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Key Audit Matters Readability and Investor Reaction

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Abstract

Purpose: This study aimed to examine whether key audit matters (KAMs) readability influences investor reaction. **Research design, data, and methodology:** The signaling theory was applied to explain the behavior of investors when they receive useful information for their decisions. Data were collected from 1,866 firm-year observations from Thai listed companies in both the Stock Exchange of Thailand (SET) and the Market for Alternative Investment (MAI) for the fiscal years of 2016-2019. The study was based on secondary data, which were collected from the SET Market Analysis and Reporting Tool (SETSMART) database and the Stock Exchange of Thailand's website (www.set.or.th). A statistical regression method was used with panel data analysis to evaluate possible associations between KAMs readability and investor reaction. The study relied on popular readability measures (Fog Index). Moreover, investor reaction was measured by absolute cumulative abnormal return and abnormal trading volume. **Results:** It was found that the KAMs readability has positive significance on both absolute cumulative abnormal return and abnormal trading volume. **Conclusion:** This study showed a significant contribution to the implication of KAMs in an emerging economy. The results reveal that more readable KAMs disclosure distributed new insights and useful information to investors and led to reducing the information gap between auditors and investors.

Keywords : Key Audit Matters, Readability, Investor Reaction, Audit Report Distribution, Emerging Market

JEL Classification Code : G4, M42, O16

1. Introduction

The auditor's report is a communication tool made by the external auditor. This report has the conclusions of the auditing process on the corporate operation and the auditor's opinion on the financial statement that are distributed to investors (Hay, 1998). The investor's expectation of this report is the accuracy of the financial statement's information and audited financial statements signaling

abnormality in the company's financial status (Asare & Wright, 2012). However, the traditional auditor's report did not convey enough information value and signal for their decision-making (Reid et al., 2019). Therefore, the International Auditing and Assurance Standards Board (IAASB) proposed in 2015 many changes to improve the current format of the auditor's report to make it more insightful and transparent.

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The IAASB issued the revised version of ISA 700: Forming an Opinion and Reporting on Financial Statements, and the most important change is the presentation of key audit matters (KAMs) as a part of the new auditor's report with the belief that the new auditor's report will enhance communicative value. The details about KAMs are given in the ISA 701: Communicating Key Audit Matters in the Independent Auditor's Report. The main objective of this version is to set the auditor's opinions on KAMs disclosure including issues and contents of communication for reporting such matters specifically. KAMs provide information for investors to understand the most important matters for the audit of the current financial statements in accordance with the auditor's professional judgment (Köhler et al., 2020). These standards solve the information gap between the auditor and the investor and bring about an increased communication value of the auditor's report (Sirois et al., 2018). The standards were issued in December 2014 and effective for audited financial statements ending on or after December 15, 2016. Several countries have already disclosed KAMs in their regulatory frameworks, including the United State, Canada, United Kingdom, European Union countries, New Zealand, China, Hong Kong, and Singapore (Al-mulla & Bradbury, 2022; Bédard et al., 2015; Christensen et al., 2014; Gutierrez et al., 2018; Lennox et al., 2022; Seebeck & Kaya, 2022; Sirois et al., 2018; Velte, 2018). To comply with the ISA 700 and ISA 701, the Federation of Accounting Professions (FAP) of Thailand utilized the new auditing reporting model in its accounting standards, which came into effect for the period ended on or after December 31, 2016, but this only applied for listed companies.

After the KAMs disclosure has been applied for auditing financial statements, auditing research on consequences of KAMs disclosure increases, such as research on matters about the impact on audit quality, audit delay, and investor reaction (e.g., Al-mulla & Bradbury, 2022; Kitiwong & Sarapaivanich, 2020; Lennox et al., 2022; Seebeck & Kaya, 2022; Smith, 2016). However, there are few studies regarding KAMs disclosure in terms of readability on investor reaction (e.g., Bédard et al., 2015; Seebeck & Kaya, 2022).

Studies on KAMs readability are interesting for several reasons. Firstly, KAMs are used to explain the characteristics of the specific information of each company. The structure of KAMs disclosure is flexible, and the language used to explain KAMs is different in each company (Kitiwong & Sarapaivanich, 2020). Therefore, KAMs readability in this study refers to the readability of KAMs disclosure that investors can read and understand, which is an important consideration in the distribution of communication between auditors and investors, and which may affect the investor reaction. Secondly, on one hand, the study of Smith (2016) found that the investors can

understand the new auditor's report with KAMs disclosure better than the traditional auditor's report without KAMs disclosure because the distribution of the new report reveals more readable disclosure. On the other hand, there are some researchers who argue that KAMs readability have no effect on the investor reaction (Bédard et al., 2015). This is because for some investors, the auditor's report might not provide any important information or signals from the auditor. Particularly, unsophisticated investors may not understand the difficult language that is used to explain the KAMs disclosure (Velte, 2018). Based on the results were mixed, this study would like to find whether using more understandable language, clear and concise wording in KAMs disclosure can help to reduce communication gaps between auditors and investors.

In the study of the consequences of KAMs disclosure in Thailand, there are some research problems that should be mentioned. Firstly, most studies had focused on the only main capital market, namely, the Stock Exchange of Thailand (SET) (e.g., Kitiwong & Sarapaivanich, 2020) or focused on the alternative capital market, namely, the Market for Alternative Investment (MAI) (e.g., Suttipun, 2020; Suttipun, 2021). No research conducted has used the sample from both capital markets at the same time. Secondly, several researchers have investigated the effect of KAMs disclosure on investor reaction in terms of issues and number of issues (e.g., Suttipun, 2020; Suttipun, 2021). No research has studied the effect of KAMs disclosure in terms of readability in Thailand.

A signaling theory is applied to explain the relationship between KAMs readability and investor reaction, based on the idea that investors need true and fair financial information and should be aware of significant risks of the business. This theory can be used to explain the behavior of investors when they receive more understandable information from auditors who, as signalers, would like to reduce information asymmetry between companies and investors (Asare & Wright, 2012). Thus, the signaling through the KAMs disclosure may be sending the additional material information regarding the various events combined with the financial information relevant to the investor's decision-making (Sirois et al., 2018). Therefore, this study aims to examine whether KAMs readability has effect on investor reaction, which is observed in terms of stock prices and stock volumes.

This study begins with literature review and then the theory used, KAMs readability and investor reaction, and hypothesis development are explained. The population and sample, data collection, measurement of variables, and data analysis are described in the research methodology section. Next, the results and discussion of the study are presented based on objectives. Finally, there is a conclusion including contributions, limitations, and suggestions for future study.

2. Literature Review and Hypotheses

2.1. Signaling Theory

The signaling theory has been widely used in accounting and auditing studies. The concept of this theory which was proposed by Spence (1973) helps to explain the behavior of two parties when they have access to different information. One party (the auditor) as the sender must choose whether and how to communicate the information; they may signal something about the firm through the auditor's report. While the other party (the investor) as the receiver must choose how to interpret the signal that they received (Washburn, 2017). Therefore, the strategy of the signaling means actions taken by a signaler to influence the decisions of receivers. The opinion disclosure on financial statements can be used to signal the company's superior quality while also reducing information asymmetry (Asare & Wright, 2012). Such information disclosure can be in either a positive or a negative context; however, somehow this information will benefit the receiver if it can be interpreted and viewed as a signal (Connelly et al., 2011).

To invest in the stock market, financial information related to financial performance, financial position, changes in shareholders' equity, cash flows, including significant risks of the business is an important factor and affects investors' decisions. However, when the company is growing, accounting and financial statement preparations as well as financial statements and more overload financial disclosure are more complex. Therefore, for the greatest decision usefulness on the financial statement, the investor requires an in-depth understanding of accounting practices, reporting practices, and business governance issues. Unfortunately, investors do not have special privileges to access the company's insightful information. Also, the ability to process investors' limited information requires investors to carefully consider the financial statement information (Shin, 2019). As a result, they cannot assess the quality of the information by themselves. Therefore, the auditor who can access the firm information and has the expertise to understand the nature of business, transactions, and accounting systems is hired to signal the financial information to investors. The auditor's intention is to make this asymmetry more equal by providing relevant information to them, and if the investor could interpret it correctly, it will affect their decision whether to invest in the company's securities or not (Connelly et al., 2011).

2.2. Key Audit Matters Readability and Investor Reaction

The result of the auditing is the auditor's report, another important element of financial reporting enclosed in front of

financial statements. The information contained within the report is disclosed by the auditors who present their opinion on whether the financial statements represent a true and fair view of the financial performance and position of the company (Valipour et al., 2013). Therefore, the investors believe that the auditor's report will give them enough information from the audit process and will give a signal warning to the investors if the audited financial statements have an abnormality (Salehi et al., 2014). For audits of listed companies, key audit matters (KAMs) is a new section in the auditor's report, which highlights those important issues under the auditor's professional judgment that concisely and credibly explain the characteristics of the specific information that were of most significance in the audit (Al-mulla & Bradbury, 2022). The examples of specific information in KAMs disclosure are 1) the significant risks in the audit of the financial statements and the assessment of the auditors regarding accounting policies, significant accounting estimates, and management discretion in such matters and 2) the information on problems encountered during the auditing, including the important matters that the auditor communicates with the management.

Because of the complexity of transactions and legal of business, the language showed in the KAMs disclosure might itself be complex and difficult for the investor to read. The important point in readability is careful consideration of what the information contained in the report is meant by the concept in the context that the writer communicates (Loughran & McDonald, 2016). Therefore, KAMs disclosure plays as a signaling role to attract investors and helps them to be aware and understand various events that relate to the significant financial statement and can understand the corporate's risks clearly for their decision.

From prior studies, the findings on the impact of KAMs on investor reaction are still inconclusive. On one hand, investors have been found to react to KAMs disclosure (e.g., Al-mulla & Bradbury, 2022; Christensen et al., 2014; Köhler et al., 2020; Reid et al., 2019; Sirois et al., 2018; Suttipun, 2020). These studies suggest that the KAMs enhance the informational value to the investor because KAMs are expected to mitigate information asymmetry problems between companies and investors. Since investors would get more information by reading more specific information. On the other hand, other prior studies suggest that the KAMs disclosure did not enhance the informational value to the investor (Gutierrez et al., 2018; Lennox et al., 2022). Furthermore, there are few studies regarding KAMs disclosure in terms of readability on investor reaction such as Bédard et al. (2015) and Seebeck and Kaya (2022) found no evidence that KAMs readability has significant effect on the investor reaction.

This study believes that KAMs disclosure may lose its usefulness if investors misunderstand it. Therefore, more

readable KAMs disclosures allow investors to access the important information more speedily and to focus on the related disclosure for their decision usefulness. Therefore, the investors may react to KAMs readability if it reduces the information asymmetry between companies and investors, leading to the following hypotheses:

- H1:** The KAMs readability affects investor reaction in the aspect of stock price.
H2: The KAMs readability affects investor reaction in the aspect of stock volume.

3. Research Methodology

3.1. Sample and Data Collection

To examine whether the KAMs readability influences the investor reaction, the population of this study comprised all companies listed on the Stock Exchange of Thailand (SET) and the Market for Alternative Investment (MAI) during periods from 2016 to 2019. However, this study did not include companies that, (1) were registered in financial services, insurance industries, and leasehold property funds because their total asset base and financial structure are not comparable to those of the other companies, (2) were withdrawn from listing by the SET and the MAI including companies under rehabilitation because they are subject to different financial reporting requirements and business conditions, (3) do not have fiscal year-ends on the 31 December to ensure that the samples are subject to similar market conditions, (4) were registered as listed companies after 2016, (5) have been incomplete data for analysis, and (6) have outlier data of the main variable. Table 1 presents the total population of 3,025 firm-year observations selected during periods from 2016 to 2019, and after applying the conditions above, there were 1,866 firm-year observations that met the study's criteria, and those companies were therefore adopted as the sample in this study.

Table 1: Sample Selection and Distribution

Sample Selection Criteria from Listed Companies in the SET and MAI	2016	2017	2018	2019	Total
Initial sample from company listed	706	751	768	800	3,025
Less Financial service, insurance industries, and leasehold property funds	(118)	(125)	(131)	(138)	(512)
Withdrawn from listing by the market including companies under rehabilitation	(21)	(21)	(15)	(12)	(69)
Fiscal year are not December 31	(28)	(29)	(33)	(34)	(124)
Registered as listed companies after 2016	-	(3)	(20)	(45)	(68)

Incomplete data for analysis	(73)	(86)	(81)	(81)	(321)
Outlier	(19)	(12)	(18)	(16)	(65)
Final sample	447	475	470	474	1,866

After acquiring the sample group, to examine whether the KAMs readability has effect on investor reaction, three types of variables were identified. The KAMs readability used as the independent variable of this study focused on only paragraphs containing KAMs in the corporate auditor's reports. Investor reaction was used as the dependent variable of this study. The closing price and stock daily trading volume in the period before and after the announcement of the auditor's report were used to calculate cumulative abnormal returns and abnormal trading volume, both of which are used to measure investor reaction. Moreover, there were seven control variables consisting of firm profitability, firm size, firm leverage, firm age, market to book ratio, profit/loss, and current ratio. All variables were collected from the SET Market Analysis and Reporting Tool (SETSMART) database and the Stock Exchange of Thailand's website (www.set.or.th).

3.2. Measurement

This section explains measure variables that consist of the dependent variable, independent variable, and control variables. The dependent variable is the investor reaction, there are two measure variables - the Cumulative Abnormal Return (CAR) and the Abnormal Trading Volume (ATV) that are preferred in investor reaction research. These proxies allow this study to capture information asymmetry between companies and changes in expectations of investors (Gutierrez et al., 2018). CAR reflects the average change in investor's belief due to an announcement event. ATV is often a more powerful indicator of information content. Moreover, trading volume reactions capture the sum of all changes in the expectations of individual investors to publicize disclosures, while price reactions reflect the average change in the expectations of the market (Czerney et al., 2019).

While the KAMs readability (*KAMs_READ*) was measured by using the Fog index developed by Robert Gunning that calculated for firm *i* in year *t* as follows: Fog index = (words per sentence + percent of complex words) * 0.4 (Li, 2008). Complex words are defined as words with three syllables or more. A higher Fog index means KAMs disclosure is less readable, a Fog index of at least 18 means KAMs is "very difficult disclosure", 14–18 is "difficult disclosures", 12–14 is "ideal", 10–12 is considered "acceptable" and 8–10 is "childlike". However, *KAMs_READ* of this study was multiplied by -1; higher values imply KAMs disclosure is more readable. Therefore, a positive link between the KAMs readability to investor

reaction shows that the more readable KAMs disclosures lead to higher investor reaction.

Additionally, the investor reaction can be affected by the complexity of the business. It is possible that corporate characteristics may relate to the investor reactions. To reduce the probability of omitted variable bias, this study includes seven control variables consisting of firm profitability (*ROA*), firm size (*SIZE*), firm leverage (*LEV*), firm age (*AGE*), market to book ratio (*MTB*), profit/loss (*PL*), current ratio (*CR*) that were adopted from the previous related studies (Smith, 2016; Velte & Issa, 2019). Table 2 indicates the methods of measuring the variables used in this study.

Table 2: Measurement of Variables

Variable	Measurement
Absolute cumulative abnormal returns (CAR)	The absolute value of the cumulative abnormal returns over three trading days, where day <i>t</i> is the auditor's report date (<i>t</i> ₀) and the two following days (<i>t</i> _{1,2}) are calculated as follows for each firm in the sample $ CAR_{it} = \sum_{t=0}^{t=2} (R_{it} - (\hat{\alpha} + \hat{\beta}R_{mt})) $ <p>where <i>R</i>_{it} is the actual return of share <i>i</i> on day <i>t</i>, <i>R</i>_{mt} is the return on the SET and the MAI market, $\hat{\alpha} + \hat{\beta}R_{mt}$ is calculated using the market model estimated over the period ranging from 240 to 5 days before the auditor's report date.</p>
Abnormal trading volume (ATV)	The natural logarithm of the firm's average event-period volume is divided by the firm's mean estimation-period volume $ATV = \ln \left(\frac{(1/t_1 \sum_{-t_1}^{t_1} VOL)}{(1/t_2 \sum_{-t_2}^{t_2} VOL)} \right)$ <p>Event window (<i>t</i>₁) is [-1, +1] around the release of auditor's report and estimation window (<i>t</i>₂) is [-60, -21].</p>
KAMs readability (KAMs_READ)	Fog index = (words per sentence + percent of complex words) x 0.4
Firm Profitability (ROA)	Return on asset
Firm Size (SIZE)	Natural logarithm of total assets
Firm Leverage (LEV)	Total debt is divided by total assets
Firm Age (AGE)	Natural logarithm of years since the date the firm is established
Market-to-book ratio (MTB)	Equity market value is divided by book value
Profit/Loss (PL)	Dummy 1 for earnings before extraordinary items in the current more than 0, and 0 otherwise
Current ratio (CR)	Current assets are divided by current liabilities

3.3. Data Analysis

The statistics used to describe the properties of variables were means, maximums, minimums, standard deviations,

and a correlation analysis. Moreover, to examine the influence of KAMs readability on investor reaction, the panel data regression tool was used to analyze the data collected for a period of four years from 2016 to 2019 from 1,866 firm-year observations. Panel data models were used to examine group individual effects, or time effects, or both to deal with heterogeneity or individual effect that may be observed (Park, 2011). The type of model used in this study was fixed effect (FE) obtained from a Hausman test (Hausman, 1978). The equations used in this study were as follows.

$$|CAR_{it}| = \beta_0 + \beta_1 KAMs_READ_{it} + \beta_2 ROA_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 AGE_{it} + \beta_8 MTB_{it} + \beta_9 PL_{it} + \beta_{10} CR_{it} + \epsilon_i$$

$$ATV_{it} = \beta_0 + \beta_1 KAMs_READ_{it} + \beta_2 ROA_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 AGE_{it} + \beta_8 MTB_{it} + \beta_9 PL_{it} + \beta_{10} CR_{it} + \epsilon_i$$

4. Results and Discussion

4.1. Descriptive Statistics

Based on the sample of 1,866 firm-year observations on the SET and the MAI each year during the periods from 2016 to 2019, this study found that the KAMs readability varied during the observation period, as shown below:

Table 3: Descriptive Statistics of Key Audit Matters Readability

Year	Mean	Std Dev	Min	Max
2016	-21.494	2.6141	-38.440	-14.160
2017	-21.492	2.6127	-39.750	-13.950
2018	-21.475	2.5371	-36.100	-13.760
2019	-21.397	2.3604	-30.870	-13.760
Total	-21.464	2.5303	-39.750	-13.760

Table 3 indicates results from the descriptive analysis of the KAMs readability that was measured by using the Fog index and was multiplied by -1, and this means that higher values imply more readable KAMs. The KAMs readability during the period from 2016 to 2019 show values of -21.494, -21.492, -21.475, and -21.397, respectively, indicating that the KAMs disclosure remains a complexity of the text (Li, 2008). However, the KAMs readability has tended to increase. This may be because the auditors realized that the improvement in readability could enhance the usefulness and communication value of the KAMs disclosure to the investor (Smith, 2016). Thus, the auditors tried to propose more understandable language for explaining the specific information of businesses in the auditor's report to the investor.

The descriptive statistics used to describe the basic

characteristics of variables in this study were means, standard deviations, minimums, and maximums. The research findings are demonstrated as follows:

Table 4: Descriptive Statistics of Variables

Variable	Mean	Std Dev	Min	Max
CAR	6.52	5.67	0.10	41.80
ATV	0.03	1.30	-6.60	4.13
ROA	5.81	10.06	-66.80	75.06
SIZE	15.38	1.61	11.46	21.63
LEV	0.42	0.21	0.00	1.04
AGE	3.34	0.54	0.69	4.97
MTB	2.43	3.64	0.12	89.27
PL	0.78	0.42	0.00	1.00
CR	2.74	5.91	0.09	216.06

Table 4 exhibits the statistical values of two dependent variables and seven control variables. The two dependent variables were absolute cumulative abnormal returns (|CAR|) and abnormal trading volume (ATV). The mean and standard deviation of |CAR| are 6.52 and 5.67, respectively, with minimum and maximum values ranging from 0.10 to 41.80. The mean and standard deviation of ATV are 0.03 and 1.30, respectively, with minimum and maximum values ranging from -6.60 to 4.13.

As for the seven control variables, the mean of firm profitability (ROA) is 5.81 percent, the standard deviation is 10.06, with minimum and maximum values ranging from -66.80 to 75.06 percent. The mean of firm size (SIZE) is 15.38 or approximately 4.76 million baht of total asset, the standard deviation is 1.61, with minimum and maximum

values ranging from 11.46 to 21.63 or from 0.10 to 2,484.44 million baht. The mean of leveraged (LEV) is 0.42 times, the standard deviation is 0.21, with minimum and maximum ratio ranging from 0 to 1.04 times. The mean of firm age (AGE) is 3.34 or approximately 28.16 years, the standard deviation is 0.54, with minimum and maximum values ranging from 0.69 to 4.97 or from 2 to 144 years. The mean of market-to-book ratio (MTB) is 2.43 times, the standard deviation is 3.64, with minimum and maximum ratio ranging from 0.12 to 89.27 times. The mean of profit/loss (PL) is 78 percent, the standard deviation is 0.42, with minimum and maximum dummy ranging from 0 to 1. Finally, the mean of current ratio (CR) is 2.74 times, the standard deviation is 5.91, with minimum and maximum ratio ranging from 0.09 to 216.06 times.

4.2. Correlation Analysis

Table 5 shows the results of the correlation analysis used to test the multicollinearity among the ten variables used in this study, consisting of two dependent variables, one independent variable, and seven control variables. The bivariate correlation procedure is subject to a two-tailed test of statistical significance at two levels, namely, $p\text{-value} < 0.01$ and $p\text{-value} < 0.05$. The correlation coefficients of all constructs range from 0.060 to 0.654, $p\text{-value} < 0.0$, and range from 0.051 to 0.058, $p\text{-value} < 0.05$. The maximum correlation is 0.654, $p\text{-value} < 0.01$, which is a positive significance between ROA and PL variables. The results indicate that there were no multicollinearity problems in this study because the result is lower than 0.80 (Hair et al., 2010).

Table 5: Correlation Analysis

Variables	CAR	ATV	KAMs_READ	ROA	SIZE	LEV	AGE	MTB	PL	CR
CAR	1									
ATV	.265***	1								
KAMs_READ	.014	-.024	1							
ROA	-.166***	.141***	.071***	1						
SIZE	-.131***	.051**	.001	.140***	1					
LEV	.040	.034	-.029	-.236***	.372***	1				
AGE	-.018	-.058**	-.010	-.038	.041	-.023	1			
MTB	.000	-.077***	.037	.179***	-.042	.111***	-.084***	1		
PL	-.137***	.147***	.060***	.654***	.205***	-.168***	-.060***	.040	1	
CR	.052**	.008	.054**	-.016	-.145***	-.356***	.026	-.054**	-.021	1

Note: *** is significant at the 0.01, and ** is significant at the 0.05

4.3. Results and Discussion

To test the hypotheses, the researchers tested the reliability of the data in order to estimate the model accurately. After the reliability was identified, the appropriate model for panel data was FE model for this study. Further, this study detected the problems of

heteroskedasticity and autocorrelation that lead to invalidity of the variances of FE estimators, such as underestimated standard errors and over-estimated t-statistics (Baltagi, 2008). Consequently, in order to offer the corrected inference, this study used robust standard errors command to enhance the efficiency of the FE model (Cameron & Trivedi, 2005).

Table 6: Results of the Effects of KAMs Readability on Investor Reaction

Independent Variables	Hypothesis 1: Model 1			Hypothesis2: Model 2		
	CAR			ATV		
	Coef.	t-test	p-value	Coef.	t-test	p-value
Intercept	-13.5030	-1.10	0.273	-14.0673	-4.99	0.000***
KAMs_READ	0.2615	2.56	0.011**	0.0414	1.70	0.091*
ROA	-0.0465	-1.46	0.145	0.0112	1.63	0.105
SIZE	-0.8884	-0.91	0.363	0.4013	2.04	0.042**
LEV	5.9718	1.77	0.077*	1.4871	2.40	0.017**
AGE	10.8827	4.64	0.000***	2.3686	5.23	0.000***
MTB	-0.0266	-0.57	0.570	-0.0466	-4.29	0.000***
PL	0.6681	1.08	0.282	0.3537	2.54	0.011**
CR	0.0900	4.73	0.000***	0.0187	8.56	0.000***
R ²	0.0435			0.0736		
F-Value	7.98			20.96		
p-value	0.000***			0.000***		
Hausman test	50.86			71.52		
p-value	0.000***			0.000***		
Maximum VIF	1.937			1.937		

Notes: This table shows the regression ordinary-least-squares with firm and year fixed-effects. All regressions are estimated with robust standard errors clustered at the firm level. Symbols mean significance at: *** p<0.01, ** p<0.05 * p<0.10.

Table 6 demonstrates the results of an FE regression analysis including industry fixed effects to control omitted time-invariants with investor reaction (|CAR| and ATV) as the dependent variable, KAMs readability (KAMs_READ) as the independent variable, and seven control variables (ROA, SIZE, LEV, AGE, MTB, PL, and CR) that were used to test the relationship between KAMs readability, control variables, and the investor reaction, which prove the set Hypotheses 1 and 2.

The model can predict the relationship between independent variables and both of dependent variables, which shows the R squared in model 1 and model 2 as 0.0435 and 0.0736, respectively. The F-values of the model 1 and model 2 were statistically significant 7.98 (p<0.01) and 20.96 (p<0.01), respectively, which were appropriate for predicting the dependent variable. The variance inflation factors (VIFs) of investor reaction and KAMs disclosure are used to test multicollinearity among the KAMs readability and the seven control variables, and the maximum VIF values of the model 1 and model 2 is 1.937.

The evidence presents the regression results that show the coefficient on KAMs_Read has positive significance with |CAR| and ATV (H1: $\beta=0.2615$; p<0.05, H2: $\beta=0.0414$; p<0.10), supporting that Hypotheses 1 and 2 were valid. This indicates that the decision of investors on KAMs disclosure not only focused on the quantity of KAMs but also on the quality of KAMs in terms of the KAMs readability. It is known that KAMs disclosure demonstrates risks that companies are going to encounter under the auditor's professional judgment (Suttipun, 2020). This is the

reason why the language used to describe KAMs by the auditor was different in each audited company, and this disclosure will influence investor's decision-making if the disclosure was distributed new insights and useful information to investors (Reid et al., 2019). When the investors received more understanding information and significant risks of the business through KAMs disclosure from the auditors, the investors must choose how to interpret the signal that they received (Connelly et al., 2011; Washburn, 2017). As can be seen, the KAMs disclosure helps them to be aware and understanding various events that relate to the significant financial risks (Christensen et al., 2014). Using signaling theory to explain the reason of positive relationship between the KAMs readability and the investor reaction, KAMs readability can increase the information value of communication between auditors and investors. Therefore, investors use the content of KAMs disclosure for their decision (Velte & Issa, 2019). In summary, if the auditor reports more readable of KAMs disclosure that is beneficial to the decision of investors and could reduce the information gap between the auditor and the investor, it will contribute to higher investor reaction in aspects of both the stock price and stock volume. This is because investors understand the KAMs disclosure that likely leads to more success in their investment.

Moreover, this study found positive significance of three control variables on |CAR| and ATV. The control variables that showed positive effects were firm leverage (LEV) ($\beta=5.9718$; p<0.10, $\beta=1.4871$; p<0.05), firm age (AGE) ($\beta=10.8827$; p<0.01, $\beta=2.3686$; p<0.01) and current ratio (CR)

($\beta=0.0900$; $p<0.01$, $\beta=0.0187$; $p<0.01$). For firm leverage, the result is consistent with the research of Czerney et al. (2019) which shows that leverage has positive effect on cumulative abnormal return. For firm age, older firms with longer experience can generate more profits than younger firms. Therefore, investors take more consideration before investing in such firms. Finally, current ratios show the firm's ability to pay its current obligation and expense. If the firm has a greater ability, the investor will have more reaction.

In addition, this study found positive significance of two control variables on ATV. The two control variables were firm size (SIZE) ($\beta=0.4013$; $p<0.05$), and profit/loss (PL) ($\beta=0.3537$; $p<0.05$). For the firm size and profit/loss, high values of these variables mean a better opportunity of bigger firms to generate more profits than smaller firms. Therefore, investors also consider more carefully before investing in such firms. On the other hand, the market-to-book ratio (MTB) ($\beta = -0.0466$; $p<0.01$) has negative significance on ATV, which show that the lower market to book ratio is associated with higher abnormal trading volume. Finally, the four control variables (ROA, SIZE, MTB, and PL) do not significant with |CAR| and one control variable (ROA) does not affect ATV.

5. Conclusions

This study investigates the KAMs readability of Thai listed companies in both the Stock Exchange of Thailand (SET) and the Market for Alternative Investment (MAI) during the periods from 2016 to 2019. The data used were obtained from 1,866 firm-year observations. This study found that KAMs readability affects investor reaction both in terms of stock price and stock volume aspect. This is in line with the signaling theory, which can be used to explain the behavior of investors when they can interpret the signal and can understand the meaning of information that they receive from auditors (Asare & Wright, 2012). The results shed light on more readable KAMs disclosure by the auditor which includes easy wording to perceive and distributes new insights information to investors (Reid et al., 2019), implying that the investors believe that adding KAMs by the auditor not only increases more understanding of the business information but also reduces the expectations gap of investors in the auditor. Therefore, it can be concluded that more readable KAMs disclosure in the auditor's report reduces the information gap between the auditor and the investor, which helps investors to make better decisions. Thus, this study confirms, as the signaling theory does, that KAMs readability is a good signal for investors' decision making.

In terms of managerial contributions expected, firstly,

this is the first longitudinal study done by collecting data during the periods from 2016 to 2019 that aims to provide evidence of KAMs disclosure in both the main capital markets and the alternative capital market in Thailand. The result can be used in the overview of all markets, while the most prior literature has focused on either the main capital markets or the alternative capital market. These previous studies may be used in only the markets that were studied. Secondly, the results shed light on the level of KAMs readability by auditors in Thailand after implementing ISA 700 in the year 2016, which can be used to explain the level of communication between auditors and investors. Moreover, this study expands the literature on KAMs disclosure in emerging-economy countries by adding useful data or knowledge about KAMs disclosure practiced in developed countries.

There is a limitation to this study which should be stressed. To understand the quality of communication, there are two communication measurements: firstly, readability, which measures whether receivers can properly understand the message from a sender or not, and secondly, tone, which measures the quality of communication contains either a positive, negative, or neutral tone. However, this study measures the quality of KAMs readability only. As a result, this study lacks the result of KAMs tone, which can be used to capture the "effect or feeling of a communication". If the KAMs disclosure reflects the tone of the auditing, the receiver's understanding is improved thereby enhancing communication value. According to the above limitation, therefore, it is suggested that a future study should extend the tone of KAMs disclosure of companies listed in the SET and the MAI and test relationships between KAMs tone and investor reaction.

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