A Comprehensive Study of the New Audit Report with Key Audit Matters: What have We Learnt from Our First Implementation?

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Abstract:

This paper provides comprehensive evidence on the impacts of the first implementation of the new audit report with key audit matters (KAMs) in Thailand in 2016. Evidence was derived from the analyses of survey questionnaires and archival data. It was found that users pay little attention to the audit reports and have little understanding of audit functions, which has resulted in a continuous presence of a reasonableness gap. Although standard setters and regulators in Thailand have succeeded in narrowing the deficiency standard gap and the deficiency performance gap, further large steps remain to close the deficient standards gap. Weak evidence was also found that the new audit report improves audit quality with an increase in audit fees and audit delays; however, no impact of KAMs on the market reaction was found.

Keywords: Key audit matters, Audit quality, Audit fees, Audit delays, Market reaction, Expectation gap

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1. Introduction

An audit report is the most important output of an audit. It is used to communicate the results of the audit to users of financial statements. To make it more effective in communication, the audit report is standardized by containing an explanation of what is audited, an explanation of management's and an auditor's responsibilities and an auditor's opinion of whether the audited financial statements provide a true and fair view of a company's financial position and performance.

Providing readers with the explanation of an audit in an audit report provides a clearer understanding of the audit; however, it also creates an expectation gap. The expectation gap occurs when the readers' expectations of the audit deviate from the auditors' perceptions of their responsibilities and performance. The deviations can include the difference between readers' and auditors' views on the level of assurance provided by the audit (Bédard, Sutton, Arnold, & Philips, 2012) and the difference between readers' and auditors' perceptions of auditors' responsibilities (McEnroe & Martens, 2001).

This expectation gap has been magnified due to mass media reports on accounting scandals and irregularities. The exemplar of this magnification is indicated by public's question: 'Why doesn't an audit report give out any signal of fraud'? This is a consequence of detected and reported high profile fraud. This question is posed even when the audit report is worded that the auditor's primary responsibility is not to detect fraud but to consider assessing the risks of a material misstatement of the financial statements due to fraud. This places the communicative and informative value of the audit report into question (Church, Davis, & McCracken, 2008; Hermanson, 2000).

In addition, standardized language and form is perceived to make the audit report less communicative and informative. An audit report is valuable in itself but less communicative (Church et al., 2008). Its standardized language leads the users of the financial statements to pay less attention to the audit reports because they know what the audit reports mean without reading the reports thoroughly (Turner, Mock, Coram, & Gray, 2010); however, the audit report is perceived to be meaningful but insufficient for auditors' and users' demands as the auditors demand to provide more information, whilst the users also demand to receive more information

(EY, 2014). As a consequence of previous accounting scandals and irregularities around the world, sceptics argue that the standardized audit report is less informative and even unreliable because all audit reports are similar unless signed by an auditor (Peterson, 2015).

In response to sceptics regarding the communicative and informative value of the standardized audit report and the increasing demand of the auditors and the users, there have been many attempts to improve the standardized audit report, particularly attempts made by the International Auditing and Assurance Standards Board (IAASB). In January 2015, IAASB announced six revised-International Standards Auditing (ISA) with the aim of improving audit reports (Deloitte Touche Tohmatsu Limited, 2015b). ISA701 'Communicating Key Audit Matters in the Independent Auditor's Report', one of the six revised standards, led the previous pass/fail audit report, which had been used since 15 December 2009, to be replaced by the new report beginning on 15 December 2016. ISA702 requires an auditor to disclose matters deemed to be the most significant in the current audit in the new audit report. This new audit report is expected to improve its communicative and informative value. Arnold Schilder, Chairman of IAASB, gave his opinion that 'this innovation in auditor reporting is radical, a step-change as some have called it. It makes the auditor's work more transparent and relevant to users. It stimulates public debate and analysis on what auditor's reports are most helpful' (PwC, 2015). In line with other counties, Thailand has adopted ISA701 for an audit of financial statements with the year-ending on or after 15 December 2016, but this only applied to listed companies.

This paper provides comprehensive evidence on stakeholders of audit's perceptions of key audit matters (KAM), the audit expectation-performance gap and the impacts of the new audit report with KAM after the adoption in Thailand. Evidence was derived from survey questionnaires and archival data. The links in this evidence are shown in Figure 1.

This paper provides comprehensive evidence on the impacts of the implementation of the new audit report with KAMs in Thailand in 2016. Evidence was derived from the analyses of survey questionnaires and archival data. It was found that users pay little attention to the audit reports and have little understanding of the audit function, which results in the continuous presence of reasonableness gaps. Standard setters and regulators in Thailand have succeeded in narrowing the

deficiency standard gaps and the deficiency performance gaps since 2010; however, in 2018, there were still further large steps required to close the deficient standard gaps to move forward. The continuous presence of deficiency performance gaps and the continuous debate over auditors' responsibility to detect fraud also remain. Interestingly, a new deficiency performance gap exists. This paper reports weak evidence that the new audit report drives the improvement of audit quality with an increase in audit fees and audit delays and with unintended consequences. Users were confused about KAMs and felt that KAMs provide insufficiently informative and redundant information. Thus, it did not impact the market reaction.

The remainder of this paper proceeds as follows. Section 2 presents related literature. Section 3 explains the sample selection and data collection. Section 4 reports the results, and Section 5 concludes.

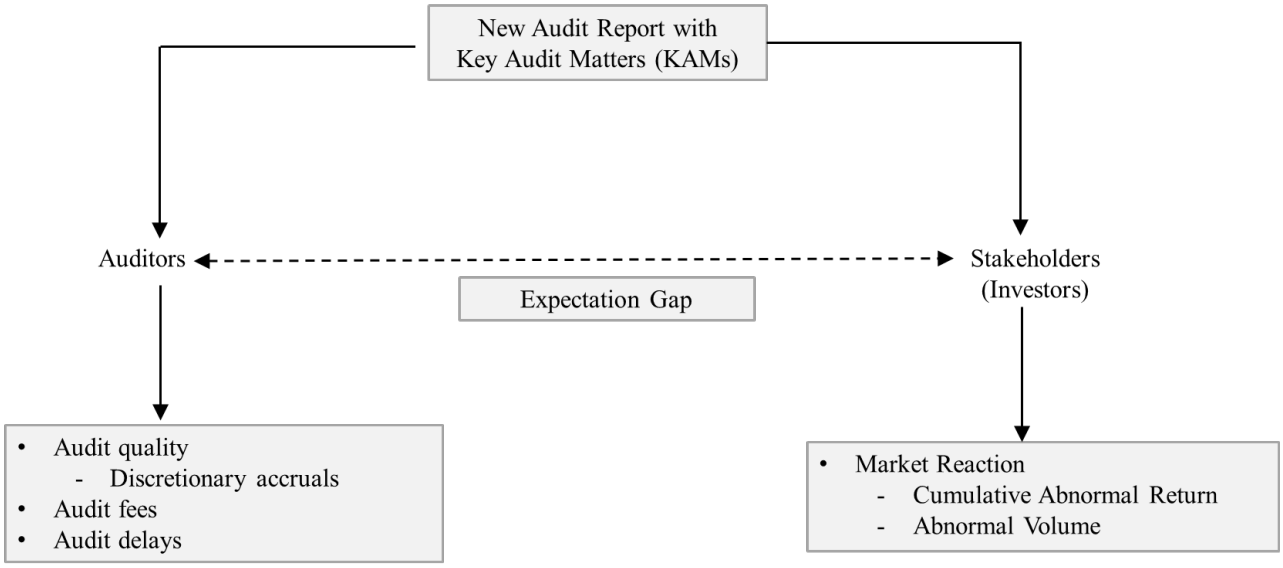


Figure 1 Conceptual Framework

2. Literature Review

2.1 Demand for Auditing

Business growth has led companies to heavily lean on external financial resources and to segregate the role of management from owners (Porter, Simon, & Hatherly, 2010). Managers are thus

required to report financial information to owners and external users; however, information risk causes reported financial information to be less reliable (Arens, Elder, Beasley, & Hogan, 2017, 30). Thus, reported financial information must be audited to ensure the reliability of the information (Porter et al., 2010). This in turn leads to the demand for audits. An audit is a systematic process performed by an independent, competent party with the aim to gather and evaluate evidence and report on the degree of correspondence between the financial information and an applicable financial reporting framework.

There are four important reasons behind the need for audits of reported financial information, which Arens et al. (2017, 30) referred to as an 'information risk'. First, conflict of interests between preparers and financial information users may occur when managers have motivations to put bias into the reporting to make the report more favourable rather than providing a fair presentation as demanded by users. Second, users suffer from consequences of error from using unreliable reported financial information in decision making. Third, users are unable to verify reported financial information on their own due to legal restriction, remoteness, time and budget limitations. Fourth, the enormous volume of transactions, new transactions, the complexity of accounting systems and the complexity of accounting standards causes users to be unable to assess the quality of reported financial information on their own.

The term 'auditing' can be defined in many aspects, mainly by standard setters and academics. Regarding the overall objectives of an audit given by the standard setters, auditing refers to the task conducted by a qualified person with the objectives 'to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework' and 'to report on the financial statements, and communicate as required by the international standards on auditing, in accordance with the auditor's findings' (IAASB, 2009, 74). In addition to professional bodies, academics such as Porter et al. (2010, 3) stated that 'auditing is a systematic process of objectively gathering and evaluating evidence relating to assertions about economic actions and events in which the individual or organization making the assertions has been engaged, to ascertain the degree of correspondence between those assertions

and established criteria, and communicating the results to users of the reports in which the assertions are made', while Arens et al. (2017, 28) asserted that 'auditing is the accumulation and evaluation of evidence about information to determine and report on the degree of correspondence between the information and established criteria. Auditing should be done by a competent, independent person'.

Despite the different but similar definitions of auditing, empirical research has consistently shown the inconsistency between stakeholders' expectations of auditors and what auditors believe are their duties (e.g. fraud, the reasonableness of financial forecasts in the annual report, the effectiveness of internal control).

2.2 Audit Expectation Gap

The gap between stakeholders' expectations of the auditing function and auditors' perceptions of their performance, called the 'audit expectation gap', can be explained by Limperg's theory of rational expectation and Jensen and Meckling's agency theory (Soltani, 2007, 31). The theory of rational expectation underscores the importance of the role of an auditor in providing financial statement users and society with confidence. An auditor is rationally expected to perform his/her work in such a manner that he/she is not disloyal to the financial statement users' and society's confidence and trust; however, this rational expectation may not be greater than the possible work done by an auditor. Thus, an auditor must perform sufficiently at the highest possible level to satisfy financial statement users' expectations and society's needs. Eventually, these expectations and needs will change, and thus the auditor must continuously improve his/her auditing methods.

Contrary to the theory of rational expectation, the agency theory provides the simple explanation of what owners (principal) expect from their auditors. According to the agency theory, the owners (principal) hire managers (agency) to run their businesses on their behalf. To monitor and to reward managers, the owners require the managers to report financial information to them.

Although stakeholders' expectations of the auditing function create the audit expectation gap, auditors' perceptions of their performance also contribute to the gap. Auditors' perceptions of their performance may deviate from stakeholders' expectations of auditor performance, especially when

there is a diversity of stakeholder expectations. In general, auditors' perceptions of duties and responsibilities are likely to be described by the auditing standards and the definitions of the term 'auditing' provided by many scholars as previously discussed. The deviation of stakeholder expectations from auditor perceptions inevitably leads to conflicts of expectations (Institute of Chartered Accountants in England and Wales, 2008).

According to Porter (1993), the audit expectation gap consists of three components, as shown in Figure 2. First, the reasonableness gap occurs when society's expectations of auditors are greater than the auditors' reasonable responsibilities. Second, the deficient standards gap occurs when the auditors' responsibilities required by the standards are lower than their reasonable responsibilities. Third, the deficient performance gap occurs when the auditors' actual performances are lower than their responsibilities required by the standards.

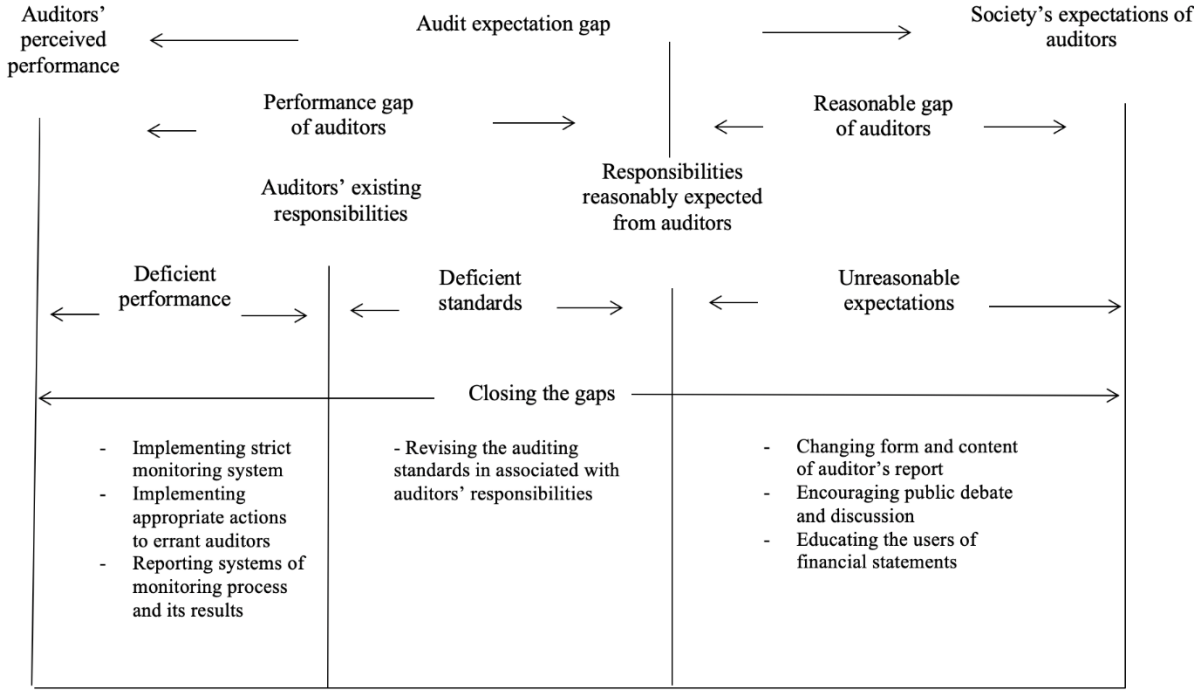


Figure 1 Porter's (1993) composition of audit expectations gap and ways to bridge the gap (Porter et al., 2012a and 2012b)

2.2.1 Research on the Audit Expectation Gap

Several studies have provided evidence on the inconsistencies between stakeholders' expectations and auditors' perceptions. Porter and Gowthorpe (2004) used a questionnaire survey to examine the audit expectations gap in the United Kingdom (UK) and New Zealand (NZ) in 1999. They found that in the UK, in 1999, the reasonable, deficiency standards and deficiency performance gaps accounted for 50%, 42% and 8%, respectively. In NZ, for the same year, the comparative proportions consisted of 41%, 53% and 6%. For the comparative proportions in NZ in 1989, they constituted 31%, 58% and 11%. They argued that the deficiency performance gap in NZ reduced from 58% in 1989 to 53% in 1999 because the auditors had improved the performance of their responsibilities; however, a lack of knowledge related to auditing led the reasonable gap to be the largest proportion in both the UK and NZ. The auditors were expected to perform some work that was not cost-effective. The users misunderstood that the auditors guaranteed that audited financial statements were completely accurate. They also misunderstood that the company with an unqualified audit report was financially sound.

Porter and Gowthorpe (2004) highlighted that the components of the reasonable gap in 1989 reappeared in 1999. This indicated that there was no progress in educating the stakeholders of auditing about the audit and auditors' reasonable responsibilities. In 1999, the deficiency standards gap was the auditors' responsibilities to report matters of concern, especially fraud and illegal acts, to the related authority, to report the reliability of the disclosure of the management's remuneration policy and the reasonableness of financial forecasts in the annual report, to report the effectiveness of internal control and to report the adequacy of risk management.

Porter and Gowthorpe (2004) also found that the deficient performance gap was the smallest proportion due to the professional bodies effectively monitoring the auditors, the revision of auditing standards related to matters of concern, especially fraud and illegal acts, and the revision of auditing standards that made the auditors' responsibilities clearer and more stringent. They suggested that ways to narrow the audit expectations gap were to strengthen the monitoring of auditors, to improve audit firms' quality controls, to enhance auditing practitioners' education, to set out new auditing standards and to educate society about auditing.

Porter, hOgartaigh, and Baskerville (2012a) and Porter, hOgartaigh, and Baskerville (2012b) re-examined the audit expectations gap of 55 actual and potential responsibilities of auditors in the UK and NZ in 2008. They found that the non-financial community (solicitors, financial journalists and the general public) was the largest group that misunderstood auditors' responsibilities. In comparison with the results of 1999, the gap in the UK was substantially narrowed, while that in NZ was slightly widened. They explained that this was because there were different monitoring functions in these two countries. In the UK, the reasonable, deficiency standards and deficiency performance gaps constituted 52%, 45% and 3%, respectively. In NZ, the comparative proportions consisted of 50%, 43% and 7%. Porter et al. (2012a) and Porter et al. (2012b) pointed out that the UK's performance and reasonable gaps decreased from 1999, while both increased in NZ. They provided the postulation of the contradictory results that for the performance gap, it was because the UK had stricter monitoring of auditors' performance and annually reported the monitoring process and results to society. For the reasonable gap, it was because society in the UK had a greater awareness of and engaged more in open debate and discussion of financial, economic and business issues.

Both studies also showed that the deficiency standards gap in the UK and NZ were quite identical. The deficiency standards gaps were in the auditors' following responsibilities: 1) to report matters of concern (e.g. embezzlement, illegal acts, financial statement distortions) discovered during the audit to the appropriate authorities and/or to disclose these matters in the audit report; 2) to report the effectiveness of internal control, the adequacy of financial risk assessment, the significant difficulties faced by the auditor and non-managerial employees' theft of high value assets; and 3) to report a company's specific information to the users of financial statements.

They provided four recommendations to bridge the gaps. First, the professional bodies and regulators should ensure that they have implemented strict monitoring systems of auditors' performance, appropriate actions to errant auditors and reporting systems of the monitoring process and its results. Second, the audit report should be improved by making it clearer, simpler, shorter and more understandable. Third, the auditing standards should include auditors' responsibilities to report company specific information and to report matters of the public's concern discovered during the audit to the appropriate authorities. Fourth, the auditing profession

should seek opportunities to have public debates and discussions of financial, economic and business matters related to audit issues. This would help the public gain a better understanding of auditing functions and auditors' responsibilities.

2.2.2 Audit expectation gap in Southeast Asia

There is considerable evidence of the audit expectations gap from different accounting and auditing environments around the world, e.g. the UK, Australia, New Zealand, China, Hong Kong, South Africa, Spain, Finland, Saudi Arabia, Egypt, Lebanon (Porter et al., 2012a), the US, India and Bangladesh (Lee, Ali, & Gloeck, 2009). For Southeast Asia, Martinis, Aw, and Kim (2000) and Best, Buckby, and Tan (2001) provided evidence from Singapore. Fadzly and Ahmad (2004), Lee, Gloeck, and Palaniappan (2007) and Lee et al. (2009) reported evidence from Malaysia, and Ongthammakul (2004) and Lee, Ali, Gloeck, Yap, and Boonyanet (2010) provided evidence from Thailand.

Best et al. (2001) conducted a mail survey of 100 auditors, 100 bankers and 100 investors. They found that the expectation gap in Singapore was quite wide, particularly the gap in the auditors' responsibilities for detecting and preventing fraud, for maintaining accounting records and for exercising judgment in selecting audit procedures. The gap was also associated with the auditors' responsibilities to report the effectiveness of internal control, the extent to which financial statements provide a true and fair view, auditors' agreements with accounting policies used by the audited company and the usefulness of audited financial statements to monitor the entity's performance. From their findings, Best et al. (2001) suggested that to narrow the audit expectations gap, a long-form audit report similar to that of Australia should be adopted in Singapore.

Fadzly and Ahmad (2004) replicated the study of Best et al. (2001) with minor modifications. The survey questionnaires were sent to 300 brokers, 300 auditors, 300 bankers and 300 investors. In addition, Fadzly and Ahmad (2004) conducted an experiment with an additional 100 investors by giving them a brochure that contained an explanation of auditors' responsibilities and audit functions. Fadzly and Ahmad (2004) compared their findings with Best et al. (2001) and found that their findings were almost identical. Fadzly and Ahmad (2004) found that a wide audit expectation gap in Malaysia was pertinent to the auditors' responsibilities for detecting and

preventing fraud, for maintaining accounting records and for reporting the effectiveness of internal control. The comparison between the results of the experimental group and the control group led Fadzly and Ahmad (2004) to suggest that reading materials, e.g. a brochure, may help educate users and correct their misunderstandings.

Unlike Best et al. (2001) and Fadzly and Ahmad (2004), Lee et al. (2007) incorporated the concept of Porter (1993) into their study in Malaysia. The survey questionnaire was distributed to 200 auditors, 200 bankers, 200 brokers, 200 investors, 200 members of the general public, 200 directors and 200 accountants. Their results revealed that in Malaysia, the reasonable gap, deficiency standards and deficiency performance gap constituted 19%, 53% and 28%, respectively. They suggested that to bridge the gaps, there should be communication with the public regarding audit functions and its nature, stricter monitoring of auditors, revisions and reviews of auditing standards.

Later on, Lee et al. (2009) provided qualitative evidence by interviewing with eight auditors, five participants from regulatory bodies, four financial controllers, two accountants, four company directors, three fund managers, four individual investors, three auditing professors and two bank officers. They found that the causes of the audit expectations gap in Malaysia were complicated. The complications resulted from the combination of the users' fallacies or ignorance, unreasonable expectation, the auditing function's complexity by nature, deficiency legislations and auditors' deficiency performance, which was caused by 'low balling' and the unreasonableness of audit fees.

For Thailand, which represents an emerging market, Lee, Ali, Gloeck, Yap, and Boonyanet (2010) incorporated the framework of Porter (1993) into their study of the audit expectations gap in Thailand. The survey questionnaire with auditors that included 42 duties (34 questions) was distributed to 200 auditors, 200 bankers, 200 brokers, 200 financial analysts, 200 management staff and 200 accountants. The responses received were 132 (13%). The comparisons across groups of auditees, audit beneficiaries and auditors were performed using the Chi-Square test. Lee, Ali, Gloeck, Yap, and Boonyanet (2010) found that in Thailand, the reasonable, deficiency standards and deficiency performance gaps constituted 46%, 46% and 2%, respectively.

In summary, the audit expectation gap has existed over different periods of time and in different accounting/auditing environments; however, most studies were conducted in developed markets. There is limited evidence from emerging markets, such as the South East Asian region. In addition, the majority of audit expectation gap studies seems to suggest that these gaps can be bridged by improving communication with the public regarding audit functions and its nature through reading materials, such as audit reports. In doing so, the new audit report with KAMs has been implemented since 2016 with the aim to improve the communicative and informative value of the previous audit report; however, there is still a lack of evidence regarding whether including KAMs in the audit report helps bridge gaps. This leads to the following research question:

RQ: Do the audit expectation gaps still exist after the implementation of the new audit report with KAMs?

2.3 Audit Report

An audit is like a black box that other people have not seen and do not know what an auditor actually does. An audit report is then used by an auditor to communicate what he/she did and what he/she found from the audit to financial statement users. Therefore, an auditor is the producer of the message of the audit and his/her opinion on the validity of audited financial statements, which heavily depends on his/her judgment and is unable to provide absolute outcomes. Users, who may have different sources of information and different processes of decision making, are the receivers of the message. To transmit the message to the receiver, the auditor uses the audit report as the transmitter. The transmitted message is not only related to the audit itself but also to the reference to the validity of audited financial statements. When the auditor and the users share the same meaning of the transmitted message, the communication process ends; however, the interpretations of the meaning of the transmitted messages are generally influenced by auditors' or users' behaviours (Hronsky, 1998).

2.3.1 Communicative and informative value of an audit report

The benefits of audit reports hinge on their communicative and informative value. The communication value of audit reports is based on the consistency between what auditors communicate through audit reports to users and what users desire and understand, while the

informative value of audit reports is based on the users' perceptions of the usefulness of the information provided (T.J. Mock et al., 2013).

Previous studies observed the impacts of the audit reports' wording on communicative and informative value. Bailey, Bylinski, and Shield (1983) observed the change in audit reports' wording in 1980 by conducting an experiment. They found that changes in audit reports' wording creates changes in the perceptions of readers. Mong and Roebuck (2005) also conducted a study on the effect of disclosing information in audit reports on auditors' litigation risk exposure. They found that audit reports with an emphasis paragraph of concerns decreased the auditors' litigation risk exposure, but the explanation of work performed by auditors did not have the same effect.

Chong and Pflugrath (2008) conducted a survey in Australia by adopting the communication theory to test whether an audit report with expanded information helped reduce the audit expectation gap. They found that audit report formats had a weak impact on perceptions of auditors and shareholders and did not reduce the expectation gap. Therefore, the attempts to reform an audit report, to change wording and to add other information seemed to be unsuccessful in closing the expectation gap.

Fakhfakh (2015) used a linguistic framework to assess whether audit reports were readable and easy to interpret. The techniques included word count, word length and number of lines. Comparing French and English versions helped them to observe the impact of the translation as well. The Flesch Reading Ease and Gunning Fog Index was employed to indicate the level of difficulty. They found that an audit report might not be readable for all users.

In sum, findings from previous studies suggest that the communicative and informative value of audit reports remains problematic. Users still misunderstand auditors' work and responsibilities and the level of assurance (Church et al., 2008). Users also demand more information because the business environment changes dynamically (International Auditing and Assurance Standrads Board, 2011).

2.4 Revised Audit Report

To address the concerns raised by audit report users, the International Auditing and Assurance Standards Board (IAASB) decided to revise auditing standards related to audit reports. The recent version of audit reports had been improved and developed in 2006 and completed in 2016. Because improving the audit report is a challenging project, IAASB and the American Institute of Certified Public Accountants (AICPA) agreed to jointly support four projects that aimed to improve the quality of audit reports and financial statements (i.e. Porter, hÓgartaigh, and Baskerville (2009); T. J. Mock, Tuner, Gray, and Coram (2009); Gold, Gronewold, and Pott (2012); Asare and Wright (2012); IAASB (2016). The results of these four studies led to the changes made in a number of auditing standards. In September 2014, exposure drafts of the International Standards on Auditing (ISAs) 700, 701, 260, 570, 705 and 706 were finally approved (IAASB, 2016).

2.5 Key Audit Matters

IAASB's the new audit report, which has been effective since 15 December 2016, is hoped to improve the communicative and informative value of audit reports. The most significant improvement is that the new audit report requires auditors to disclose 'key audit matters' (KAMs). KAMs are defined in ISA 701 as 'those matters that, in the auditor's professional judgment, were of most significance in the audit of the financial statements of the current period. KAMs are selected from matters communicated with those charged with governance' (IAASB, 2015, para.8). Disclosing KAMs may help users gain a better understanding of audited companies' nature of business (KPMG, 2018). In addition, comparing KAMs with those of other companies in the same industries may help audit committees have a better understanding of the companies (Deloitte Touche Tohmatsu Limited, 2015a).

IAASB's KAMs are similar to the Public Company Accounting Oversight Board's (PCAOB) Critical Audit Matters (CAMs), but the latter is defined as the most significant difficulty of the audit (EY, 2014). KAMs and CAMs are also similar to France's Justification of Our Assessments (JOAs) and the UK's Risk of Material Misstatements (RMMs). Selecting KAMs to be disclosed significantly depends on the auditor's judgment. The disclosure should be flexible. As commented to IAASB by the Chartered Finance Analyst Institution (CFA), the way to present KAMs should not be standardized (PCAOB, 2014).

2.6 Evidence of the New Audit Report

Apart from the studies funded by IAASB, other studies also tested whether disclosing KAMs really improved the communicative and informative value of audit reports. Some researchers observed the impacts of France's JOAs and UK's RMMs. Bédard et al. (2012) investigated the costs and benefits of France's mandatory for reporting JOAs since 2003. They found France's mandatory for reporting JOAs had a small impact on marketing reaction, audit quality, audit cost and even audit efficiency. It increased the symbolic value but not the informative value. Reid, Carcello, Li, Neal, and Francis (2018) conducted an investigation of RMMs in the UK where the new audit report began on 30 September 2013. From their regression analysis, the audit quality was found to be increased with a small increase in costs of the audit. Reid et al. (2018) also tested whether changes in audit reports and audit committee reports were beneficial for investors in the UK. They found that the new report reduced the information asymmetry and provided useful information to investors. There was some evidence that the companies were in favour of auditors who tended to give more information of audits in the audit report.

Kachelmeier, Schmidt, and Valentine (2014) examined the effect of disclosing and wording CAMs in the audit report on perceived responsibilities of auditors. Testing their hypotheses gave them the results that auditor liability for misstatement and the confidence in financial statements were perceived to be lesser when disclosing CAMs. Sirois, Montreal, Bédard, and Bera (2014) tested whether the presentation of KAMs in the audit report impacted the report's informative value. They found that the readers of the audit reports paid more direct attention to KAMs. Providing too much information in the audit report might lead the reader to read only the most important information and to pay more attention to other disclosed information related to KAMs. A greater number of KAMs indicated the auditor's poor communication. Importantly, providing additional information in the audit report might magnify the audit expectation gap.

Recent studies have provided evidence of the impacts of KAMs after their implementation. Wei, Fargher, and Carson (2017) provided evidence from Australia. Their regression of both absolute value and income-increasing discretionary accruals provides evidence that the disclosure of KAMs does not improve audit quality but increases audit costs. Almulla and Bradbury (2018) provided

evidence from New Zealand and found that KAMs do not impact audit quality. Srijunpetch (2018), Boonyanet and Promsen (2018) and Boonlert-U-Thai, Srijunpetch, and Phakdee (2019) provided evidence from Thailand. Srijunpetch (2018) found that KAMs have a positive impact on stock trading volume but do not have an impact on stock price; however, Boonyanet and Promsen (2018) found that KAMs slightly improve the informative value of audit reports. KAMs related to allowances for doubtful accounts have a positive relation with stock prices. Boonlert-U-Thai et al. (2019) found that the disclosures of KAMs increased audit fees and audit delays because the auditors are more conservative.

2.7 Hypotheses Development

2.7.1 Audit quality

KAMs may improve audit quality. Bédard, Gonthier-Besacier, and Schatt (2018) emphasised that auditors are required to disclose additional information in audit reports, which in turn increases auditors' accountability. The greater accountability drives auditors to obtain more and better audit evidence and to exert more professional scepticism into their audits. Li, Hay, and Lau (2019) highlighted that KAMs increase the transparency of audits, which increases auditor accountability and responsibility. KAMs also help promote the communication between auditors and those charged with governance. Wei et al. (2017) indicated that KAMs improve the interactions between auditors and those charged with governance.

Concurrent evidence from archival studies of the impacts of JOAs, RMMs or KAMs on audit quality in the first year of their implementation remains inconclusive. Bédard et al. (2018) found that disclosing JOAs does not have a relation with the absolute value of abnormal accruals[1], which are a proxy for audit quality. Gutierrez, Minutti-Meza, Tatum, and Vulcheva (2018) found that disclosing RMMs does not impact audit quality as measured by accruals[2], but Reid et al. (2018) found that disclosing RMMs improves financial reporting quality as measured by absolute

[1] Abnormal accruals are calculated using Kothari, Leone, and Wasley (2005) performance-adjusted cross-sectional variation of the Jones model, and accruals are computed using Hribar and Collins (2002) cash flow approach.

[2] Abnormal accruals are calculated using the Jones model, including ROA. Gutierrez et al. (2018) used the match pair-sample between listed companies in the UK Financial Times Stock Exchange (FTSE) 100 index and those in the LSE Alternative Investment Market (AIM). RMMs are required only for listed companies in the main board.

abnormal accruals[3]. Almulla and Bradbury (2018) found that in New Zealand, disclosing KAMs does not affect absolute abnormal accruals[4], but Li et al. (2019) reported a contradictory finding that in New Zealand, disclosing KAMs reduced absolute abnormal accruals[5]. Wei et al. (2017) found that in Australia, disclosing KAMs does not improve audit quality as measured by discretionary accruals[6].

The inconclusiveness of this concurrent evidence leads to the following null hypothesis:

H1: There is no association between KAMs and audit quality.

2.7.2 Audit fee

Disclosing KAMs is believed to increase audit effort and audit risk, thereby increasing audit fees (Almulla & Bradbury, 2018; Bédard et al., 2018). Auditors increase their audit fees because disclosing additional matters, such as KAMs, in audit reports may cause them to face a higher litigation risk against auditors when misstatements are subsequently revealed (Wei et al., 2017). Similar to JOAs, disclosing KAMs should lead to the increase in senior members' effort because they have more work in considering, documenting, preparing and reviewing the disclosure of KAMs (Bédard et al., 2018). Disclosing KAMs also requires auditors to spend more time discussing these matters with audited companies (Reid et al., 2018). For the first year, audit firms must spend resources and time preparing their staff for the implementation and training of KAMs (Li et al., 2019; Reid et al., 2018) .

Recent archival studies of the impacts of JOAs, RMMs or KAMs on audit fees in the first year of their implementation provide inconclusive findings. Bédard et al. (2018) found that disclosing JOAs in the first year did not affect audit fees. Reid et al. (2018) and Gutierrez et al. (2018) found that disclosing RMMs does not affect audit fees. Li et al. (2019) reported that disclosing KAMs

[3] Abnormal accruals are calculated using the modified Jones (1991). Reid et al. (2018) used the match-pair sample between UK listed companies and US listed companies. The US has not yet had the requirement for CAM disclosure.
[4] Abnormal accruals are calculated using the modified Jones (1991).
[5] Abnormal accruals are calculated using the modified Jones (1991).
[6] Abnormal accruals are calculated using Kothari et al. (2005) performance-adjusted cross-sectional variation of the modified Jones model.

increases audit fees in New Zealand, but Almulla and Bradbury (2018) found that disclosing KAMs does not increase audit fees in New Zealand in the first year of implementation. Wei et al. (2017) reported that in Australia, disclosing KAMs increases audit fees only for non-Big 4 firms. According to these inconclusive studies, the null hypothesis is as follows:

H2: There is no association between KAMs and audit fees.

2.7.3 Audit delay

Disclosing KAMs increases audit work (Bédard et al., 2018) and requires auditors to spend more time discussing these matters with their audited companies (Reid et al., 2018). Therefore, audit delays are expected to be increased in the first year of its implementation; however, findings of concurrent studies are contradictory to this expectation. Reid et al. (2018) concluded that disclosing RMMs does not affect audit delays. Almulla and Bradbury (2018) found that disclosing KAMs does not affect audit delays. Bédard et al. (2018) reported that disclosing JOAs does not affect audit delays. The null hypothesis regarding the impacts of disclosing KAMs on audit delays is as follows:

H3: There is no association between KAMs and audit delays.

2.7.4 Market reaction

KAMs are informative to investors because KAMs are expected to alleviate the information asymmetry problem (Almulla & Bradbury, 2018; Bédard et al., 2018). Auditors' identified significant risks and responses to the risks are disclosed as KAMs (Almulla & Bradbury, 2018). This disclosure of KAMs may affect stock prices or trading volume, which are generally used to gauge the usefulness for market decisions because they impact the quality of financial reporting and the estimation of a company's ex ante cash flows (Gutierrez et al., 2018). Unless they are difficult to understand, KAMs may affect the market reaction in terms of investment decisions and attention to information provided (Bédard et al., 2018).

Concurrent studies have provided evidence that disclosing RMMs or JOAs does not affect the market reaction in the first year of implementation. Gutierrez et al. (2018) found that disclosing

RMMs does not impact absolute abnormal returns or abnormal trading volume. Bédard et al. (2018) found that disclosing JOAs does not impact abnormal returns or abnormal trading volume. Based on these findings, the following null hypothesis is presented:

H4: There is no association between KAMs and market reaction.

3. Methodology

3.1 Survey: Audit Expectation Gaps

The compositions, structure and the extent of the audit expectation gap in Thailand after the implementation of the new audit report in 2016 was investigated using a mail survey. The sample included stakeholders or users of audits with different relationships with the audit functions and auditors. Following Porter et al. (2012a), three broad interest groups were initially identified as follows:

1) auditees – the group closely associated with the audit functions;
2) audit beneficiaries from the financial community – the group directly benefitting from the audit functions, such as financial statement users; and
3) audit beneficiaries from outside the financial community – the group indirectly benefitting from the audit functions.

The subgroups of each broad interest group were identified, and samples of survey participants were randomly selected from their names and positions disclosed on the websites of the Securities Exchange and Commission, listed companies, universities, regulators, government bodies and companies. In September 2018, questionnaires were mailed to 2,230 individuals. Details of the interest groups are shown in Table 3. As shown in the table, the overall response rate was 8%. The low response is a general problem in the study of audit expectation gaps using questionnaire surveys. The study of Porter et al. (2012a) achieved an overall response rate of 14% in the UK in 2008 after they distributed 1,610 questionnaires and an overall response rate of 29% in New Zealand in 2008 after they distributed 1,555 questionnaires. The study in Thailand of Lee, Ali, Gloeck, Yap, Ng, et al. (2010) achieved an overall response of 13% after distributing 1,000 questionnaires.

Although the overall response of this study is lower than those of Porter et al. (2012a) and Lee, Ali, Gloeck, Yap, Ng, et al. (2010), the number of usable responses of the auditees group (independent committee, board of directors, audit committee, CFOs, accounting managers and internal auditors), which is the key stakeholder of audits, is sufficient. The number of usable responses was 111, whilst that of Porter et al. (2012a) was 42 in the UK and 137 in New Zealand and that of Lee, Ali, Gloeck, Yap, Ng, et al. (2010) was eight.

3.2.1 Survey instrument

To answer the research question regarding whether the expectation gaps still exist after the implementation of KAMs, a survey was conducted. The survey questionnaire was developed based on those of Porter et al. (2012a) and Lee, Ali, Gloeck, Yap, Ng, et al. (2010). It contained questions related to 64 actual and potential responsibilities of auditors, 53 of which were identified by Porter et al. (2012a) and 11 by LeeLee, Ali, Gloeck, Yap, Ng, et al. (2010). These 64 actual and potential responsibilities of auditors are shown in Table 4. Respondents were asked to give their opinions on each suggested responsibility listed in the questionnaire in respect of three questions *(1) whether the suggested responsibility is an existing responsibility of auditors, (2) if so, how well the auditors performed the responsibility and (3) whether the suggested responsibility should be the auditors' responsibility.*

Table 1 **Groups included in the survey and their response rates**

Survey groups	Number of distributed questionnaires	Number of usable responses	Percentage of usable responses (%)
Auditees:			
Independent committee	400	13	3%
Board of directors	400	45	11%
Audit committee	400	27	7%
CFO/Accounting manager	400	19	5%
Internal auditors	400	8	2%
Total	**2,000**	**112**	**6%**
Audit beneficiaries: Financial Community:			
Stockbrokers	30	21	70%
Financial analysts	30	3	10%

Bankers-corporate lenders	30	14	47%
Institutional investors	30	0	0%
Auditing/accounting regulator	10	0	0%
Auditing academics	30	5	17%
Total	**160**	**43**	**27%**
Audit beneficiaries: Non-financial community			
Solicitors	20	1	5%
Financial journalists	20	1	5%
General public	30	21	70%
Total	**70**	**23**	**33%**
Combined totals	**2,230**	**178**	**8%**

3.2.2 Coding and testing the survey results

Following Porter et al. (2012a), for the *questions 1 and 3*, the choices 'yes', 'no' and 'not sure' were given and were later coded +1, -1 and 0, respectively. If the mean of the group's opinion is positive, this indicates that the group members deemed the suggested responsibility is, or should be, a responsibility of auditors. The converse applies when the mean of the group's coded opinion is negative. The absolute value of the mean, which ranges from a possible 0 to ± 100, indicates the degree of the group members' agreement on the suggested responsibility of auditors. The closer the mean to ± 100, the greater the agreement. In addition, the level of the agreement or disagreement was interpreted as follows: +68 to +100 agree strongly, +34 to +67 agree moderately, 0 to +33 agree slightly, 0 to -33 disagree slightly, -34 to -67 agree moderately and -68 to -100 disagree strongly.

For *question 2*, which asked the respondents how well the auditors performed the responsibility, the choices 'poorly', 'adequately', 'well' and 'unable to judge' were given and were later coded 1, 2, 3 and 0, respectively. If the mean of the group's coded opinion on the suggested responsibility is less than 2.0, this indicates that the group members considered that the performance of auditors is not satisfactory. As suggested by Porter et al. (2012a), 1.9 should be used as the point to differentiate between adequate and inadequate performance. The differentiation was later affirmed by the additional test, which helped identify a perceived sub-standard performance of auditors' responsibilities if 20% or more of the group members selected 'poorly'.

3.3 Archival data analyses

To test hypothesis H1, discretionary accruals were used as a measurement of audit quality, similarly to previous studies. The regression model is as follows:

$$ABDAC = \alpha + \beta_1 \boldsymbol{KAMsDisclose} + \beta_2 LOGASSETS + \beta_3 LEVERAGE + \beta_4 ROA + \beta_5 LOSS + \beta_6 SALEGROWTH + \beta_7 MB + \beta_8 CFO + YFIXEFF + INDFIXEff + \varepsilon \quad (1)$$

Where,

$ABDAC$ = absolute value of discretionary accruals computed by the modified Jones model, including ROA;

$KAMsDisclose$ = 1 for the audit of financial statements for the year-ending on or after 15 December 2106 when disclosing KAMs is required, 0 otherwise;

$LOGASSETS$ = natural logarithm of total assets;

$LEVERAGE$ = total debts divided by total assets;

ROA = net income divided by total assets;

$LOSS$ = 1 if the company reported loss, 0 otherwise;

$SALEGROWTH$ = sale volatility, which is changed to sales divided by total assets;

MB = ratio of market to book value of equity;

CFO = cash flow from operations;

$YFIXEFF$ = dummy variables of year's fixed effects; and

$INDFIXEFF$ = dummy variables of industry's fixed effects.

Following Bédard et al. (2018) and Gutierrez et al. (2018), the cross-sectional modified Jones model was used adding the return on assets to estimate discretionary accruals.

In model 1, company $LOGASSETS$ was controlled, as Wei et al. (2017) found it has negative relation with the absolute value of abnormal accruals. $LEVERAGE$ was controlled, as Bédard et al. (2018) reported it has a positive relation with the absolute value of abnormal accruals. ROA, $LOSS$ and $SALEGROWTH$ were controlled, as Almulla and Bradbury (2018) and Li et al. (2019) found ROA has as negative relation with the absolute value of abnormal accruals, while Gutierrez et al. (2018). Almulla and Bradbury (2018) reported that $LOSS$ has a negative relation with the

absolute value of abnormal accruals. Gutierrez et al. (2018) found that $SALEGROWTH$ has a positive relation with the absolute value of abnormal accruals. MB was controlled, as Wei et al. (2017) found it has a positive relation with the absolute value of abnormal accruals. CFO was controlled, as Gutierrez et al. (2018) reported it has a positive relation with the absolute value of abnormal accruals.

To test hypothesis H2, audit fee was used as a measurement of audit cost, similarly to previous studies. The regression model is as follows:

$$\begin{aligned} LAFEE = \ & \alpha + \boldsymbol{\beta_1 KAMsDisclose} + \beta_2 LOGASSETS + \beta_3 LEVERAGE + \\ & \beta_4 ROA + \beta_5 LOSS + \beta_6 SALEGROWTH + \beta_7 CURR + \beta_8 AR + \beta_9 INV + \\ & \beta_{10} BIG4 + YFIXEFF + INDFIXEFF + \varepsilon \end{aligned} \quad (2)$$

Where,

$LAFEE$ = the natural logarithm of audit fee;

$KAMsDisclose$ = 1 for the audit of financial statements for the year-ending on or after 15 December 2106 when disclosing KAMs is required, 0 otherwise;

$LOGASSETS$ = natural logarithm of total assets;

$LEVERAGE$ = total debts divided by total assets;

ROA = net income divided by total assets;

$LOSS$ = 1 if the company reported loss, 0 otherwise;

$SALEGROWTH$ = sale volatility, which is changed to sales divided by total assets;

$CURR$ = current assets divided by current liabilities;

AR = accounts receivable divided by total assets;

INV = inventories divided by total assets;

$BIG4$ = 1 for the Big 4 firm, 0 otherwise;

$YFIXEFF$ = dummy variables of year's fixed effects; and

$INDFIXEFF$ = dummy variables of industry's fixed effects.

In Model 2, company $LOGASSETS$ was controlled, as Wei et al. (2017), Gutierrez et al. (2018) and Almulla and Bradbury (2018) found it has a positive relation with audit fees. $LEVERAGE$ was

controlled, as Almulla and Bradbury (2018) reported it has a positive relation with audit fees. ROA, $LOSS$ and $SALEGROWTH$ was controlled, as Almulla and Bradbury (2018) and Gutierrez et al. (2018) found that ROA has a negative relation with audit fees, whilst they reported $LOSS$ has a negative relation with audit fees. Gutierrez et al. (2018) found that $SALEGROWTH$ has a positive relation with audit fees, but Reid et al. (2018) found it has a negative relation with audit fees. $CURR$ was controlled, as Wei et al. (2017) found it has a negative relation with audit fees. AR was controlled, as Gutierrez et al. (2018) and Li et al. (2019) reported it has a positive relation with audit fees. INV was controlled, as Gutierrez et al. (2018) found it has a negative relation with audit fees. $BIG4$ was controlled, as Gutierrez et al. (2018) and Wei et al. (2017) found it has a positive relation with audit fees.

To test hypothesis 3, the following model was developed:

$$LADELAY = \alpha + \boldsymbol{\beta_1 KAMsDisclose} + \beta_2 LOGASSETS + \beta_3 LEVERAGE + \beta_4 ROA + \beta_5 LOSS + \beta_6 SALEGROWTH + \beta_7 MB + \beta_8 CFO + \beta_9 BUSY + \beta_{10} BIG4 + \beta_{11} LAFEE + YFIXEFF + INDFIXEFF + \varepsilon \quad (3)$$

where,

$LADELAY$ = the natural logarithm of audit delay counting from the date of year-ending for accounting period to the date of auditor report;

$KAMsDisclose$ = 1 for the audit of financial statements for the year-ending on or after 15 December 2106 when disclosing KAMs is required, 0 otherwise;

$LOGASSETS$ = natural logarithm of total assets;

$LEVERAGE$ = total debts divided by total assets;

ROA = net income divided by total assets;

$LOSS$ = 1 if the company reported loss, 0 otherwise;

$SALEGROWTH$ = sale volatility, which is changed to sales divided by total assets;

MB = ratio of market to book value of equity;

CFO = cash flow from operations;

BUSY = 1 if the date of year-ending for accounting period is 31 December, 0 otherwise;

BIG4 = 1 for the Big 4 firm, 0 otherwise;

$YFIXEFF$ = dummy variables of year's fixed effects; and

$INDFIXEFF$ = dummy variables of industry's fixed effects.

In model 3, company size $LOGASSETS$ were controlled, as Almulla and Bradbury (2018) and Reid et al. (2018) found it has a negative relation with audit delays, but Bédard et al. (2018) found it has a positive relation with audit delays. Firm ROA was controlled, as Almulla and Bradbury (2018) found it has a positive relation with audit delays. $LOSS$, $LEVERAGE$, $SALEGROWTH$, $BUSY$ and $LAFEE$ were controlled, as Reid et al. (2018) found they have a positive relation with audit delays. MB and CFO were controlled, as Reid et al. (2018) found they have a negative relation with audit delays. $BIG4$ was controlled, as Almulla and Bradbury (2018) found it has a positive relation with audit delays, but Reid et al. (2018) found it has a negative relation with audit delays.

To test hypothesis 4, the impact of the market reaction on KAMs was observed based on both abnormal returns and abnormal trading volume around the date of financial statement submission to the website of the Thailand Security Exchange and Commission. Model 4 was developed to observe abnormal returns, whilst model 5 was developed to observe abnormal trading volumes. Model 4 is as follows:

$$CAR = \alpha + \boldsymbol{\beta_1 KAMsDisclose} + \beta_2 LMKC + \beta_3 MB + \beta_4 LEVERAGE + \beta_5 CHNI + \beta_6 CAR3 + \beta_7 BIG + YFIXEFF + INDFIXEFF + \varepsilon \quad (4)$$

Where,

CAR = cumulative abnormal return;

$KAMsDisclose$ = 1 for the audit of financial statements for the year-ending on or after 15 December 2106 when disclosing KAMs is required, 0 otherwise;

$LMKC$ = natural logarithm of market capitalization;

MB = ratio of market to book value of equity;

$LEVERAGE$ = total debts divided by total assets;

$CHNI$ = current year's net income less previous year's net income divided by total assets;

$CAR3$ = the absolute value of the sum of the three-day absolute CAR during the period surrounding the financial statement

submitting date;

BIG = 1 for the Big 4 firm, 0 otherwise;

$YFIXEFF$ = dummy variables of year's fixed effects; and

$INDFIXEFF$ = dummy variables of industry's fixed effects.

For model 4, MB was controlled, as Bédard et al. (2018) found it has a positive relation with abnormal returns. $LMKC$ and $CHNI$ were controlled, as Gutierrez et al. (2018) reported they have a negative relation with abnormal returns. $LEVERAGE$, $CAR3$ and BIG were controlled, as Gutierrez et al. (2018) found they have a positive relation with abnormal returns.

Model 5 was developed to observe abnormal trading volumes as follows:

$$ABTV = \alpha + \boldsymbol{\beta_1 KAMsDisclose} + \beta_2 LMKC + \beta_3 ROA + \beta_4 LOSS + \beta_4 CAR3 + \\ + YFIXEFF + INDFIXEFF + \varepsilon, \quad (5)$$

Where,

$ABTV$ = cumulative abnormal trading volume;

$KAMsDisclose$ = 1 for the audit of financial statements for the year-ending on or after 15 December 2106 when disclosing KAMs is required, 0 otherwise;

$LMKC$ = natural logarithm of market capitalization;

ROA = net income divided by total assets;

$LOSS$ = 1 if the company reported loss, 0 otherwise;

$CAR3$ = the absolute value of the sum of the three-day absolute CAR during the period surrounding the financial statement submitting date;

$YFIXEFF$ = dummy variables of year's fixed effects; and

$INDFIXEFF$ = dummy variables of industry's fixed effects.

Following Pevzner, Xie, and Xin (2015), the estimation period is [-120, -21], and the event period is [0, +1].

In model 5, $LMKC$, ROA and $CAR3$ were controlled, as Gutierrez et al. (2018) found they have a positive relation with abnormal trading volumes. $LOSS$ was controlled, as Gutierrez et al. (2018) reported it has a negative relation with abnormal trading volumes.

3.3.5 Sample and data collection

A sample of listed companies traded on the Main Board of the Stock Exchange of Thailand (SET) was selected, and data were used covering the two years before and two years after the implementation of KAMs in Thailand in December 2016. First, the list of 580 listed companies traded on the Main Board of SET was considered. Fifty-eight companies from financials sectors, seven companies with rehabilitation and 87 companies with insufficient data for computing necessary variables were deleted. This resulted in 428 listed companies with 1,712 firm-year observations. Twelve firm-year observations with extreme audit delays were deleted due to the SEC's enforcement of financial restatement. Thirteen firm-year observations without data of KAMs were also deleted. Observations with a value of the main variable below the 1st and above the 99th percentile were deleted. Finally, the sample included 399 companies with 1,316 firm-year observations. Data were collected from the companies' financial statements, annual reports and the Form 56-1, which are published on the Thailand Securities and Exchange Commission website or the companies' websites.

4. Results

4.2 Audit Performance Expectation Gaps

4.2.1 Society's expectations of auditors

As illustrated in Table 4, auditors were expected by society to perform 58 of 64 suggested responsibilities. These 58 responsibilities are shown in column 6 and are labelled 'S'. Six suggested responsibilities on the list (2.17a, 2.17b, 2.17c, 2.24a, 2.24b and 2.24c) were not expected by society to be performed by auditors.

Table 4 Contribution of responsibilities to components of the audit expectations performance gap in Thailand in 2018.

No.	Suggested responsibilities of auditors[2]	1[1]	2[1]	3[1]	4[1]	5[1]	6[1]
		(%)		(%)		(%)	
2.1	**Prepare the client's financial statements**	**-**	**-**	**-**	**-**	**41**	**S**
2.2	**Guarantee that the company's audited financial statements are completely accurate**	**-**	**-**	**-**	**-**	**44**	**S**
2.3	State whether or not the financial statements fairly reflect the company's financial affairs	-	D	-	R	-	S

2.4	**Guarantee that a company with a clean audit report is financially sound**	**-**	**-**	**-**	**-**	**44**	**S**
2.5a	**Report to an appropriate authority doubts about the client's continued existence**	**-**	**-**	**-**	**-**	**53**	**S**
2.5b	Disclose in the audit report doubts about the client's continued existence	-	D	-	R	-	S
2.6	Ensure compliance with the disclosure requirements of the Companies Acts	-	D	-	R	-	S
2.7	**Report breaches of tax law to Revenue Department**	**-**	**-**	**-**	**-**	**48**	**S**
2.8a	Detect theft of a material amount (e.g. > 5per cent of turnover or total assets) of the client's assets by non-managerial employees	-	D	-	R	-	S
2.8b	Detect theft of a material amount (e.g. > 5per cent of turnover or total assets) of the client's assets by directors/senior management	-	D	-	R	-	S
2.9a	**Detect minor (but not petty) theft of the client's assets by non- managerial employees**	**-**	**-**	**-**	**-**	**46**	**S**
2.9b	**Detect minor (but not petty) theft of the client's assets by directors/senior managements**	**-**	**-**	**-**	**-**	**61**	**S**
2.10	Detect deliberate distortion of the client's financial statements	-	D	-	R	-	S
2.11a	**In the absence of a regulated industry duty, report to an appropriate authority (e.g. Police, SEC) minor (but not petty) theft of the client's assets by non-managerial employees**	**-**	**-**	**-**	**-**	**41**	**S**
2.11b	**In the absence of a regulated industry duty, report to an appropriate authority (e.g. Police, SEC) theft of a material amount of the client's assets by non-managerial employees**	**-**	**-**	**-**	**-**	**63**	**S**
2.11c	In the absence of a regulated industry duty, report to an appropriate authority (e.g. Police, SEC) embezzlement of the client's assets by directors/senior management	-	D	-	R	-	S
2.11d	In absence of regulated industry duty, report to appropriate authority (e.g. Police or SEC) deliberate distortion of client's financial statements	-	D	-	R	-	S
2.12a	**Disclose in the audit report minor (but not petty) theft of the client's assets by non-managerial employees**	**-**	**-**	**-**	**-**	**47**	**S**
2.12b	Disclose in the audit report theft of a material amount of the client's assets by non-managerial employees	-	D	-	R	-	S
2.12c	Disclose in the audit report embezzlement of the client's assets by directors/ senior management	-	D	-	R	-	S
2.12d	Disclose in the audit report deliberate distortion of the client's financial statements	-	D	-	R	-	S
2.13	In absence of a regulated industry duty, report to an appropriate authority (e.g. police, SEC) suspicions of theft or deliberate distortion of the client's financial statements	-	D	-	R	-	S
2.14a	Detect illegal acts by the client's directors/senior management which directly impact on the client's financial statements (e.g. political payoffs)	-	D	-	R	-	S
2.14b	**Detect illegal acts by the client's directors/senior management which only indirectly impact on the client's financial statements (e.g. breaches of environmental laws and regulations)**	**-**	**-**	**-**	**-**	**64**	**S**
2.15a	**Disclose in the audit report illegal acts by the client's directors/senior management which directly impact on the client's financial statements**	**10**	**D**	-	R	-	S
2.15b	**Disclose in the audit report illegal acts by the client's directors/senior management which only indirectly impact on the client's financial statements (e.g. breaches of environmental laws)**	**-**	**-**	**-**	**-**	**58**	**S**
2.16	In the absence of a regulated industry duty, report to an appropriate authority (e.g. police, SEC) illegal acts by client's directors/management that illegal acts have been committed by the company's management or directors	-	D	-	R	-	S
2.17a	Examine & report (in audit report) on reliability of information in the client's annual report about its equal employment opportunities policy and record	-	-	-	-	-	-
2.17b	Examine and report (in the audit report) on the reliability of information in the client's annual report about its product safety policy and record	-	-	-	-	-	-
2.17c	Examine and report (in audit report) on reliability of information in client's annual report about its occupational health and safety policy and record	-	-	-	-	-	-
2.17d	Examine and report (in the audit report) on the reliability of information in client's annual report about its directors' remuneration	-	D	-	R	-	S
2.18a	**Examine and report (in the audit report) on the effectiveness of the client's internal financial controls**	**-**	**-**	**79**	**R**	-	S

2.18b	**Examine and report (in the audit report) on the effectiveness of the client's operating systems and internal non-financial controls**	**-**	**-**	**-**	**-**	**47**	**S**
2.19	**Examine and report (in the audit report) on the client's IT systems**	**-**	**-**	**-**	**-**	**48**	**S**
2.20	**Examine & report (in the audit report) on client's non-financial performance**	**-**	**-**	**-**	**-**	**39**	**S**
2.21	**Examine and report (in the audit report) on the efficiency and effectiveness of the client's management and administration**	**-**	**-**	**-**	**-**	**46**	**S**
2.22	**Audit half-yearly published financial statements**	**-**	**-**	**-**	**-**	**74**	**S**
2.23	**Examine and report (in the audit report) on the reasonableness of financial forecasts included in the client's annual report**	**-**	**-**	**61**	**R**	-	S
2.24a	Consider & report (in audit report) on client's impact on its local community	-	-	-	-	-	-
2.24b	Consider and report (in the audit report) on the client's impact on its environment (other than its carbon footprint)	-	-	-	-	-	-
2.24c	Consider and report (in the audit report) on the client's carbon footprint	-	-	-	-	-	-
2.25a	**Examine and report (in the audit report) on the reliability of information in the client's entire annual report**	**-**	**-**	**73**	**R**	-	S
2.25b	Examine and report (in the audit report) on information in the client's annual report which is inconsistent with the financial statements	-	D	-	R	-	S
2.26a	**For listed company clients, examine compliance with a specified set of the Stock Exchange's corporate governance requirements and report (in the audit report) on compliance therewith**	**-**	**-**	**61**	**R**	-	S
2.26b	**For listed company clients, examine compliance with all of the Stock Exchange's corporate governance requirements and report (in the audit report) instances of non-compliance**	**-**	**-**	**-**	**-**	**59**	**S**
2.27a	Examine and report to the client's directors (or audit committee) on the adequacy of the client's procedures for identifying financial risks (e.g. credit, interest rate, foreign exchange and liquidity risks)	-	D	-	R	-	S
2.27b	**Examine and report to the client's directors (or audit committee) on the adequacy of procedures for identifying operational risks (e.g. machinery breakdown, entering new markets, materials or labour shortages)**	**-**	**-**	**-**	**-**	**51**	**S**
2.28a	**Examine and report (in audit report) on adequacy of client's procedures for identifying financial risks (e.g. credit, interest rate, foreign exchange risks)**	**-**	**-**	**52**	**R**	-	S
2.28b	**Examine and report (in audit report) on adequacy of procedures for identifying operational risks (e.g. machinery breakdown, labour shortages)**	**-**	**-**	**-**	**-**	**39**	**S**
2.29a	**Examine and report (in attached audit report) on the reliability of information provided on the Internet by the client in its audited financial statements**	**-**	**-**	**75**	**R**	-	S
2.29b	**Examine and report (in attached audit report) on reliability of information (other than in its audited financial statements) posted on Internet by client**	**-**	**-**	**-**	**-**	**60**	**S**
2.30a	Report to directors (or audit committee) significant difficulties encountered during the audit (e.g. disagreements with senior managers re financial reporting matters)	-	D	-	R	-	S
2.30b	Report in audit report significant difficulties encountered during the audit (e.g. disagreements with senior managers about financial reporting matters)	-	D	-	R	-	S
2.31	**Verify every accounting transaction**	**-**	**-**	**-**	**-**	**56**	**S**
2.32	Verify the accounting estimates in the financial statement	-	D	-	R	-	S
2.33	**Prevent fraud and errors in the company**	**-**	**-**	**-**	**-**	**50**	**S**
2.34	**Plan the accounting system and internal control system**	**-**	**-**	**-**	**-**	**42**	**S**
2.35	Comply with Code of Ethics for professional accountant	-	D	-	R	-	S
2.36	Maintain confidentiality and safe custody of the audit working papers	-	D	-	R	-	S
2.37	**Report in the published auditor's report the future prospects of the company**	**-**	**-**	**-**	**-**	**32**	**S**
2.38	Express an opinion on the company's accounts to shareholders in a general meeting	-	D	-	R	-	S
2.39	Report in the published auditor's report on failures of auditors in obtaining all the information and explanation in forming their opinion on the company's accounts	-	D	-	R	-	S
2.40	Report in the published an auditor's report on any deficiencies or failure on the manner proper accounting and other records (including registers) are kept by the company	-	D	-	R	-	S
2.41	**Audit published quarterly company's reports**	**-**	**-**	**-**	**-**	**69**	**S**

	No. of responsibilities	**1**	**26**	**6**	**32**	**26**	**58**
	Measure of unfulfilled expectation attaching to component	10		401		1322	
	Proportion of expectation-performance gap	1%		22%		76%	

[1] 1=Deficient performance gap, 2=Auditors' existing responsibilities, 3=Deficient standards gap, 4=Responsibilities reasonably expected from auditors, 5=Reasonableness gap and 6 = Society expectations of auditors.

[2] The percentage of respondents from auditees, financial and non-financial community who agreed that (1) auditors should perform the responsibility (in cases of reasonableness gaps and deficiency standards gap) or (2) the auditors perform the responsibility poorly in case of the deficiency performance gap.

[3] D is coded for existing responsibilities of auditors indicated in the auditing standards. The responsibilities 2.11c, 2.11d, 2.12b, 2.13, 2.16 and 2.30b are from the implementations of the new auditing standards related to the new audit report with KAMs.

[4] R is coded for responsibilities that are reasonably expected for auditors to perform.

[5] S is coded for responsibilities that the respondents indicated should be performed by auditors.

[6] Responsibilities highlighted in bold are those that contribute to the components of the audit expectation gap.

4.2.2 Responsibilities reasonably expected from auditors

Table 5, column 4 shows that 32 of the 64 suggested responsibilities were reasonably expected to be performed by auditors and are labelled 'R'. Rs are suggested responsibilities that 20% of the combined group of respondents from auditees and those from the financial community signified that auditors should perform. As explained by Porter et al. (2012a), these two groups are close to the audit function but from different views. On one hand, auditees, which are the subject to be audited, are more concerned about the audit costs and are therefore more likely to limit the responsibilities of auditors. On the other hand, the respondents from the financial community are beneficiaries of the audits and are therefore more likely to extend the responsibilities of auditors. Opinions from these two groups are thus useful to consider whether the benefits from the suggested responsibilities of auditors outweigh their costs. The opinions of the respondents from the non-financial community are excluded because they are too remote from the audits.

4.2.3 Reasonableness gap

Table 5, column 5 shows the reasonableness gap, which is a gap between what society expects auditors to achieve and what they can reasonably be expected to accomplish (compared between columns 4 and 6). Twenty-six responsibilities (highlighted in bold) are found to contribute to this reasonableness gap. Twenty-three are readily explainable, and three are less readily explainable (2.15b, 2.5a and 2.7).

4.2.4 Deficient standards gap

Table 5, column 3 illustrates the deficient standards gap, which is a gap between the duties that can reasonably be expected of auditors and auditors' existing duties as defined by auditing standards (compare columns 2 and 4). The results in Table 5, column 4 show that 32 responsibilities are reasonably expected from auditors, while Table 5, column 2 shows that 26 are existing responsibilities. Thus, the remaining six responsibilities (2.18a, 2.23, 2.25a, 2.26a, 2.28a and 2.29a) contribute to the deficient standards gap.

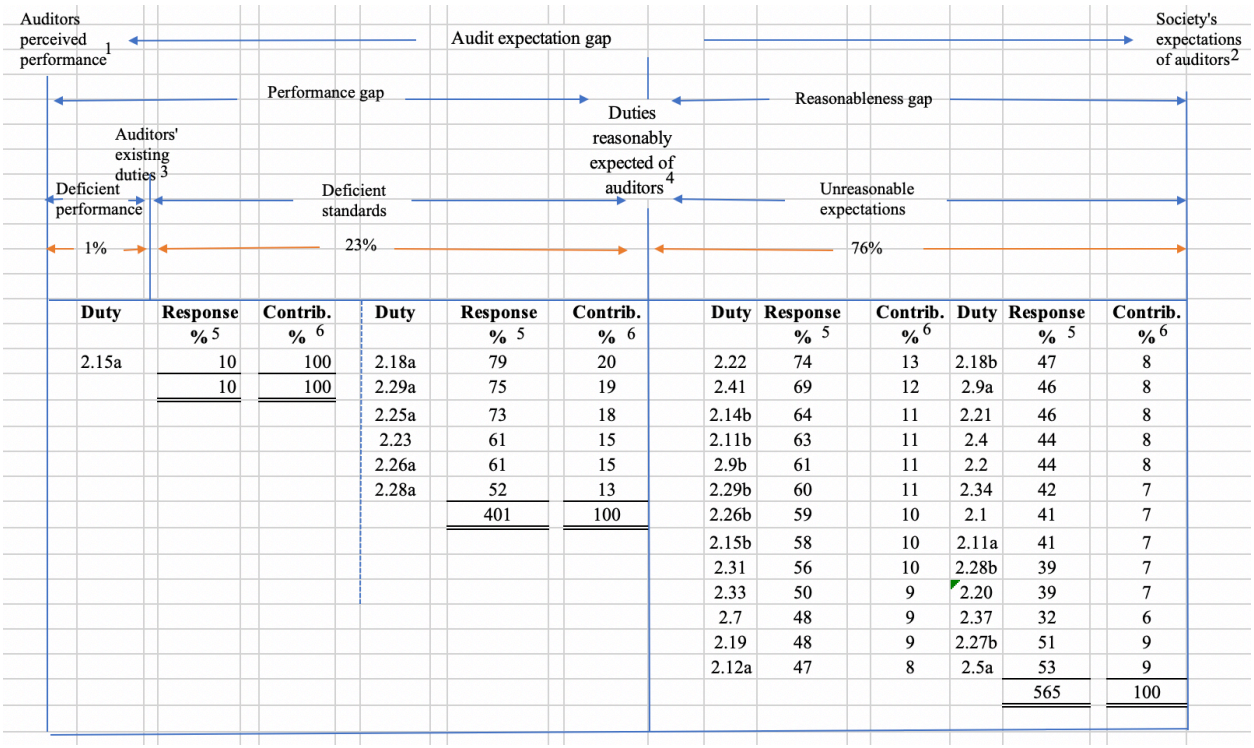
4.2.5 Deficient performance gap

The results shown in Table 5, column 1 indicate that there is only one auditor responsibility that constituted the deficient performance gap. This is the auditors' responsibility to disclose in the audit report illegal acts by the client's directors/senior management that directly impact the client's financial statements (2.15a).

4.2.6 Structure and extent of the audit expectation performance gap

Figure 3 illustrates that the structure of the audit expectation gap consisted of 76% of the reasonableness gap, 23% of the deficient standards gap and 1% of the auditor deficient performance gap. First, for the reasonableness gap, 26 responsibilities contributed to this gap. The first and second greatest contributions were society's unreasonable expectations of auditors to audit half-year published financial statements (2.22) and published quarterly company reports (2.41). Seventy-four per cent and 69% of society expected auditors to perform responsibilities 2.22 and 2.41, respectively. The smallest contribution was society's unreasonable expectation of auditors to report in the published auditor's report the future prospects of the company (2.37), and 32% of society unreasonably expected them to perform this responsibility.

Figure 2 Relative contribution of responsibilities to components and components of the audit expectation performance gap in Thailand in 2018



Duty	Response % [5]	Contrib. % [6]	Duty	Response % [5]	Contrib. % [6]	Duty	Response % [5]	Contrib. % [6]	Duty	Response % [5]	Contrib. % [6]
2.15a	10	100	2.18a	79	20	2.22	74	13	2.18b	47	8
	10	100	2.29a	75	19	2.41	69	12	2.9a	46	8
			2.25a	73	18	2.14b	64	11	2.21	46	8
			2.23	61	15	2.11b	63	11	2.4	44	8
			2.26a	61	15	2.9b	61	11	2.2	44	8
			2.28a	52	13	2.29b	60	11	2.34	42	7
				401	100	2.26b	59	10	2.1	41	7
						2.15b	58	10	2.11a	41	7
						2.31	56	10	2.28b	39	7
						2.33	50	9	2.20	39	7
						2.7	48	9	2.37	32	6
						2.19	48	9	2.27b	51	9
						2.12a	47	8	2.5a	53	9
										565	100

[1] Society perceived that auditors performed the responsibilities deficiently.

[2] 20% of respondents expected auditors to perform the responsibilities.

[3] The existing responsibilities of auditors are adapted from Porter et al. (2012) and Lee et al. (2010). The responsibilities 2.3, 2.5b, 2.6, 2.8a, 2.8b, 2.10, 2.12c, 2.12d, 2.14a, 2.15a, 2.17d, 2.25b, 2.27a and 2.30a are from Porter et al. (2012), while the responsibilities 2.32, 2.35, 2.36, 2.38, 2.39 and 2.40 are from Lee et al. (2010). The responsibilities 2.11c, 2.11d, 2.12b, 2.13, 2.16 and 2.30b are from the implementations of the new auditing standards related to the new audit report with KAMs.

[4] The percentage of respondents from auditees, financial and non-financial community who agreed that (1) auditors should perform the responsibilities in cases of the reasonableness gap and the deficiency standards gap or (2) auditors perform the responsibilities poorly in case of the deficiency performance gap.

Second, six suggested responsibilities contributed the deficient standards gap. The first greatest contribution (79%) to this gap was society's reasonable expectation of auditors to examine and to report (in the audit report) the effectiveness of the client's internal financial controls (2.18a). The second and third greatest contributions (75% and 73%, respectively) were society's reasonable expectations of auditors to examine and to report (in attached audit report) the reliability of information provided on the Internet by the client in its audited financial statements (2.29a) and information in the client's entire annual report (2.25a). The smallest contribution (52%) was

society's reasonable expectation of auditors to examine and to report (in audit report) the adequacy of client's procedures for identifying financial risks (e.g. credit, interest rate, foreign exchange risks) (2.28).

Third, the deficient performance gap consisted of only one existing responsibility of auditors to disclose in the audit report illegal acts by the client's directors/senior management that directly impact the client's financial statements (2.15a). Eleven per cent of society perceived that auditors' performance of this responsibility was unsatisfactory.

4.2.7 Summary

In comparison with the findings of Lee, Ali, Gloeck, Yap, Ng, et al. (2010), the findings suggest that after the implementation of KAMs, the deficient performance and deficient standards gaps became narrower, while the reasonableness gap became broader. The auditors' existing responsibilities to detect deliberate distortion of the client's financial statements (2.10) and to disclose it in the audit report (2.12d), which contributed to the deficiency performance gap, disappeared in 2018. This may be due to the close monitoring (e.g. audit firm inspection) of auditors' performance by the Security Exchange and Commission and the tremendous effort of the Thailand Federation of Accountants to promote audit quality; however, a new deficiency performance gap was found in 2018, which is the auditors' responsibility to disclose in the audit report illegal acts by the client's directors/senior management that directly impact the client's financial statements (2.15a). This may have resulted from the series of illegal acts by the listed companies' directors/senior management reported by mass media in the past few years. Society has therefore perceived that the auditors' performance was unsatisfactory. To close this gap, standard setters should raise auditors' awareness of detecting and reporting illegal acts committed by companies' management and should also closely monitor the auditors' performance.

The narrower deficiency standards gap may have resulted from the large reforms of the auditor's report and related auditing standards in 2016, especially the requirement of auditors' disclosing KAMs, which refer to the auditors' responsibilities 2.5a, 2.11c, 2.11d, 2.12b, 2.13, 2.16 and 2.30b; however, the remaining gap is associated with society's reasonable expectations of auditors to examine and to report in the audit report the effectiveness of the client's internal financial controls

(2.18a), the reliability of information provided on the Internet by the client in its audited financial statements (2.29a) and information in the client's entire annual report (2.25a), the reasonableness of financial forecasts included in the client's annual report (2.23), the compliance with a specified set of the Stock Exchange's corporate governance requirements (2.26a) and the adequacy of client's procedures for identifying financial risks. Performing these responsibilities would make insignificantly increased in deficiency standards gap.

4.3 Archival Data Analyses

4.3.1 Audit quality

4.3.1.1 Descriptive statistics

Model 1 was used to test the impacts of disclosing KAMs on audit quality measured by abnormal accruals. Untabulated results[7] show that absolute values of abnormal accruals were on average 0.120 (median =0.091). Approximately 51% of the firm-year observations are from the period after the implementation of KAMs. Approximately 19% of the firm-year observations reported losses. The sample had on average total assets approximately Baht 6 billion (Baht 5 billion) and reported good performances as the average ROA was approximately 0.052 (median=0.052).

There was no different characteristic between the firm-year observations for the abnormal accruals model before or after the implementation of KAMs (Untabulated).

4.3.1.4 Regression results

Hypothesis 1 predicts that disclosing KAMs does not impact audit quality after the implementation of KAMs in Thailand. Model 1 was used to address this hypothesis. The results in Table 6 show a weak significant negative effect of $KAMsDisclose$ on $ABDAC$ (-0.055 P=0.061). Therefore, null hypothesis H1 was rejected. This indicates that disclosing KAMs helps improve audit quality by reducing discretionary accruals by approximately 5.5%.

[7] To reduce the impacts of outliers, data of all continuous variables were winsorised at the 1^{th} and 99^{th} percentiles. The sample of abnormal accruals included 1,414 firm-year observations.

Table 6 Regression analyses

ABDAC	Pred Sign	Coef.		P-value
(1) KAMsDisclose	-	-0.055	*	0.061
(2) LOGASSETS	-	-0.006	***	0.005
(3) LEVERAGE	+	0.002		0.905
(4) ROA	-	-0.164	***	0.007
(5) LOSS	-	0.020	**	0.039
(6) SALEGROWTH	+	-0.059	***	0.001
(7) MB	+	-0.002		0.210
(8) CFO	+	0.221	***	0.000
Intercept		0.256	***	0.000
YFIXEFF		Yes		
INDFIXEFF		Yes		
Robust variance estimates		Yes		
N. Obs.		1,414		
Adjusted R2		0.13		
Loglikelihood ratio		215.882	***	
AIC*N		-2716.714		
BIC		-92.561		

*, ** and *** indicate significance at the 0.10, 0.05 and 0.01 levels, respectively. P-values are one-tailed for predicted sign except when the estimated coefficient has a sign opposite to expectation. All other p-values are two-tailed.

4.3.2 Audit fees

4.3.2.1 Descriptive statistics

Model 2 was adopted to test the impacts of disclosing KAMs on audit fees. Untabulated results[8] show that paid audit fees were on average Baht 2.4 million (median=2.1 million). Approximately 65% of the firm-year observations were audited by Big 4 firms. Clients paid higher audit fees after the implementation of disclosing than before the implementation. They paid audit fees of approximately Baht 2.2 million (median=2.1 million) before disclosing KAMs; however, they paid audit fees of approximately Baht 2.5 million (2.3 million) after the implementation. This provided evidence that disclosing KAMs increases audit fees.

4.3.2.4 Regression results

Hypothesis 2 predicts that disclosing KAMs does not impact audit fees after the implementation of KAMs in Thailand. Model 2 was used to address this hypothesis. Table 7 reports the results of the regression analysis. A significant and positive effect of $KAMsDisclose$ (0.135 P=0.050) on *LAFEE* was found. Therefore, null hypothesis H2 was rejected. After the implementation, clients paid higher audit fees (approximately 14.4%) than before the implementation.

Table 7 Regression analysis

LAFEE	**Pred. Sign**	**Coef.**		**P-value**
(1) KAMsDisclose	+	0.135	**	0.050
(2) LOGASSETS	+	0.336	***	0.000
(3) LEVERAGE	+	0.106	***	0.002
(4) ROA	-	-0.803	***	0.004
(5) LOSS	-	0.042		0.389
(6) SALEGROWTH	+	-0.016		0.872
(7) CURR	-	-0.006		0.316
(8) AR	+	0.051		0.109

[8] To reduce the impacts of outliers, data of all continuous variables were winsorised at the 1th and 99th percentiles. The sample of audit fees included 1,375 firm-year observations.

(9) INV	-	-0.119		0.154
(10) BIG	+	0.216	***	0.000
Intercept		6.880	***	0.000
YFIXEFF		Yes		
INDFIXEFF		Yes		
Robust variance estimates		Yes		
N. Obs.		1,375		
Loglikelihood ratio		953.526	***	
Adjusted R2		0.49		

Notes: *, ** and *** indicate significance at the 0.10, 0.05 and 0.01 levels, respectively. P-values are one-tailed for predicted sign except when the estimated coefficient has a sign opposite to expectation. All other p-values are two-tailed.

4.3.3 Audit delays

4.3.1.1 Descriptive statistics

Model 3 was adopted to test the impacts of disclosing KAMs on audit delays. Untabulated results[9] show that audit delays were on average 53 days (median=54 days). Approximately 96% of the firm-year observations' year endings were 31 December. Audit delays before the implementation of disclosing KAMs and those after the implementation of KAMs were not significantly different. This provides evidence that the implementation of disclosing KAMs does not impact audit delays.

4.3.1.2 Regression results

Hypothesis 3 predicts that disclosing KAMs does not impact audit delays after the implementation of KAMs in Thailand. Model 3 was used to test this hypothesis. In Table 8, the results show that $KAMsDisclose$ is positively (weak significance) related to *LADELAY* (0.031 P=0.063). Therefore, null hypothesis H3 was rejected. Audit delays after the implementation are approximately 3.2% (exponential function of 0.031 less 1) longer than before the implementation.

Table 2 Regression analysis

	Pred.

[9] To reduce the impacts of outliers, data of all continuous variables were winsorised at the 1th and 99th percentiles. The sample of audit delays included 1,355 firm-year observations..

LADELAY	Sign	Coef.		P-value
(1) KAMsDisclose	+	0.031	*	0.063
(2) LOGASSETS	?	-0.013	***	0.000
(3) LEVERAGE	+	0.016	***	0.003
(4) ROA	+	-0.126		0.080
(5) LOSS	+	-0.011		0.279
(6) SALEGROWTH	+	0.037	**	0.029
(7) MB	-	-0.002		0.255
(8) CFO	-	-0.138	***	0.000
(9) BUSY	+	-0.012		0.401
(10) BIG	?	-0.049	***	0.000
(11) LAFEE	+	0.023	***	0.000
Intercept		4.013	***	0.000
YFIXEFF		Yes		
INDFIXEFF		Yes		
Robust variance estimates		Yes		
N. Obs.		1,355		
Loglikelihood ratio		197.746	***	
Adjusted R2		0.12		

*, ** and *** indicate significance at the 0.10, 0.05 and 0.01 levels, respectively. P-values are one-tailed for predicted sign except when the estimated coefficient has a sign opposite to expectation. All other p-values are two-tailed.

4.3.4 Market reaction

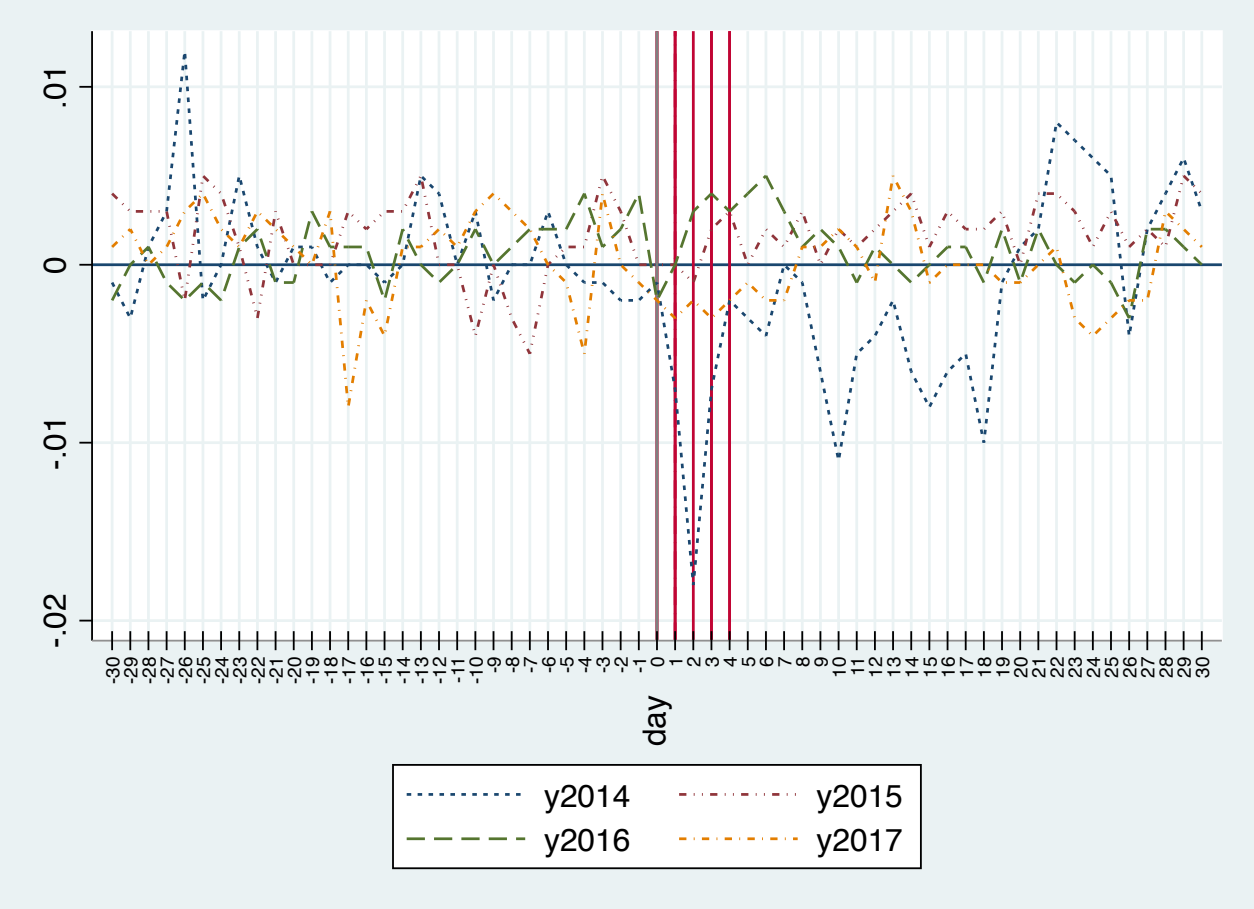
4.3.1.1 Descriptive statistic

Models 4 and 5 were adopted to tests the impacts of disclosing KAMs on market reaction measured by cumulative abnormal returns and abnormal trading volume. Untabulated results[10] and Figure 4 show the abnormal returns in period [-30, +30] in 2014, 2015, 2016 and 2017. Day 0 of the period was the date that companies filed their financial information on the SEC's website. It was found that negative abnormal returns in 2014 occurred after the filing date in the period [+1,+3]. In 2015,

[10] To reduce the impacts of outliers, data of all continuous variables were winsorised at the 1th and 99th percentiles. The sample of the market reaction model included 1,270 firm-year observations.

positive abnormal returns occurred before the filing date in the period [-3,-2]. In 2016, when requiring the disclosures of KAMs, abnormal returns occurred both before and after the filing date. There were positive abnormal returns in day [-1] and in the period [+3,+4]. In 2017, abnormal returns occurred before the filing date in the period [-4,-3]. Cumulative abnormal returns in the period [0,+1] were on average -0.003 (median=0.000), and abnormal trading volumes were on average 1.528 (0.810). There were no significant differences in the characteristics of firms compared to before and after disclosing KAMs.

Figure 3 Abnormal returns in period [-30, +30]



4.3.1.4 Regression results

Hypothesis 4 predicts that disclosing KAMs does not impact the market reaction after the implementation of KAMs in Thailand. Models 4 and 5 were used to address this hypothesis. Table 9, Panel A presents the results of the cumulative abnormal return model (model 4), while Panel B presents the results of the abnormal trading volume model (model 5). For both models, insignificant relationships were found between $KAMsDisclose$ and CAR as well as $ABTV$. Therefore, null hypothesis H4 that disclosing KAMs does not impact the market reaction at the earnings announcement date after the implementation of the requirement for KAMs in Thailand was accepted.

Table 9 Regression analysis

Panel A: Cumulative abnormal return model

		CAR		
	Pred. Sign	**Coef.**		**P-value**
(1) KAMsDisclose	?	0.002		0.634
(2) LMKC	-	0.002	*	0.058
(3) MB	+	0.000		0.549
(4) LEV	+	-0.009		0.136
(5) CHNI	-	0.110	***	0.000
(6) CAR3	+	-0.084		0.225
(7) BIG	+	0.005	**	0.037
Intercept		-0.046	***	0.021
YFIXEFF		Yes		
INDFIXEFF		Yes		
Robust variance estimates		Yes		
N. Obs.		1,270		
Loglikelihood ratio		68.226	***	
Adjusted R2		0.04		

Table 9 Regression analysis

Panel B: Abnormal trading volume

		ABTV		
	Pred. Sign	**Coef.**		**P-value**
(1) KAMsDisclose	?	0.417		0.178
(2) LMKC	-	0.003	*	0.941
(3) ROA	+	2.716		0.012
(4) LOSS	+	-0.292		0.142
(5) CAR3	-	26.166	***	0.000
Intercept		0.865	***	0.419
YFIXEFF		Yes		
INDFIXEFF		Yes		
Robust variance estimates		Yes		
N. Obs.		1,270		
Loglikelihood ratio		190.646	***	
Adjusted R2		0.13		

*, ** and *** indicate significance at the 0.10, 0.05 and 0.01 levels, respectively. P-values are one-tailed for predicted sign except when the estimated coefficient has a sign opposite to expectation. All other p-values are two-tailed.

4.3.5 Summary

The archival data analyses provided (weak) evidence that the implementation of disclosing KAMs in Thailand in 2016 improves audit quality and increases audit fees and audit delays with no impact on market reaction. After implementation, disclosing KAMs tended to reduce discretionary accruals by approximately 5.5%, increase audit fees by approximately 14.4% and increase audit delays by approximately 3.2%.

5. Conclusion

This paper provides comprehensive evidence of audit stakeholders' perceptions on KAMs, including the audit expectation gap, and the impacts of KAMs on audit quality, audit fees, audit

delays and market reactions. Evidence is derived from the analyses of questionnaires and archival data. The analyses are subject to the following limitations. First, the overall response rate of the survey was low, which may undermine the credibility of the results from analysing the audit expectation performance gap. Second, to observe the impacts of a new audit report on the audit expectation gap after the implementation of KAMs in Thailand in 2016, the results from this study were compared with those of Lee, Ali, Gloeck, Yap, Ng, et al. (2010). The difficulty in reconciling the actual and potential responsibilities of auditors listed by Porter et al. (2012a), Porter et al. (2012b) and Lee et al. (2010) may reduce the correctness of the comparison. Third, there is a lack of consensus on the definition and the measurement of audit quality (Li et al., 2019). Similar to other studies (Almulla & Bradbury, 2018; Bédard et al., 2018e.g., ; Gutierrez et al., 2018), audit quality was measured using discretionary accruals. Fourth, the two-year post-period of the implementation of KAMs may be too short to observe the impact on audit quality, audit fees, audit delays and market reaction.

Notwithstanding the aforementioned limitations, the conclusion and suggestions are as follows.

First, the survey data analysis provided evidence that the reasonableness gaps were widened from 30% in 2010 to 78% in 2018. It is possible that the dynamic changes in the business world have led to more complex business transactions and also to greater expectations of auditing functions than those in the past and thus have magnified the reasonable gap.

To narrow the reasonable gap, it is suggested that the reforms of the audit report be done in parallel with proactive approaches to educating users about audit functions. To change this perception, the standard setters and regulators in Thailand should seek efficient ways to help users understand and recognise the importance of audit functions. This could include promoting on-going and proactive education on auditing through mass media, seminars and the website of the Thailand Federation of Accounting Professions (www.tfac.or.th) as well as encouraging public debates and discussions on auditing issues.

Second, this study is the first to provide evidence that the deficiency standards gaps were narrowed from 63% in 2010 to 23% in 2018. This may have resulted from the large reforms of the auditor

report and related auditing standards in 2016, especially the requirement for auditors to disclose KAMs; however, the remaining gap is associated with society's reasonable expectations of auditors to examine and to report in the audit report the effectiveness of the client's internal financial controls, the reliability of information provided on the Internet by the client in its audited financial statements as well as information in the client's entire annual report. Performing these responsibilities would make audits more valuable and would increase benefits to society.

Third, it was found that the deficiency performance gaps were narrower after the implementation of the new audit report. The deficiency performance gaps were narrower from 7% in 2010 to 1% in 2018. The auditors' existing responsibilities to detect deliberate distortion of the client's financial statements and to disclose it in the audit report, which contributed to the deficiency performance gap in 2010, disappeared in 2018. This may be due to close monitoring (e.g. audit firm inspection) of auditors' performance by the Security Exchange and Commission and the tremendous effort of the Thailand Federation of Accountants to promote audit quality; however, a new deficiency performance gap was found in 2018. The gap is the auditors' responsibility to disclose in the audit report illegal acts by the client's directors/senior management that directly impact the client's financial statements. This may have resulted from the series of illegal acts by the listed companies' directors/senior management reported by mass media in the past few years. Society has therefore perceived that auditors' performance is unsatisfactory. To close this gap, the standard setters should raise auditors' awareness of detecting and reporting illegal acts committed by companies' management and should also closely monitor the auditors' performance.

Fourth, the archival data analyses provided weak evidence that the new audit report with KAMs improves audit quality by reducing discretionary accruals. It is possible that disclosing KAMs leads auditors to feel more responsible (Bédard et al., 2018; Li et al., 2019) and accountable (Li et al., 2019), thereby seeking more and better audit evidence and having more professional scepticism in their audits (Bédard et al., 2018). Disclosing KAMs also improves the communication between auditors and those charged with governance (Li et al., 2019) and interactions between auditors and those charged with governance (Wei et al., 2017). The evidence is consistent with that of Li et al. (2019) but inconsistent with that of Almulla and Bradbury (2018) and Wei et al. (2017).

Fifth, the analyses also provided weak evidence that disclosing KAMs has economic consequences by increasing audit fees and audit delays. After the implementation of the new audit report in Thailand, audit fees and audit delays increased by approximately 14.4% and 3.2%, respectively. Audit firms must spend resources and time preparing and training their staff, especially in the first year of the implementation of KAMs (Li et al., 2019; Reid et al., 2018). Costs associated with preparing and training staff may be added to their audit fees and absorbed by their clients. Increases in audit fees may compensate for increases in audit risk and audit effort. Auditors may face a higher litigation risk when misstatements are found (Wei et al., 2017) after disclosing KAMs. Disclosing KAMs increases audit effort (Almulla & Bradbury, 2018; Bédard et al., 2018). It increases senior members' working hours on the disclosure of KAMs (Bédard et al., 2018). KAMs may also lead to disagreements between auditors and management, and thus auditors may spend more time discussing these matters with audited companies' managers and audit committees (Reid et al., 2018). Therefore, audit fees and audit delays may increase.

The evidence of the impacts of disclosing KAMs on audit fees is consistent with that of Li et al. (2019) and Wei et al. (2017) but inconsistent with that of Bédard et al. (2018), Almulla and Bradbury (2018), Reid et al. (2018) and Gutierrez et al. (2018). The consistency and inconsistency of the evidence on the impact of disclosing KAMs on audit quality, audit fees and audit delays may have resulted from country-level factors and the studies' methodologies. The effects of the implementation of the new audit reports with KAMs may vary across countries. Therefore, it is suggested that future research should examine the impacts of country-level factors, e.g. culture, legal systems and regulatory bodies, on the association between disclosing KAMs and audit quality, audit fees and audit delays. Using the match-pair sample methodology used by Reid et al. (2018) and Gutierrez et al. (2018) should help future studies capture the impacts of disclosing KAMs on audit quality, audit fees and audit delays. For a further examination of the impacts of KAMs on audit fees, future research should use other measures of audit quality, e.g. financial restatements, real earnings management and results of regulatory audit firm inspections.

Finally, findings from the archival data analyses support that KAMs have little informative value to users and provide redundant information. Cumulative abnormal returns and abnormal trading volumes around the dates that audited companies filed their audited financial statements on the

SEC's website were observed, and it was found that disclosing KAMs does not impact the market reaction. As pointed out by Almulla and Bradbury (2018), in New Zealand, investors had already known matters disclosed as KAMs in the year before the implementation of the requirement for disclosing KAMs. Wei et al. (2017) found that in Australia, one-third of matters disclosed as KAMs had already been reported in audited clients' previous year's annual report before the implementation of the requirement for disclosing KAMs. This finding is similar to those of Bédard et al. (2018) and Gutierrez et al. (2018). Bédard et al. (2018) found that disclosing JOAs does not impact abnormal returns or abnormal trading volume in France. Gutierrez et al. (2018) found that disclosing RMMs does not impact absolute abnormal returns or abnormal trading volume in the UK.

To alleviate users' confusion regarding KAMs and to reduce their belief that KAMs have little informative value and provide redundant information, standard setters and regulators in Thailand should seek efficient ways to proactively educate users regarding KAMs by promoting users' understanding of audit functions and encouraging a greater recognition of the importance of audit functions.

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