenue is derived mainly from express services for franchisees. In 2018, the sales revenue of express services was RMB ¥23,338,199,088.83, accounting for 84.97% of the consolidated income of YTO Express. As the revenue from express services accounts for a significant proportion, it is the main income source of YTO Express and affects key performance indicators. In addition, such transactions occur frequently and involve many franchisees, and thus, the inherent risk of misstatement is high. Therefore, we regard the recognition of revenue from express services as a KAM.</p> <p>According to Note 3 (25) in its financial statements, YTO Express provides sorting and transshipment services for the express deliveries received by franchisees in accordance with the franchise contract signed with franchisees. The express business model is divided into four steps: collection, sorting, transporting and delivering. The remuneration related to express services and the main risks associated with it are transferred at delivery completion. According to the general principle of revenue recognition, the company's revenue recognition is confirmed at the time when the express service is completed.</p>	<p>The audit procedures we implement include mainly the following:</p> <ol style="list-style-type: none"> <li>1. Understanding and evaluating YTO's revenue recognition policy by reviewing the franchise contract and interviewing management.</li> <li>2. Testing the internal control of sales and payment cycle, settlement point, and the general and application control of the business and financial information systems of YTO Express.</li> <li>3. Performing substantive analytical procedures on the detailed data of accounts receivable, advance payments and operating income to check whether there are any anomalies or major fluctuations.</li> <li>4. Selecting samples to perform confirmation procedures for YTO Express franchisees' sales, account receivables and accounts received in advance.</li> <li>5. Selecting samples and conducting interviews with franchisees, asking them whether there were significant differences in payment settlement, business volume and sales.</li> <li>6. Selecting the receipt number, rechecking the completeness of its lifecycle, checking the transport route from the transport alliance system, confirming the originating outlets, transiting centers and destination outlets that the express order passes through, checking the consumption records of electronic toll collection (ETC) transit fees of their own transport vehicles, and confirming the authenticity of the express service revenue.</li> <li>7. Performing sample tests on sales revenue recognized before and after the balance sheet date and checking them against business documents to assess whether sales revenue is recognized in the appropriate period.</li> </ol>

## APPENDIX 2

### Variable Definitions

Variables	Definitions
<i>ABCAR</i>	Absolute value of the cumulative abnormal return around the release of the audit report, which is calculated as follows: $\sum_t^T (R_{it} - R_{mt})$ , where $R_{it}$ is the daily stock return adjusted by cash dividends and $R_{mt}$ is the daily market return weighted by firm value. Event window $T$ is the three days [-1, 1] around the release of the audit report.
$ABCAR_{[-2, 2]}$	Five-day absolute cumulative abnormal return, which is estimated like <i>ABCAR</i> , except for the event window $T$ being five days [-2, 2] around the release of the audit report.
$ABCAR_{adj}$	The firm-specific adjusted absolute cumulative abnormal return is the absolute value of the firm-specific adjusted cumulative abnormal return, calculated as follows: (1) we first estimate the correlation coefficients between $R_{it}$ (i.e., individual stock return) and $R_{mt}$ (i.e., market stock return) during the nondisclosure window, i.e., [-60, -11] prior to the release of the audit report, using the regression specification $R_{it} = \alpha_0 + \alpha_1 R_{mt}$ ; (2) then, we obtain the expected $R_{it}'$ value by calculating $\bar{\alpha}_0 + \bar{\alpha}_1 R_{mt}'$ over the event window [-1, 1] around the release of the audit report; and (3) $CAR$ is the sum of abnormal return $R_{it}' - (\bar{\alpha}_0 + \bar{\alpha}_1 R_{mt}')$ over three days [-1, 1].
<i>Analysts</i>	Number of analysts following the firm.
<i>Analysts_low</i>	An indicator that equals one if the number of analysts following the firm is below the sample median and zero otherwise.
<i>AVOL</i>	Abnormal trading volume calculated as follows: $\frac{1}{T} \sum_t^T \left( \frac{VOL_{it}}{OS_{it}} - \frac{MVOL_t}{MOS_t} \right)$ , where $VOL_{it}$ is firm i's trading volume on day t, $OS_{it}$ is firm i's outstanding shares on day t, $MVOL_t$ represents the market's trading volume on day t, and $MOS_t$ represents the market's outstanding shares on day t. Event window $T$ is the three-day window [-1, 1] around the release of the audit report. We standardize this variable.
$AVOL_{[-2, 2]}$	Five-day abnormal trading volume, which is estimated like <i>AVOL</i> , except for the event window $T$ being five days [-2, 2] around the release of the audit report.
$AVOL_{adj}$	Firm-specific adjusted abnormal trading volume is calculated as follows: $\ln \left( \frac{1/T_1 \sum_{t_1}^{T_1} VOL_{it_1}}{1/T_2 \sum_{t_2}^{T_2} VOL_{it_2}} \right)$ , where $VOL_{it}$ is firm i's trading volume on day t, event window $T_1$ is the three-day window [-1, 1] around the release of the audit report, and nondisclosure window $T_2$ is the 50-day window [-60, -11] prior to the release of the audit report.
$AVOL_{med\_adj}$	Firm-specific median-adjusted abnormal trading volume is calculated as follows: $\ln \left( \frac{1/T_1 \sum_{t_1}^{T_1} VOL_{it_1}}{\text{median value over } T_2 \text{ of } VOL_{it_2}} \right)$ , where $VOL_{it}$ is firm i's trading volume on day t, event window $T_1$ is the three-day window [-1, 1] around the release of the audit report, and nondisclosure window $T_2$ is the 50-day window [-60, -11] prior to the release of the audit report.
<i>BETA</i>	Slope coefficient of the regression of weekly stock returns on equally weighted market returns.
<i>BL</i>	Sum of investment net income, profits from other operations, and nonoperating net income divided by total assets at fiscal year-end.

<i>BSHARE</i>	Indicator variable that equals one if the firm also issues B shares and zero otherwise.
<i>CAR</i>	$\sum_t^T (R_{it} - R_{mt})$ , where $R_{it}$ is the daily stock return adjusted by cash dividends and $R_{mt}$ is the daily market return weighted by firm value. Event window $T$ is the three days [-1, 1] around the EA.
<i>CAR<sub>AR</sub></i>	$\sum_t^T (R_{it} - R_{mt})$ , where $R_{it}$ is the daily stock return adjusted by cash dividends and $R_{mt}$ is the daily market return weighted by firm value. Event window $T$ is the three days [-1, 1] around the release of the audit report.
<i>CFO</i>	Net operating cash flow divided by total assets at fiscal year-end.
<i>DACC</i>	Discretionary accruals estimated using the methodology described in Kothari et al. (2005).
<i>ΔEPS</i>	Change in basic EPS over the year.
<i>INST</i>	Proportion of institutional shareholding.
<i>KAM_EFFORT</i>	Measure of auditors' efforts to address the identified KAMs calculated by dividing the average number of words in each KAM audit procedure by the average number of words in each KAM description. Data obtained from the CNRDS database (see <a href="https://www.cnrds.com/Home/Login">https://www.cnrds.com/Home/Login</a> )
<i>KAM_EFFORT_high</i>	Indicator variable that equals one if the <i>KAM_EFFORT</i> is above the sample median and zero otherwise.
<i>KAM_Number</i>	Number of KAMs disclosed in the audit report. Data obtained from the CNRDS database (see <a href="https://www.cnrds.com/Home/Login">https://www.cnrds.com/Home/Login</a> )
<i>KAM_Readscore</i>	Textual readability score of the KAMs disclosed in the audit report; the score measures the logarithmic mean of the conditional generation probability of the sentences in the text. The higher the value is, the higher the frequency of the word pair collocation order in the text in the corpus and the higher the readability of the text. The score is obtained from the WinGo database (see <a href="http://www.wingodata.com/#/cn/pages/wenben?id=2&amp;type=1&amp;wenben=5">http://www.wingodata.com/#/cn/pages/wenben?id=2&amp;type=1&amp;wenben=5</a> ).
<i>KAM_Simscore</i>	Textual similarity score of the KAMs disclosed in the audit report; the score compares the frequency of each word attributed to KAMs with the median value of other peers' text in the same industry using the term frequency-inverse document frequency (TF-IDF) method. The higher the value is, the more similar the text. The score is obtained from the WinGo database (see <a href="http://www.wingodata.com/#/cn/pages/wenben?id=2&amp;type=3&amp;wenben=5">http://www.wingodata.com/#/cn/pages/wenben?id=2&amp;type=3&amp;wenben=5</a> ).
<i>KAM_Totalword</i>	Natural logarithm of the number of words attributed to all KAMs disclosed in the audit report. Data obtained from the CNRDS database (see <a href="https://www.cnrds.com/Home/Login">https://www.cnrds.com/Home/Login</a> )
<i>LAF</i>	Natural logarithm of audit fees in the fiscal year.
<i>LEV</i>	Leverage ratio computed as the ratio of total liabilities to total assets at fiscal year-end.
<i>LnMV</i>	Natural logarithm of market value at fiscal year-end.
<i>Loss</i>	Indicator variable that equals one if net income is negative and zero otherwise.
<i>MAO</i>	Indicator variable that equals one if the audit opinion is modified (i.e., unqualified opinions with explanatory notes, qualified opinions, and disclaimers or adverse opinions) and zero otherwise.
<i>MTB</i>	Market value divided by net equity value at fiscal year-end.
<i>MV_low</i>	Indicator variable that equals one if the firm's market value is below the sample median and zero otherwise.
<i>NLUE</i>	Nonlinear part of unexpected earnings, i.e., $UE$ times the absolute value of $UE$ .

<i>POST</i>	Indicator variable that signifies the postadoption period of expanded audit reports for A-share firms, which equals one for A-share firms in FY 2017 and 2018 and zero otherwise.
<i>POSTAH</i>	Indicator variable that signifies the postadoption period of expanded audit reports for AH-share firms, which equals one for AH-share firms in FY 2016 and zero otherwise.
<i>QFII</i>	Proportion of qualified foreign investor holding.
<i>RD</i>	Number of downloads of auditor reports divided by the number of downloads of annual reports of each firm. Download information is obtained from the JuChao platform ( <a href="http://www.chinfo.com.cn">www.chinfo.com.cn</a> ).
<i>ROA</i>	Net income divided by total assets at fiscal year-end.
<i>SDRET</i>	Stock volatility measured by the standard deviation of the weekly stock returns over the fiscal year.
<i>SIZE</i>	Natural logarithm of total assets at fiscal year-end.
<i>SOE</i>	Indicator variable that equals one if the controlling shareholder is state owned and zero otherwise.
<i>SP</i>	Indicator variable that equals one if the firm reports return on equity between 0 and 0.01 and zero otherwise.
<i>SYNC, Rsquare</i>	Stock price synchronicity, which is the log transformation, i.e., $\ln(R^2 / 1 - R^2)$ , of the goodness of regression fit $R^2$ ( <i>Rsquare</i> ) of stock return comovement. We capture this variable using the following regression specification: $R_{it} = \beta_0 + \beta_1 R_{mt} + \beta_2 R_{mt-1} + \beta_3 R_{indt} + \beta_4 R_{indt-1} + \varepsilon_{it}$ , where $R_{it}$ , $R_{mt}$ , and $R_{indt}$ represent the (average) stock return of firm $i$ , its overall market, and its industry on day $t$ , respectively. The estimation window is 30 days following the release of the audit report.
<i>SYNC<sub>[0,90]</sub>, Rsquare<sub>[0,90]</sub></i>	Ninety-day stock price synchronicity, which is estimated as <i>SYNC (Rsquare)</i> , except for the estimation window being 90 days [0, 90] following the release of the audit report.
<i>TOPHOLD</i>	Proportion of shares held by the top shareholder.
<i>TOPHOLD2</i>	Square of <i>TOPHOLD</i> .
<i>TREAT</i>	Indicator variable that equals one for AH-share firms and zero for A-share firms.
<i>UE</i>	Calculated as the change in EPS over the year deflated by the prior fiscal year-end stock price.
<i>UE<sub>alt</sub></i>	Alternative measure of unexpected earnings calculated as the current EPS minus the median value of analysts' forecasts no more than 12 months prior to the release of the audit report and then deflated by the prior fiscal year-end stock price.
<i>UEX</i>	Calculated as the change in expenses per share over the year deflated by the prior fiscal year-end stock price, where expenses is defined as revenue minus earnings.
<i>UR</i>	Calculated as the change in revenue per share over the year deflated by the prior fiscal year-end stock price.
<i>VOL</i>	Natural logarithm of the firm's average stock turnover measured as total shares traded divided by total shares outstanding over the fiscal year.

**TABLE 1**  
**Sample**

**Panel A: Sample selection process**

Sample selection criteria	Firm-years from FY 2014 to 2018
All listed companies in China's A-share market	15,679
Retained: companies listed before 2014	12,200
Retained: nonfinancial companies	11,870
Retained: nonmissing data used to calculate the stock return, trading volume, and stock price synchronicity around the release of the report	10,661
Retained: all data existing for five years, i.e., a balanced panel sample	7,325
Final sample	7,325
A-share firms	7,025 (=1,405*5)
AH-share firms	300 (=60*5)

**Panel B: Sample distribution by industry**

Industry classification by the CSRC	Composition in the final sample	Composition in the initial sample
A Agriculture, forestry, animal husbandry and fishery	1.57%	1.10%
B Mining	3.07%	2.06%
C1 Manufacturing sector 1	6.62%	6.05%
C2 Manufacturing sector 2	18.43%	18.08%
C3 Manufacturing sector 3	35.43%	36.74%
C4 Manufacturing sector 4	1.37%	1.97%
D Electricity, heat, gas and water production and supply	4.30%	2.91%
E Construction	2.73%	2.54%
F Wholesale and retail trade	5.60%	4.42%
G Transportation, warehousing and postal services	4.16%	2.76%
H Accommodation and catering	0.34%	0.24%
I Software and information technology services	6.14%	7.83%
J Financials	N/A	2.89%
K Real estate	4.85%	3.35%
L Leasing and business services	1.23%	1.44%
M Scientific research and technical services	0.68%	1.54%
N Water conservancy and public facilities management	1.16%	1.37%
O Residential services, repairs and other services	N/A	0.03%
P Education	0.27%	0.21%
Q Health and social work	0.27%	0.32%
R Culture, sports and entertainment	1.16%	1.58%
S Others	0.61%	0.58%
	100%	100%

**TABLE 2**  
**Descriptive Statistics of A-Share Firms Comparing Pre- vs. Postadoption Periods**

Variable	Postadoption period (2,810 obs.)		Preadoption period (4,215 obs.)		(1) - (3)
	(1)	(2)	(3)	(4)	
<b>Market Reaction Analyses</b>					
<i>ABCAR</i>	0.036	0.026	0.037	0.027	-0.001
<i>AVOL</i>	0.005	-0.218	-0.081	-0.409	0.086 ***
<i>LnMV</i>	22.67	22.53	22.91	22.80	-0.239 ***
<i>LEV</i>	0.431	0.428	0.423	0.412	0.008 *
<i>INST</i>	0.430	0.450	0.426	0.444	0.004
<i>Analysts</i>	4.793	2.000	4.556	3.000	0.237 *
<i>MTB</i>	2.666	2.035	4.662	3.595	-1.996 ***
<i>ΔEPS</i>	-0.315	0.020	-0.486	-0.106	0.172 **
<i>ROA</i>	0.039	0.035	0.044	0.037	-0.004 ***
<i>SDRET</i>	0.360	0.344	0.525	0.476	-0.165 ***
<i>BETA</i>	1.246	1.210	1.012	1.087	0.234 ***
<i>MAO</i>	0.018	0.000	0.014	0.000	0.004
<i>DACC</i>	-0.001	-0.002	-0.004	-0.003	0.004 ***
<i>LAF</i>	13.97	13.91	13.77	13.71	0.196 ***
<i>SP</i>	0.051	0.000	0.051	0.000	0.000
<i>BL</i>	0.013	0.006	0.020	0.011	-0.007 ***
<b>ERC Analyses</b>					
<i>CAR</i>	0.001	-0.004	0.001	-0.003	0.001
<i>UE</i>	-0.001	-0.000	-0.003	-0.001	0.002 ***
<i>CFO</i>	0.044	0.042	0.050	0.048	-0.006 ***
<i>SDSales</i>	0.128	0.035	0.077	0.022	0.051 ***
<i>Loss</i>	0.082	0.000	0.069	0.000	0.013 *
<b>Price Synchronicity Analyses</b>					
<i>SYNC</i>	0.081	0.099	0.154	0.208	-0.073 ***
<i>TOPHOLD</i>	0.332	0.311	0.349	0.330	-0.017 ***
<i>TOPHOLD2</i>	0.130	0.097	0.144	0.109	-0.013 ***
<i>QFII</i>	0.002	0.000	0.002	0.000	0.000
<i>SIZE</i>	22.62	22.50	22.30	22.16	0.317 ***
<i>VOL</i>	1.499	1.456	2.210	2.236	-0.711 ***
<i>SOE</i>	0.432	0.000	0.432	0.000	0.000
<i>BSHARE</i>	0.037	0.000	0.037	0.000	0.000

This table reports the descriptive statistics of our variables of interest and control variables during the pre- and postadoption periods and the results of *t* tests of the differences in means between the two groups. Variable definitions are provided in Appendix 2. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

**TABLE 3**  
**Market Reaction Analyses**

Dep. Var. =	(1) <i>ABCAR</i>	(2) <i>AVOL</i>
<b><i>POST</i></b>	<b>0.0021</b> <b>(1.078)</b>	<b>0.1874***</b> <b>(5.015)</b>
<i>ABCAR</i>		7.9764*** (16.076)
<i>LnMV</i>	-0.0049*** (-5.876)	-0.1752*** (-8.704)
<i>LEV</i>	0.0021 (0.908)	0.2759*** (3.782)
<i>INST</i>	-0.0014 (-0.755)	-0.6117*** (-9.390)
<i>Analysts</i>	0.0004*** (3.609)	0.0037* (1.664)
<i>MTB</i>	0.0000 (0.180)	-0.0039 (-1.020)
<i>ΔEPS</i>	-0.0001 (-0.942)	0.0108*** (3.867)
<i>ROA</i>	0.0113 (0.806)	-0.3947 (-1.259)
<i>SDRET</i>	0.0093** (2.466)	0.9859*** (11.308)
<i>BETA</i>	-0.0086*** (-7.455)	-0.1200*** (-4.650)
<i>MAO</i>	0.0087* (1.785)	0.0468 (0.496)
<i>DACC</i>	0.0023 (0.306)	0.0474 (0.323)
<i>LAF</i>	0.0002 (0.189)	-0.0003 (-0.013)
<i>SP</i>	-0.0007 (-0.399)	0.0395 (0.967)
<i>BL</i>	-0.0203 (-1.368)	1.6044*** (3.857)
Constant	0.1475*** (8.875)	3.4535*** (8.527)
Industry FE	Yes	Yes
Audit Firm FE	Yes	Yes
Obs.	7,025	7,025
R <sup>2</sup>	0.046	0.273

This table reports the pre-post regression results of the analyses of the market reaction to the adoption of expanded audit reports that contain KAMs. The dependent variable is the absolute cumulative abnormal returns (*ABCAR*) in Column 1 and abnormal trading volume (*AVOL*) in Column 2. Variable definitions are provided in Appendix 2. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).

**TABLE 4**  
**ERC Analysis**

Dep. Var. =	All Sample	Sample with EA on the same date as the audit report filing date	Sample with EA earlier than the audit report filing date
	(1) <i>CAR</i>	(2) <i>CAR</i>	(3) <i>CAR</i>
<i>UE</i>	-2.0700 (-1.649)	-2.4974 (-1.435)	-1.8576 (-1.261)
<i>POST</i>	0.0070*** (3.612)	0.0035 (1.282)	0.0094*** (3.369)
<i>UE*POST</i>	<b>0.1858***</b> <b>(2.773)</b>	<b>0.3196***</b> <b>(2.816)</b>	<b>0.0180</b> <b>(0.206)</b>
<i>LnMV</i>	0.0004 (0.295)	0.0036* (1.917)	-0.0014 (-0.899)
<i>LnMV*UE</i>	0.0903 (1.444)	0.0919 (1.073)	0.0945 (1.123)
<i>MTB</i>	-0.0003 (-1.345)	0.0004 (1.302)	-0.0015*** (-3.723)
<i>MTB*UE</i>	0.0578*** (2.835)	0.0591** (2.148)	0.0317 (1.028)
<i>LEV</i>	-0.0029 (-0.719)	-0.0038 (-0.626)	-0.0012 (-0.263)
<i>LEV*UE</i>	-0.0695 (-0.353)	-0.0507 (-0.170)	0.0711 (0.264)
<i>CFO</i>	-0.0515*** (-2.730)	-0.0410 (-1.595)	-0.0419 (-1.424)
<i>CFO*UE</i>	-0.9474 (-1.042)	-0.7523 (-0.552)	-1.1287 (-0.906)
<i>SDSales</i>	-0.0027 (-1.419)	-0.0014 (-0.603)	-0.0042 (-1.060)
<i>SDSales*UE</i>	-0.2488** (-2.392)	-0.2244* (-1.677)	-0.4031** (-2.169)
<i>Analysts</i>	0.0004*** (2.882)	-0.0001 (-0.266)	0.0006*** (3.614)
<i>Analysts *UE</i>	0.0048 (0.699)	0.0092 (0.833)	0.0049 (0.484)
<i>Loss</i>	-0.0106*** (-3.632)	-0.0088 (-1.626)	-0.0133*** (-4.139)
<i>Loss*UE</i>	-0.2433** (-2.400)	-0.2187 (-1.129)	-0.3002*** (-2.804)
<i>MAO</i>	-0.0030 (-0.491)	-0.0080 (-0.854)	-0.0045 (-0.473)
<i>MAO*UE</i>	0.3186 (1.145)	0.2397 (0.839)	0.3715 (0.739)
<i>DACC</i>	-0.0568*** (-2.842)	-0.0597** (-2.132)	-0.0361 (-1.223)
<i>DACC*UE</i>	-0.2500 (-0.242)	0.5173 (0.365)	-0.8783 (-0.601)
<i>LAF</i>	-0.0011 (-0.691)	-0.0021 (-0.874)	-0.0001 (-0.031)
<i>LAF*UE</i>	0.0004 (0.005)	0.0196 (0.160)	-0.0119 (-0.108)
<i>SP</i>	-0.0002 (-0.100)	0.0045 (1.386)	-0.0051 (-1.560)
<i>SP*UE</i>	0.1069	0.1301	0.0330

	(0.806)	(0.853)	(0.151)
<i>BL</i>	-0.0504** (-2.395)	-0.0415 (-1.434)	-0.0559 (-1.539)
<i>BL*UE</i>	-1.5448 (-1.027)	-2.7413 (-1.554)	1.8102 (0.895)
Constant	0.0123 (0.551)	-0.0497 (-1.390)	0.0406 (1.286)
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Test equality of coefficients ( <i>UE*POST</i> ) in Col. (2) vs. Col. (3)		$\chi^2=3.85^{**}$ p value=0.049	
Obs.	7,025	3,405	3,620
R <sup>2</sup>	0.031	0.034	0.065

This table reports the pre-post regression results of the ERCs around the adoption of expanded audit reports that contain KAMs. The dependent variable is the cumulative abnormal returns (*CAR*). Columns (1), (2), and (3) are based on the full sample, the sample in which the EA is on the same date as the audit report filing date, and the sample in which the EA is earlier than the audit report filing date, respectively. Variable definitions are provided in Appendix 2. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).

**TABLE 5**  
**Stock Price Synchronicity Analysis**

Dep. Var. =	SYNC
<i>POST</i>	<b>-0.1013**</b> (-1.999)
<i>TOPHOLD</i>	0.1091 (0.335)
<i>TOPHOLD2</i>	-0.3656 (-0.875)
<i>QFII</i>	-3.9778*** (-3.095)
<i>SIZE</i>	-0.0098 (-0.467)
<i>MTB</i>	-0.0288*** (-5.491)
<i>LEV</i>	0.0517 (0.640)
<i>VOL</i>	0.1351*** (4.283)
<i>ROA</i>	0.0613 (0.212)
<i>SOE</i>	0.1097*** (4.262)
<i>BSHARE</i>	-0.1244** (-2.180)
<i>MAO</i>	-0.0901 (-0.864)
<i>DACC</i>	0.1766 (0.982)
<i>LAF</i>	-0.0625** (-2.515)
<i>SP</i>	0.0022 (0.050)
<i>BL</i>	0.6226 (1.345)
Constant	1.0097** (2.396)
Industry FE	Yes
Audit Firm FE	Yes
Obs.	7,025
R <sup>2</sup>	0.061

This table reports the pre-post regression results of stock price synchronicity around the adoption of expanded audit reports that contain KAMs. The dependent variable is stock price synchronicity (SYNC). Variable definitions are provided in Appendix 2. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).

**TABLE 6**  
**Analyses of KAM Content**

**Panel A: Descriptive statistics of KAM attributes**

Variables	Obs.	Mean	SD	Q1	Median	Q3
KAM_Number	2,810	2.081	0.652	2.000	2.000	2.000
KAM_Totalword	2,810	7.003	0.411	6.795	7.023	7.258
KAM_Readscore	2,810	-35.38	10.86	-40.85	-32.12	-27.58
KAM_Simscore	2,810	0.239	0.078	0.183	0.234	0.285

**Panel B: Correlations between KAM attributes**

Variables	(1)	(2)	(3)	(4)
(1) KAM_Number	1			
(2) KAM_Totalword	0.769***	1		
(3) KAM_Readscore	0.013	-0.065***	1	
(4) KAM_Simscore	0.212***	0.161***	0.092***	1

**Panel C: KAM attributes by industry**

Industry Code	Sample	KAM_Number Mean	KAM_Number SD	KAM_Totalword Mean	KAM_Totalword SD	KAM_Readscore Mean	KAM_Readscore SD	KAM_Simscore Mean	KAM_Simscore SD
C3	35.44%	2.12	0.64	7.03	0.39	-34.26	10.25	0.24	0.06
C2	18.79%	2.05	0.63	6.99	0.43	-34.62	10.05	0.24	0.06
C1	6.83%	1.99	0.63	6.95	0.41	-36.06	11.90	0.23	0.05
I	6.41%	2.14	0.66	7.05	0.42	-36.24	11.41	0.24	0.06
F	5.77%	2.09	0.68	6.99	0.47	-35.88	10.85	0.17	0.05
K	4.98%	2.27	0.84	7.12	0.40	-41.80	12.18	0.34	0.12
G	4.13%	1.91	0.63	6.92	0.41	-38.26	12.26	0.18	0.05
D	3.49%	1.86	0.61	6.95	0.42	-38.31	11.67	0.15	0.04
B	2.56%	1.94	0.60	6.86	0.38	-31.84	9.26	0.20	0.04
E	2.56%	2.18	0.64	7.02	0.39	-36.15	11.63	0.40	0.11
A	1.64%	2.09	0.66	6.92	0.45	-33.59	9.46	0.20	0.05
C4	1.42%	1.95	0.50	6.85	0.37	-32.79	10.73	0.27	0.05
L	1.28%	2.08	0.37	7.20	0.28	-38.17	10.69	0.18	0.05
N	1.21%	2.09	0.67	6.88	0.50	-34.92	9.96	0.21	0.07
R	1.21%	2.06	0.55	6.93	0.38	-32.07	10.44	0.24	0.06
M	0.71%	2.25	0.64	7.12	0.43	-31.58	6.95	0.28	0.08
S	0.64%	2.17	0.62	7.11	0.38	-40.61	14.07	0.16	0.04
H	0.36%	1.70	0.48	6.92	0.30	-35.35	6.66	0.23	0.00
P	0.28%	2.88	0.99	7.15	0.40	-37.97	10.65	0.27	0.06
Q	0.28%	1.50	0.76	6.62	0.64	-36.02	8.33	0.28	0.08
Total	100.00%	2.08	0.65	7.00	0.41	-35.38	10.86	0.24	0.08

**Panel D: Top 10 KAM topics**

KAM Topical Category	Number of Firm-KAMs	Percentage	Cum.%
Revenue recognition	1,915	32.66%	32.66%
Goodwill impairment	777	13.25%	45.91%
Accounts receivable allowance	763	13.01%	58.92%
Inventory write-downs	652	11.12%	70.04%
PPE impairment	237	4.04%	74.08%
Long-term equity investment	167	2.85%	76.93%
Related party transaction	87	1.48%	78.41%
Government grants	73	1.24%	79.66%
Financial instrument	65	1.11%	80.76%
Deferred income tax	53	0.90%	81.67%
Others	1,075	18.33%	100.00%
<i>Total firm-KAMs</i>	5,864	100.00%	

**Panel E: KAM attribute analysis**

Dep. Var.=	(1) Trading volume test <i>AVOL</i>	(2) ERC test <i>CAR</i>	(3) Price synchronicity test <i>SYNC</i>
<i>KAM_Number</i>	0.0004 (0.018)	0.0022 (0.912)	0.0090 (0.288)
<i>KAM_Totalword</i>	-0.0099 (-0.292)	-0.0035 (-0.932)	<b>0.0145*</b> <b>(1.801)</b>
<i>KAM_Readscore</i>	0.0002 (0.163)	0.0000 (0.317)	-0.0017 (-0.807)
<i>KAM_Simscore</i>	<b>-0.2626*</b> <b>(-1.744)</b>	0.0176 (1.016)	<b>0.1044**</b> <b>(2.101)</b>
<i>UE</i>		-2.4489 (-1.283)	
<i>UE*KAM_Number</i>		0.0294 (0.189)	
<i>UE*KAM_Totalword</i>		-0.0653 (-0.347)	
<i>UE*KAM_Readscore</i>		-0.0004 (-0.072)	
<i>UE*KAM_Simscore</i>		<b>0.6000</b> <b>(1.547)</b>	
Controls	Yes	Yes	Yes
Industry and Year FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	2,810	2,810	2,810
R <sup>2</sup>	0.205	0.094	0.141

**Panel F: KAM auditor response analysis**

Dep. Var.=	(1) Trading volume test <i>AVOL</i>	(2) ERC test <i>CAR</i>	(3) Price synchronicity test <i>SYNC</i>
<i>KAM_EFFORT</i>	<b>0.0561*</b> <b>(1.740)</b>	-0.0001 (-0.049)	-0.0149 (-1.517)
<i>UE</i>		-2.7397 (-1.547)	
<i>UE*KAM_EFFORT</i>		<b>0.0767*</b> <b>(1.911)</b>	
Controls	Yes	Yes	Yes
Industry and Year FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	2,810	2,810	2,810
R <sup>2</sup>	0.211	0.093	0.141

**Panel G: Investors' response to revenue surprises**

Dep. Var.=	(1)	(2) <i>KAM_EFFORT_high=1</i>	(3) <i>KAM_EFFORT_high=0</i>
	<i>CAR<sub>AR</sub></i>	<i>CAR<sub>AR</sub></i>	<i>CAR<sub>AR</sub></i>
<i>UR</i>	0.0340*** (3.337)	0.0267** (2.030)	0.0384*** (3.113)
<i>KAM_REV</i>	0.0006 (0.311)	0.0001 (0.034)	0.0012 (0.459)
<i>UR*KAM_REV</i>	-0.0211 (-0.929)	0.0226 (0.768)	<b>-0.0523*</b> <b>(-1.859)</b>
<i>UEX</i>	-0.0334*** (-3.159)	-0.0252* (-1.871)	-0.0366*** (-2.937)
<i>UEX *KAM_REV</i>	0.0161 (0.633)	-0.0286 (-0.871)	0.0456 (1.452)
Controls	Yes	Yes	Yes

Industry and Year FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Test equality of coefficients ( <i>UR*KAM_REV</i> ) in Col. (2) vs. Col. (3)	$\chi^2= 3.44^*$ p value=0.064		
Obs.	2,810	1,406	1,404
R <sup>2</sup>	0.083	0.111	0.107

This table reports the analyses of KAM content. In Panel A, we report the descriptive statistics of the KAM attributes. In Panel B, we report the Pearson correlation between the KAM attributes. In Panel C, we report the KAM attributes by industry. In Panel D, we report the top 10 KAM topics. In Panels E and F, we report the analysis of the KAM attributes and KAM auditor response, respectively, where Columns 1, 2 and 3 report the results of the three main tests using *AVOL*, *CAR* and *SYNC* as the dependent variables, respectively. In Panel G, we report the analysis of investors' response to revenue surprises. Variable definitions are provided in Appendix 2. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).

## **Online Appendix for “Informativeness of Key Audit Matters: Evidence from China”**

### **1. Additional Sensitivity Analyses**

#### **1.1 DID Analyses**

In our main analyses, we use a pre-post adoption research design. To mitigate concerns that our results are driven by concurrent events surrounding the expanded audit report mandate, we perform a DID analysis. As previously discussed, a small number of AH-share firms adopted the new mandate one year before the other A-share firms did. Hence, we exploit this staggered adoption of expanded audit reports to provide stronger evidence for our main results. Because AH-share firms may be fundamentally different in several observable dimensions from A-share firms, we use propensity score matching (PSM) to form a matched sample of AH-share firms (treatment sample) and A-share firms (control sample) that are similar across multiple observable dimensions.<sup>1</sup>

The results of the DID analysis are presented in Online Appendix Table 1. As shown in Panel A, we achieve covariate balance after PSM, and none of the observable covariates significantly differ between treatment and control samples. In Panel B, we perform a DID analysis using the PSM sample and rerun our main analyses. As shown in all three columns based on the *AVOL*, *ERC*, and *SYNC* analyses, we find that our variables of interest (i.e., *POSTAH\*TREAT* and *POSTAH\*TREAT\*UE*) are all significant at 10% or lower. These results suggest that our main inferences are unchanged when we use a DID approach.

#### **1.2 Alternative Measures of *CAR*, *AVOL*, *ERC* and *SYNC***

---

<sup>1</sup> Specifically, we first estimate a logit regression that predicts the probability of cross-listing in Hong Kong (i.e., AH-share firms) based on multiple characteristics. Then, we compute the propensity score (fitted probability) to match each treatment sample firm (AH-share firm) with five control observations (A-share firms) because we have a much smaller sample of the former. Because A-share firms adopted the new audit mandate in FY 2017, our sample period for DID analysis ranges from FY 2014 to 2016. Then, we create an indicator variable, *POSTAH*, that equals one for AH-share firms in FY 2016 and zero otherwise.

We perform several robustness tests using alternative measures of our outcome variables of interest to corroborate our main results. For brevity, we present only the results of the variables of interest in Online Appendix Table 2. First, we measure the cumulative abnormal returns using other alternative measures, such as signed cumulative abnormal returns ( $CAR$ ), five-day absolute cumulative abnormal returns ( $ABCAR_{l-2, 2j}$ ) and firm-specific adjusted cumulative abnormal returns ( $ABCAR_{adj}$ ). Panel A shows that there are still no significant differences in the stock price reactions to expanded audit reports between the pre- and postadoption periods. Next, we measure abnormal trading volume using the five-day abnormal trading volume ( $AVOL_{l-2, 2j}$ ) and firm-specific abnormal trading volume adjusted by either the mean ( $AVOL_{adj}$ ) or median value ( $AVOL_{med\_adj}$ ) of the trading volume over the estimation window. Panel B shows that abnormal trading volume based on the revised measures continues to be significantly greater in the postadoption period than in the preadoption period. Panel C presents the results using alternative measures of the ERC. We first validate our results using analysts' forecasts as an earnings benchmark to measure unexpected earnings (Column 1) using a robust regression instead of OLS (Column 2) and adding the nonlinearity of unexpected earnings to the regression to address concerns regarding the extreme value of unexpected earnings (Column 3) (Gipper et al. 2020). Panel C shows that the coefficients on  $UE_{alt} * POST$  continue to be significantly positive across all specifications. Finally, Panel D presents the results using alternative measures of stock price synchronicity. We measure  $SYNC$  using its original  $R^2$  value as the dependent variable instead of the transformed value previously reported (Column 1). We also consider a longer period, 90 days following the release of annual reports, in measuring  $SYNC$  (Column 2) and  $R^2$  (Column 3). We continue to find that stock price synchronicity is significantly lower during the postadoption period than during the preadoption period. Interestingly, the larger coefficients on  $POST$  compared to

those in Table 5 suggest that the firm-specific information contained in expanded audit reports may continue to be useful for investors beyond 30 days after the release of an audit report. Taken together, these robustness tests further support our main findings that KAMs in expanded audit reports are informative for investors in the Chinese setting.

### 1.3 Entropy Balancing

One limitation of our earlier analyses based on a pre-post adoption research design is that our main variable of interest, *POST*, can be a proxy for other developments in the Chinese economy that might concurrently affect sample firms and thus lead to spurious inferences. In other words, the characteristics of the treatment sample (postadoption observations) are different from those of the control sample (preadoption observations). Entropy balancing is a quasimatching approach that reweights each control observation such that the postweighting distributional properties of matched variables between treatment and control observations are virtually identical, thereby ensuring covariate balance (Hainmueller 2012; McMullin and Schonberger 2020). Hence, we examine the robustness of our results using the entropy balancing technique.<sup>36</sup> We achieve covariate balance by balancing the first three moments (mean, variance and skewness) of the covariate distributions and using the default tolerance of 0.015 across pre- and postadoption observations. Panel E of Online Appendix Table 2 reports the results of the effects of KAMs on *AVOL*, *ERC* and *SYNC* using entropy balancing, showing that the coefficients on *POST* (Columns 1 and 3) and *POST\*UE* (Column 2) remain significant at 10% or lower. In summary, our main results are robust to the use of entropy balancing.

---

<sup>36</sup> In contrast to standard matching procedures, entropy balancing preserves the size of the control sample, which is important in studies with a significant imbalance in terms of the sizes of treatment and control samples (Shroff et al. 2017; Ferri et al. 2018; Chapman et al. 2019).

## **2. Additional Analyses**

### **2.1 Cross-Sectional Analysis - Demand for Audit Reports**

To the extent that investors rely on and respond to KAM disclosures for decision making, we expect KAM informativeness to increase in circumstances in which there is greater investor demand for such information. As previously discussed, SOEs have more opaque information environments and lack alternative sources of information compared to non-SOEs. Consequently, we expect that investors in SOEs are more likely to rely on KAMs in expanded audit reports for decision making relative to their counterparts in non-SOEs. To test our assertion, we create an indicator variable, *SOE*, that equals one if the controlling shareholder is state owned and zero otherwise. In addition, we expect investors' demand for KAMs in expanded audit reports to be greater when the information environment is more opaque. Because smaller firms and firms with a smaller analyst following have poorer information environments (e.g., Lang and Lundholm 1993, 1996), we proxy for information opacity using (i) *MV\_low*, which is an indicator variable that equals one if a firm's market value is below the sample median and zero otherwise, and (2) *Analysts\_low*, which is an indicator variable that equals one if the number of analysts following a firm is below the sample median and zero otherwise.

Online Appendix Table 3 presents the regression results of our cross-sectional analysis in which we conduct subsample analyses for two groups of firms with greater investor demand for audit report information (*SOE*, *MV\_low*, and *Analysts\_low* =1) and with lower investor demand for audit report information (*SOE*, *MV\_low*, and *Analysts\_low* =0). In Panel A, the differences in coefficients on *POST* between these two groups are positive and significant ( $p<0.05$ ) using *MV\_low* and *Analyst\_low* as proxies for investor demand, suggesting that the increase in trading volume after the adoption of expanded audit reports is larger among smaller firms and firms with

a smaller analyst following compared to other firms. In contrast, we find that the difference in coefficients on *POST* is negative and significant ( $p<0.10$ ) using *SOE* as a proxy for investor demand, which is contrary to our expectations that investors in SOEs, compared to non-SOEs, would react more to KAM disclosures. One possible reason why there is a lower information demand by investors in SOEs could be because local SOEs are likely to hire small local auditors (Wang et al. 2008) and auditors are supervised by local governments in China, hence raising the concern of auditor independence in SOEs (Chen et al. 2000; Piotroski and Wong 2012). Consequently, investors in SOE firms may not find KAM disclosures credible and hence react less to them. In Panel B, we find that the differences in coefficients on *POST* between these two groups are positive and significant ( $p<0.10$ ) using *MV\_low* and *Analyst\_low* as proxies for investor demand, suggesting that the increase in the ERC after the adoption of expanded audit reports is more pronounced among smaller firms and firms with a smaller analyst following compared to other firms. We find that the difference in coefficients on *POST* is negative and significant ( $p<0.01$ ) using *SOE* as a proxy for investor demand, which again suggests that investors in SOEs find KAM disclosures less credible and hence respond less to earnings surprises vis-à-vis their counterparts in non-SOEs. Finally, in Panel C, we find that the differences in coefficients on *POST* between these two groups are negative and significant ( $p<0.01$ ) using *MV\_low* and *Analyst\_low* as proxies for investor demand, while the difference in the coefficient on *POST* is positive but not significant at the conventional level using *SOE* as a proxy for investor demand. These results indicate that the decrease in stock price synchronicity after the adoption of expanded audit reports is more pronounced among smaller firms and firms with a smaller analyst following. Taken together, the results in this section provide some support for the notion that investors find KAMs more informative when there is greater demand for audit reports.

## **2.2 Investors' Attention to Expanded Audit Reports (Relative to Annual Reports)**

Audit reports are issued concurrently with annual reports. To further support the notion that the investor reaction that we documented earlier is more likely attributable to expanded audit reports than to annual reports, we examine the number of downloads of audit reports relative to the number of downloads of annual reports during the pre- and postadoption periods. The data of information downloads are obtained from the JuChao platform ([www.chinfo.com.cn](http://www.chinfo.com.cn)). We define relative downloads ( $RD$ ) as the number of downloads of auditor reports divided by the number of downloads of annual reports of each company, and we replace  $ABCAR$  in Model 1 with  $RD$ .<sup>37</sup> In Online Appendix Table 4, Panel A, we find that the coefficient on  $POST$  is positive and significant ( $p<0.01$ ), suggesting that the number of audit report downloads relative to that of annual report downloads significantly increases during the postadoption period relative to the preadoption period. This finding supports the notion that the investor reaction we documented earlier is more likely due to the information content of expanded audit reports than to annual reports *per se*.

## **2.3 ERCs Conditional on Positive and Negative Earnings Surprises**

Prior studies suggest that good news is less credible than is bad news (Hutton et al. 2003; Rogers and Stocken 2005). Therefore, if the expanded audit reports are informative about financial misstatement risks and enhance the credibility of reported earnings, then we expect the informational value of the expanded audit report to be higher for good news than for bad news. To test this prediction, we partition our sample into firms with positive ( $UE \geq 0$ ) and negative earnings surprises ( $UE < 0$ ) and rerun our ERC tests. The results are presented in Online Appendix Table 4, Panel B, Columns 1 and 2. As reported in this table, we do not observe a significant

---

<sup>37</sup> We randomly select 200 firms from our full sample and calculate  $RD$  during the 2014-2017 period. We find that these 200 firms have generally similar characteristics (e.g.,  $LnMV$  and other control variables included in this table) as those in our main analyses.

differential market reaction to earnings surprises between firms that report positive and negative earnings surprises.

As reported earlier, some firms announce earnings together with the issuance of the audit report, while others announce earnings before the issuance of the audit report. We then rerun our earlier test by partitioning on these two subsamples, and the results for firms that release earnings together with audit reports (release earnings before audit reports) are presented in Online Appendix Table 4, Panel B, Columns 3 and 4 (Columns 5 and 6). After the adoption of the enhanced audit report, we find that when firms report earnings together with the audit report (Columns 3 and 4), the market reaction to positive earnings surprises significantly increases ( $p<0.01$ ), while the market reaction to negative earnings surprises remains unchanged. The chi-square test of the difference in coefficients on  $UE*POST$  between these two groups is also significant ( $p<0.10$ ). In contrast, after the adoption of the enhanced audit report, we find that when firms report earnings before the audit report (Columns 5 and 6), the market reaction to positive earnings surprises significantly decreases ( $p<0.10$ ), while the market reaction to negative earnings surprises remains similarly unchanged. The chi-square test of the difference in coefficients on  $UE*POST$  between these two groups is also significant ( $p<0.10$ ). Collectively, the evidence suggests that postadoption, investors react more strongly to a positive earnings surprise at the EA when it is accompanied by an enhanced audit report, which increases the credibility of the good news. In contrast, without the release of the audit reports at the EA, investors react less to positive earnings surprises, which is consistent with the lower credibility of good news, particularly in the absence of the audit report. These results suggest that KAM disclosures in the expanded audit report enhance the credibility of good news but not that of bad news.

## ONLINE APPENDIX TABLE 1: DID Analyses

**Panel A: Covariate balance after PSM**

Control Variables	Treatment group	Control group	Mean Diff.	p-value
	Mean	Mean		
<i>LnMV</i>	24.373	24.316	0.057	0.462
<i>LEV</i>	0.573	0.576	-0.003	0.873
<i>INST</i>	0.675	0.655	0.020	0.188
<i>Analysts</i>	8.614	8.274	0.340	0.219
<i>MTB</i>	2.621	2.810	-0.189	0.537
$\Delta EPS$	-0.322	-0.395	0.073	0.788
<i>ROA</i>	0.039	0.044	-0.005	0.244
<i>SDRET</i>	0.401	0.413	-0.013	0.374
<i>BETA</i>	1.070	1.050	0.020	0.547
<i>MAO</i>	0.004	0.004	0.000	1.000
<i>DACC</i>	-0.010	-0.012	0.002	0.228
<i>LAF</i>	15.556	15.558	-0.002	0.972
<i>SP</i>	0.035	0.030	0.005	0.724
<i>BL</i>	0.022	0.029	-0.007	0.340

**Panel B: DID regression results using the PSM sample**

	(1) Trading volume test	(2) ERC test	(3) Price synchronicity test
Dep. Var.=	<i>AVOL</i>	<i>CAR</i>	<i>SYNC</i>
<i>POSTAH</i>	-0.2126*	-0.0084 (-1.664)	-1.0386*** (-8.995)
<i>TREAT</i>	-0.0985 (-0.708)	-0.0013 (-0.212)	0.0817 (0.794)
<i>POSTAH*TREAT</i>	<b>0.2232*</b> <b>(1.664)</b>	<b>0.0087</b> <b>(0.989)</b>	<b>-0.2427*</b> <b>(-1.729)</b>
<i>UE</i>		1.5415* (1.817)	
<i>POSTAH*TREAT*UE</i>		<b>0.8492*</b> <b>(1.665)</b>	
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	321	321	321
R <sup>2</sup>	0.383	0.220	0.444

This table reports the results based on a DID research design and PSM sample. Panel A reports the covariate balance after the PSM procedure. We first use a logit regression to estimate the probability of being a treatment firm (i.e., AH-share firm). The variables we include in the logit regression are the covariates shown in this panel. Then, we create the matched sample using the 1:5 nearest-neighbor matching technique without replacement and a caliper set at 0.03 following Shipman et al. (2017). Panel B reports the regression results using a DID research design. Columns (1), (2), and (3) of this panel report the results of the three main tests using *AVOL*, *CAR* and *SYNC* as the dependent variables, respectively. Variable definitions are provided in Appendix 2. For brevity, we present only the results of our variables of interest. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering and are based on two-tailed tests. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

## ONLINE APPENDIX TABLE 2: Additional Sensitivity Analyses

### *Panel A: Alternative measures of cumulative abnormal returns*

Dep. Var.=	(1) <i>Signed CAR</i>	(2) <i>ABCAR<sub>[-2,2]</sub></i>	(3) <i>ABCAR<sub>adj</sub></i>
<b>POST</b>	<b>0.0006</b> (0.183)	<b>0.0027</b> (1.258)	<b>0.0025</b> (1.289)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	7,025	7,025	7,025
R <sup>2</sup>	0.017	0.043	0.038

### *Panel B: Alternative measures of abnormal trading volume*

Dep. Var.=	(1) <i>AVOL<sub>[-2,2]</sub></i>	(2) <i>AVOL<sub>adj</sub></i>	(3) <i>AVOL<sub>med adj</sub></i>
<b>POST</b>	<b>0.1899**</b> (2.032)	<b>0.1636***</b> (3.091)	<b>0.1617***</b> (2.775)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	7,025	7,025	7,025
R <sup>2</sup>	0.205	0.208	0.204

### *Panel C: Alternative measures of ERC*

Dep. Var.=	(1) <i>CAR</i>	(2) <i>CAR</i>	(3) <i>CAR</i>
<i>UE<sub>alt</sub></i>	-3.9562 (-1.061)	-2.8058*** (-2.848)	-2.0831 (-1.618)
<b>POST</b>	0.0153*** (6.160)	0.0062*** (6.107)	0.0067*** (3.433)
<b><i>UE<sub>alt</sub>*POST</i></b>	<b>0.5477**</b> (2.477)	<b>0.1673***</b> (2.847)	<b>0.2677*</b> (1.685)
<i>NLUE</i>			-5.0064* (-1.776)
<i>NLUE*EAR</i>			-1.9077 (-0.460)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	4,293	7,025	7,025
R <sup>2</sup>	0.064	0.036	0.032

### *Panel D: Measurement issue related to price synchronicity*

Dep. Var.=	(1) <i>Rsquare</i>	(2) <i>SYNC<sub>[0, 90]</sub></i>	(3) <i>Rsquare<sub>[0, 90]</sub></i>
<b>POST</b>	<b>-0.0252**</b> (-2.237)	<b>-0.1654***</b> (-3.195)	<b>-0.0384***</b> (-3.342)
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	7,025	7,025	7,025
R <sup>2</sup>	0.062	0.073	0.073

**Panel E: Regression results using entropy balancing**

Dep. Var.=	(1) Trading volume test	(2) ERC test	(3) Price synchronicity test
	<i>AVOL</i>	<i>CAR</i>	<i>SYNC</i>
<b><i>POST</i></b>	<b>0.1673***</b> (3.685)	<b>-3.3555**</b> (-2.061)	<b>-0.0813*</b> (-1.869)
<i>UE</i>		0.0070*** (3.391)	
<b><i>POST*UE</i></b>		<b>0.2104*</b> (1.867)	
Controls	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes
Obs.	7,025	7,025	7,025
R <sup>2</sup>	0.306	0.094	0.114

This table reports the results of various sensitivity tests. Panel A reports the results of the market reaction to expanded audit reports using various alternative measures of cumulative abnormal returns. Column (1) is based on an unsigned *CAR*. Column (2) is based on  $ABCAR_{[-2, 2]}$ , which is estimated in the five-day window surrounding the issuance of the expanded audit report. Column (3) is based on firm-specific adjusted cumulative abnormal returns. Panel B reports the results of the abnormal trading volume around the issuance of expanded audit reports using various alternative measures of abnormal trading volume. Column (1) is based on  $AVOL_{[-2, 2]}$ , which is estimated in the five-day window around the issuance of the expanded audit report. Column (2) is based on firm-specific adjusted  $AVOL_{adj}$ . Column (3) is based on  $AVOL_{med-adj}$ , which is similar to  $AVOL_{adj}$ , except that it uses the median value instead of the mean value of trading volume over the estimation window. Panel C reports the results of the ERCs around the issuance of expanded audit reports using alternative specifications. Column (1) is based on  $UE_{alt}$ , which uses prior disclosure analysts' forecasts as an earnings benchmark. Column (2) is based on *UE* but is estimated using robust regression. Column (3) is based on further controlling for *NLUE* (i.e., *UE* times the absolute value of *UE*) and its interaction with *POST*. Panel D reports the results of stock price synchronicity around the release of expanded audit reports using various alternative measures of stock price synchronicity. Column (1) is based on *Rsquare*, i.e., raw R<sup>2</sup>. Column (2) is based on  $SYNC_{[0, 90]}$ , which is estimated over 90 days following the issuance of expanded audit reports. Column (3) is based on  $Rsquare_{[0, 90]}$ , i.e., raw R<sup>2</sup> relating to  $SYNC_{[0, 90]}$ . Panel E reports the results using entropy balancing, which is a quasimatching approach that reweights each control observation such that the postweighting distributional properties of the matched variables of the treatment and control observations are virtually identical, thereby ensuring covariate balance (Hainmueller 2012; McMullin and Schonberger 2020). Columns (1), (2), and (3) report the entropy balancing results of the three main tests using *AVOL*, *CAR* and *SYNC* as the dependent variables, respectively. Variable definitions are provided in Appendix 2. For brevity, we present only the results of our variables of interest. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).

**ONLINE APPENDIX TABLE 3: KAM Informativeness in Expanded Audit Reports – Moderating Effects of SOE Status, Firm Size, and Analyst Following**

**Panel A: Trading volume analysis**

Dep. Var.=	(1) SOE=1 AVOL	(2) SOE=0 AVOL	(3) MV_low=1 AVOL	(4) MV_low=0 AVOL	(5) Analysts_low=1 AVOL	(6) Analysts_low=0 AVOL
<b>POST</b>	<b>0.1627***</b> (4.106)	<b>0.2295***</b> (5.265)	<b>0.2630***</b> (4.927)	<b>0.1696***</b> (4.016)	<b>0.2445***</b> (6.520)	<b>0.1350***</b> (2.657)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Test equality of coefficients	$\chi^2=2.76^*$ p value=0.097		$\chi^2=4.18^{**}$ p value=0.041		$\chi^2=6.75^{***}$ p value=0.009	
Obs.	3,035	3,990	3,512	3,513	3,164	3,861
R <sup>2</sup>	0.345	0.273	0.315	0.237	0.304	0.256

**Panel B: ERC analysis**

Dep. Var.=	(1) SOE=1 CAR	(2) SOE=0 CAR	(3) MV_low=1 CAR	(4) MV_low=0 CAR	(5) Analysts_low=1 CAR	(6) Analysts_low=0 CAR
<i>UE</i>	0.8012 (0.000)	-3.5099** (-2.133)	-3.2950 (-1.630)	0.0000 (-1.019)	-3.0873* (-1.735)	0.0000 (-0.056)
<i>POST</i>	0.0054** (2.318)	0.0085*** (3.121)	0.0117*** (4.910)	0.0023 (1.053)	0.0027 (1.094)	0.0105*** (4.263)
<i>UE* POST</i>	<b>-0.0325</b> (-0.301)	<b>0.3662***</b> (4.002)	<b>0.3402***</b> (3.088)	<b>0.1333</b> (1.497)	<b>0.3060***</b> (2.962)	<b>0.0055</b> (0.060)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Test equality of coefficients	$\chi^2=6.71^{***}$ p value=0.010		$\chi^2=3.01^*$ p value=0.083		$\chi^2=3.50^*$ p value=0.061	
Obs.	3,035	3,990	3,513	3,512	3,164	3,861
R <sup>2</sup>	0.034	0.052	0.057	0.045	0.057	0.036

**Panel C: Price synchronicity analysis**

Dep. Var.=	(1) SOE=1 SYNC	(2) SOE=0 SYNC	(3) MV_low=1 SYNC	(4) MV_low=0 SYNC	(5) Analysts_low=1 SYNC	(6) Analysts_low=0 SYNC
<b>POST</b>	<b>-0.0638**</b> (-2.254)	<b>-0.1180***</b> (-4.591)	<b>-0.1503***</b> (-5.579)	<b>-0.0375</b> (-1.356)	<b>-0.1550***</b> (-6.301)	<b>-0.0309</b> (-0.979)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Test equality of coefficients	$\chi^2=1.81$ p value=0.176		$\chi^2=8.00^{***}$ p value=0.005		$\chi^2=9.28^{***}$ p value= 0.002	
Obs.	3,035	3,990	3,513	3,512	3,164	3,861
R <sup>2</sup>	0.074	0.071	0.061	0.107	0.073	0.135

This table reports the regression results of the moderating effects of SOEs versus non-SOEs, firm size, and analyst following on the informativeness of expanded audit reports, as captured by AVOL (Panel A), CAR (Panel B) and SYNC (Panel C). SOE is an indicator variable that equals one if the controlling shareholder is state owned and zero otherwise. MV\_low is an indicator variable that equals one if the firm's market value is below the sample median and zero otherwise. Analysts\_low is an indicator that equals one if the number of analysts following the firm is below the sample median and zero otherwise. Variable definitions are provided in Appendix 2. For brevity, we present only the results of our variables of interest. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).

**ONLINE APPENDIX TABLE 4: Further Corroborating Analyses**

**Panel A: Investors' attention to audit reports relative to annual reports**

Dep. Var. =	<i>RD</i>
<b>POST</b>	<b>0.0671***</b>
	(14.732)
Controls	Yes
Industry FE	Yes
Audit Firm FE	Yes
Obs.	756
R <sup>2</sup>	0.463

**Panel B: ERCs partitioned by positive and negative earnings surprise**

	All Sample	Sample with EA on the same date as the audit report filing date	Sample with EA earlier than the audit report filing date			
Dep. Var.=	(1) <i>UE</i> $\geq 0$ <i>CAR</i>	(2) <i>UE</i> < 0 <i>CAR</i>	(3) <i>UE</i> $\geq 0$ <i>CAR</i>	(4) <i>UE</i> < 0 <i>CAR</i>	(5) <i>UE</i> $\geq 0$ <i>CAR</i>	(6) <i>UE</i> < 0 <i>CAR</i>
<i>UE</i>	-2.9273 (-1.219)	0.5462 (0.000)	-1.2226 (-0.363)	0.0568 (0.016)	-4.3208 (-1.193)	-0.3084 (-0.114)
<i>POST</i>	0.0096*** (3.208)	0.0048 (1.477)	0.0021 (0.452)	-0.0017 (-0.424)	0.0146*** (3.756)	0.0107** (2.194)
<i>UE</i> * <i>POST</i>	<b>0.0394</b> (0.231)	<b>0.0869</b> (0.694)	<b>0.5348**</b> (2.338)	<b>0.0462</b> (0.229)	<b>-0.4111*</b> (-1.822)	<b>0.1033</b> (0.642)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Audit Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Test equality of coefficients	$\chi^2=0.04$ p value=0.842		$\chi^2=3.62^*$ p value=0.062		$\chi^2=3.19^*$ p value=0.074	
Obs.	3,374	3,651	1,678	1,727	1,696	1,924
R <sup>2</sup>	0.046	0.037	0.062	0.050	0.098	0.076

This table reports the results of further corroborating analyses. Panel A reports the regression results of investors' attention to audit reports (relative to annual reports) before and after the issuance of expanded audit reports. The dependent variable is relative downloads (*RD*), as measured by the number of downloads of audit reports relative to the number of downloads of annual reports. Panel B reports the pre-post regression results of the ERCs around the adoption of expanded audit reports that contain KAMs, partitioned by positive and negative earnings surprise (*UE*). The dependent variable is the cumulative abnormal returns (*CAR*). Columns (1) and (2) are based on the full sample, Columns (3) and (4) are based on the sample in which the EA is on the same date as the audit report filing date, and Columns (5) and (6) are based on the sample in which the EA is earlier than the audit report filing date. Variable definitions are provided in Appendix 2. For brevity, we present only the results of our variables of interest. The *t*-statistics are computed using standard errors adjusted for firm and annual report announcement date clustering. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively (two-tailed tests).