

Research Article / Araştırma Makalesi

WHAT FACTORS AFFECT THE DISCLOSURE OF KEY AUDIT MATTERS? EVIDENCE FROM MANUFACTURING FIRMS

Assoc. Prof. Dr. Ahmet ÖZCAN 

Adana Alparslan Türkeş Science and Technology University, Adana, Turkey (aozcan@atu.edu.tr)

ABSTRACT

This paper aims to investigate the factors affecting key audit matters disclosed by manufacturing firms listed on Borsa Istanbul for the accounting period of 2019. Data are collected from the audited financial statements of 164 manufacturing firms listed on Borsa Istanbul and Poisson regression analysis is applied to the empirical model. The results of regression analysis indicate that non-Big 4 auditors disclose more key audit matters and firm complexity considerably increases the number of key audit matters. A statistically insignificant relationship between the disclosure of key audit matters and audit opinion was found. This paper is expected to contribute to the limited literature by adding important findings on another perspective of key audit matters.

Keywords: Independent Auditing Activity, Key Audit Matters, Financial Reporting, Multivariate Analysis.

KİLİT DENETİM KONULARININ AÇIKLANMASINI HANGİ FAKTÖRLER ETKİLER? İMALAT FİRMALARINDAN KANITLAR

ÖZET

Bu çalışma, 2019 yılında Borsa İstanbul'da işlem gören imalatçı firmaların denetim raporlarında yer alan kilit denetim konularını etkileyen faktörleri incelemeyi amaçlamaktadır. Borsa İstanbul'da işlem gören 164 imalatçı firmanın denetlenmiş mali tablolarından toplanmış olan verilerin analizi için Poisson regresyon modeli kullanılmıştır. Regresyon analizinin sonuçları, 4 büyük denetim şirketi arasında yer almayan denetim şirketlerinin daha fazla kilit denetim konusunu açıkladığını ve firma karmaşıklığının kilit denetim konularının sayısını önemli ölçüde artırdığını göstermektedir. Kilit denetim konularının sayısı ile denetim görüşü arasında istatistiksel olarak anlamsız bir ilişki bulunmuştur. Bu çalışmanın, kilit denetim konularının farklı bir perspektifine önemli bulgular ekleyerek sınırlı literatüre katkıda bulunması beklenmektedir.

Anahtar Kelimeler: Bağımsız Denetim Faaliyeti, Kilit Denetim Konuları, Finansal Raporlama, Çok Değişkenli Analiz

1. Introduction

Audit reports are indispensable part of globalized economic environment. Independent auditors are the group that financial market participants trust most to safeguard their interest. The accuracy of decisions made by investors and creditors is heavily influenced by the quality of financial statements disclosed by firms. Assurance services provided by independent auditors help build investor confidence. Undoubtedly, firms benefit from increased investor confidence and trust. Auditing activities play a vital role in well-functioning markets. With the increasing importance of independent audit activities, auditing standards have been established by regulatory agencies.

After the subprime mortgage crisis exploded in 2008, stakeholders are more concerned regarding the integrity of financial reporting and audit reports. The decrease in the quality of audit reports has considerably eroded investors' confidence. Audit deficiencies pose serious threat to the global economic environment. To respond these concerns, standard setting bodies introduced new measures that enhance investor trust in financial statements. Audit reports should have high communication and informational value (Pratoomsuwan & Yolrabil, 2020).

In January 2015, The International Auditing and Assurance Standards Board (IAASB) published ISA 701, *Communicating Key Audit Matters in the Independent Auditor's Report*, to increase the communicative value of the audit reports by yielding greater transparency regarding auditing process. The disclosure of key audit matters enables the users of financial statement to better understand those matters which are of utmost significance in auditing of financial statement. According to ISA 701, auditors' professional judgement plays a vital role in the determination of key audit matters. Key audit matters can vary according to macroeconomic factors, organizational complexity and industry in which firms operate.

Key audit matters (hereafter referred to as 'KAM') reporting significantly increases the value of audit reports. It is worth noting that the disclosure of KAM does not mitigate the liability of auditors. Ferreira & Morais (2020) purported that audit reports present more detailed information regarding the audit risks via KAM. Whilst numerous studies have investigated factors affecting KAM for the developed economies, few studies have attempted to analyze this from emerging market perspective. The present study aims to contribute to the limited literature on factors affecting key audit matters in emerging markets.

The present paper is divided into four sections. After the introduction, the dynamics of audit activities in Turkey are discussed. Third section discusses the literature review and hypothesis development. Research design is presented in the fourth section. Fifth section reveals the results of empirical analysis. Final section puts forward concluding remarks and recommendations for future studies.

2. Auditing Activities in Turkey

It is critically important for emerging countries such as Turkey to comply with international auditing and financial reporting standards in attracting foreign investment that vastly fosters economic growth. In Turkey, many important steps have been taken towards the institutionalization of the market economy in the recent decades. As a result of liberalization process, a large number of successful medium and small-sized firms have been established. Many global investors have invested capital into these firms.

As known, auditing activities are important part of economic environment. Since 1980, total foreign direct investment to Turkey has mounted 250 billion dollars. For developing economies, foreign direct investment positively influences the economic growth. Regulatory authorities in Turkey have tried to design policies that can grab foreign direct investment. Some of these policies are related to effective regulation of auditing activities. Foreign direct investment (FDI) that can significantly accelerate economic growth necessitates the development of auditing activities. Additionally, the regulation of auditing activities is considerably important for the development of financial markets. As of 2016, the disclosure of KAM is compulsory for listed firms in Turkey.

In the first half of the 20th century, independent auditing activities in Turkey are mainly driven by tax purposes (Güvemli & Özbirecekli, 2011:147). Over the last two decades, regulatory bodies in Turkey have taken important actions to enhance the quality of auditing standards. Financial reporting, auditing standards and European Union's regulations have significant effects on the development of auditing activities in Turkey. Public Oversight, Accounting and Auditing Standards Authority is the main authority that regulates and supervises auditing activities in Turkey. This authority plays a vital role in issuing auditing and accounting standards in Turkey. The convergence of Turkish auditing standards with international auditing standards began in 2012. Eighty independent auditing firms are authorized in Turkey in August 2020. It is worth stating that auditing environment in Turkey is mainly dominated by "Big 4" audit firms.

3. Literature Review and Research Hypotheses

This section is devoted to the literature review and hypotheses development. In the globalized financial markets, the users of financial statements strongly demand more relevant audit reports, since these reports prominently shape investment decisions of users of financial statement. Standard setting bodies such as IAASB and PCAOB have introduced new requirements to increase the perceived value of auditing activities. One of these requirements is the inclusion of key audit matters to the audit report. The auditors are fully responsible for deciding which audit matters are critically important for the users of financial statements (Dogan & Arefaine, 2017:7). Most of the previous studies contributed to the literature by providing conceptual basis for the disclosure of KAMs.

This paper bases on agency theory in formulating hypotheses. Agency costs stem from the conflicts of interest between firm management and shareholders. Agency theory is the most important theory in the related literature. The information asymmetry between firm management and shareholders can remarkably decrease firms' operational efficiency. Fan & Wang (2005) suggest that auditing activities can serve as a mechanism that decreases agency problems in firms operating in emerging markets. In a weak legal environment, audit deficiencies could lead to severe agency conflicts.

The disclosure of KAMs is strongly linked to the audit quality. In this context, the increased audit quality can eliminate agency conflicts within firms. The disclosure of key audit matters is expected to contribute to decrease the information gap between the users of financial statement and auditors (Church et al., 2008:71). Gold et al. (2020) and Reid et al. (2019) stated that the disclosure of KAMs decreases the likelihood of aggressive accounting policies that

can result from managerial opportunistic behavior. KAMs can increase the quality of financial reporting through reducing aggressive accounting behavior.

Auditor characteristics can influence the disclosure of KAMs. According to agency theory, external stakeholders of firms ask firms to be strictly audited by audit firms. If the audit firm is independent from firm management, the likelihood of publishing a clean and objective opinion increases. Camargo (2012) claimed that Big 4 auditors are more likely to withstand pressures coming from their clients and report non-compliances that distort fair presentation of financial statements. Krishnan (2003), Eshleman & Guo (2014) and Alzoubi (2016) prompt that Big 4 auditors provide high-quality external audits. This might be due to the fact that Big 4 auditors have important human capital and financial resources and have greater access to information technology (Velte, 2018). The reputational capital means a lot to Big 4 auditors. These auditors strive to minimize litigation risk. The Big 4 auditors closely follow the regulations related with KAM. In this study, it is expected that the appointment of a Big-4 audit firm is positively related to the number of KAM disclosures. Velte (2018) and Ferreira & Morais (2020) stated that firms audited by Big 4 auditors tend to present more KAMs. Based on this argument, the first hypothesis is established as follows;

H1: There is a positive association between the presence of a Big-4 audit firm and the number of KAM disclosures.

Audit opinion reveals important information associated with the reliability and accuracy of firms' financial reporting. In today's financial markets, the audit opinion is a prominent parameter that influences the investment decisions of investors, creditors and shareholders. Auditors are expected to issue a modified opinion when they cannot get sufficient audit evidence and the client's financial statement includes misstatements. Firms suffering from financial distress and business uncertainty are more likely to receive a modified audit opinion (Hudaib & Cooke, 2005:1711; Basioudis et al., 2008:294). When auditors issue an opinion related with going concern risk, they are required to evaluate the consequences for external stakeholders. Type of audit opinion may directly influence the disclosure of KAM. Auditors are more likely to disclose KAM in firms that receive modified opinion so as to protect their reputation and minimize litigation risk. Velte (2018) and Pinto & Morais (2019) found that the receiving modified opinion significantly increases the likelihood of the disclosing more KAM. This discussion leads to the following hypothesis;

H2: There is a positive association between modified audit opinion and the number of KAM disclosures.

In the current economic environment, business operations are becoming more and more complex than before. Globalization, advanced technology and competition contributed to increasing complexity. To mitigate complexity, firms are required to rethink their services, products and organizational design. The level of firm complexity can vary according to the human resources, the structure of economy and industry in which the firm operates. Auditors are expected to meticulously conduct audit works when the organizational complexity of the client is significantly high. Pinto & Morais (2018) claim that a high level of firm complexity leads to higher audit risk. Ferreira & Morais (2020) and Suttipun (2020) support the assertion that firm complexity positively influences the disclosure of KAMs. Thus, auditors of firms that have a high level of organizational complexity may feel more pressure to reveal KAMs

for the purpose of ensuring their independence and reducing audit risk. Following Markarian & Parbonetti (2007), Chen (2015) and Lee & Yeo (2016), the number of business segments is used as a proxy for firm complexity. To understand how firm complexity influences the disclosure of KAMs, the following hypothesis is proposed.

H3: There is a positive association between firm complexity and the number of KAM disclosures.

4. Research Design

To test research hypotheses, a well-established research design should be employed. Following previous studies (Pinto & Morais, 2018; Velte, 2020; Ferreira & Morais, 2020 and Suttipun, 2020), financial performance, leverage, size and sales growth are included as control variables. Broadly speaking, profitability provides important insights about firms' future viability. Beasley et al. (1999) and Loebbecke et al. (1989) found that high profitable firms are more likely to get unmodified audit opinion that mitigates the auditors' litigation risks. On the other hand, less profitable firms are more likely to have modified audit opinion due to non-compliance with accounting standards. Thus, it is assumed that auditors of less profitable firms tend to disclose more KAMs so as to reduce litigation risks. Firms with high-leverage are exposed to high financial risks. High financial risk soars the litigation risk. As a firm's financial risks mount, auditors are likely to conduct audit procedures more meticulously. Firm size has important impacts on the disclosure of KAMs. Reynolds & Francis (2000) stated that audit firms may fail to resist pressure coming from large-sized clients for economic factors. The below empirical model is estimated to analyze the relationship between the number of KAMs and predictor variables.

$$KA = \beta + \beta_1 AUDITR + \beta_2 AUDII + \beta_3 CLEX + \beta_4 FIERF + \beta_5 LEV + \beta_6 SIZE + \beta_7 SG + \varepsilon$$

In which, KAM is the number of key audit matters reported by each firm in the sample at the end of 2019. AUDITOR is the type of the auditor and takes value 1 when the audit firm is one of the Big-4 auditors and 0 otherwise. AUDOPINION is dummy variable that takes value of 1 when the audit firm issues unmodified audit opinion and 0 otherwise. COMPLEX is the number of business segments disclosed in the financial statements. A business segment can be defined as a component of a firm's that can produce its own product and service and earn its own revenues. Business segments have separate operations and costs. FINPERF is the financial performance measured by return on equity. LEV is calculated as the ratio of total liabilities to total assets. SIZE is the natural logarithm of total assets. SG, sales growth, is the percentage growth of net sales revenue from 2019 to 2020.

4.1. Sample

A sample of manufacturing firms quoted on Borsa Istanbul that have reported KAMs at the end of 2019 fiscal year is used in the empirical analysis. Financial firms are excluded from the sample, since these firms are subject to different auditing, corporate governance and financial reporting requirements. All of research data are hand-collected from the audit report and financial statements of sample firms. The total number of sample firms is 164. Table 1 shows the industry classification of sample firms. According to Table 1, the most represented

industries in the sample are chemicals, with 19.5 %, fabricated metal products and machinery electrical equipment, with 18.2 %, food, beverage and tobacco, with 16.4, and non-metallic mineral products, with 13.4 %. There are nine different industries in the final sample. Table 1 demonstrates that the sample used in this paper broadly represents the manufacturing firms operating in Turkey.

Table 1: Classification of Sample Firms by Industry

Industry	Number	Percentage (%)
Chemicals	32	19.5
Fabricated metal products and machinery electrical equipment	30	18.2
Food, beverage and tobacco	27	16.4
Non-metallic mineral products	22	13.4
Textiles	20	12.1
Basic metal	15	9
Paper and paper products	10	6
Wood products	5	3
Crop and animal production	3	1
Total	164	100

5. Empirical Results

In this section of the study, empirical results are discussed. Table 2 reveals the distribution of KAMs reported in sample firms' audit report. 316 KAMs are collected for sample firms. The primary concern of auditors is associated with the accounting treatment of revenue. KAMs related with revenue represent 23% of total number of KAMs reported. The rest of KAMs are associated with trade receivables (19.3%), inventory (11.1%), tangible assets (8.8%), debts (3.8%), deferred tax (3.1%) and provision (2.2%).

Table 2: The Distribution of KAMs Reported in Sample Firms' Audit Report

KAM's Topic	The Number of KAM's Topic	Percentage (%)
Revenue	74	23
Trade receivables	61	19.3
Inventory	35	11.1
Tangible assets	28	8.8
Debts	12	3.8
Deferred tax	10	3.1
Provision	7	2.2
Others	89	28.1
Total	316	100

5.1. Descriptive Statistics

Table 3 shows descriptive statistics for the sample data. The average number of KAMs for the sample firms is 1.927 with a minimum 1 and a maximum of 7. All firms in the sample report at least one KAM. The mean value of auditor type, which is 0.524, indicates that 52.4 % of sample firms are audited by Big-4 auditors. Most of sample firms received unmodified audit opinion (mean of auditor opinion= 0.896). Regarding the firm complexity of sample firms, the average number of business segments is 6.280, with a standard deviation of 2.753. The average ROE for sample firms is -0.086. As shown in Table 3, some firms in the sample achieved to generate a high level of profitability as the maximum ROE amounted to 1.154. The average size of sample firms amounted to 8.796 and ranged from 6.847 to 10.744 with a standard deviation of 0.789. With relation to leverage, the mean value is 0.537, indicating that sample firms are moderately leveraged. The mean value of sales growth is 0.277, implying that overall sales growth of sample firms is positive.

Table 3: Descriptive Statistics

Variables	Observation	Mean	Std. Dev.	Min	Max
KAM	164	1.927	1.031	1	7
AUDITOR	164	0.524	0.501	0	1
AUDOPINION	164	0.896	0.306	0	1
COMPLEX	164	6.280	2.753	1	11
FINPERF	164	-0.086	1.129	-10.831	1.154
SIZE	164	8.796	0.789	6.847	10.744
LEV	164	0.537	0.227	0.093	0.987
SG	164	0.277	1.794	-0.742	22.767

Notes: KAM is the number of key audit matters reported by each firm in the sample at the end of 2019. AUDITOR is the type of the auditor and takes value 1 when the audit firm is one of the Big-4 auditors and 0 otherwise. AUDOPINION is dummy variable that takes value of 1 when the audit firm issues unmodified audit opinion and 0 otherwise. COMPLEX is the number of business segments disclosed in the financial statements. FINPERF is the financial performance measured by return on equity. SIZE is the natural logarithm of total assets. LEV is calculated as the ratio of total liabilities to total assets. SG, sales growth, is the percentage growth of net sales revenue from 2019 to 2020.

Correlation Matrix Correlation coefficients are computed to analyze the association between dependent variable and predictor variables in Table 4. Contrary to the findings of previous studies (Velte, 2018; Ferreira & Morais, 2020), KAM negatively correlated with the audit firm type ($r = -0.317, p < 0.01$). The type of audit opinion is not statistically related with KAM. A significant positive correlation is observed between KAM and firm complexity. This finding supports H3. Size, leverage and sales growth are insignificantly positively correlated with KAM, while ROE is insignificantly negatively correlated with KAM. The correlation coefficients greater than 0.80 may distort the regression results (Hair et al., 2009; Gujarati, 2003). As it can be seen from Table 4, no correlation coefficients exceed 0.80. Thus, multicollinearity does not pose a serious problem for the regression analysis.

Table 4: Correlation Coefficients

Variables	KAM	AUDITOR	AUDOPINION	COMPLEX	ROE	SIZE	LEV	SG
KAM	1							
AUDITOR	-0.317***	1						
AUDOPINION	-0.063	0.197**	1					
COMPLEX	0.760***	-0.263***	-0.104	1				
ROE	-0.055	0.076	0.030	-0.009	1			
SIZE	0.056	0.501***	-0.011	0.100	0.112	1		
LEV	0.021	0.183**	-0.092	0.028	-0.313** *	0.145 *	1	
SG	0.003	0.054	0.013	-0.045	0.053	0.002	-0.154* *	1

Notes: KAM is the number of key audit matters reported by each firm in the sample at the end of 2019. AUDITOR is the type of the auditor and takes value 1 when the audit firm is one of the Big-4 auditors and 0 otherwise. AUDOPINION is dummy variable that takes value of 1 when the audit firm issues unmodified audit opinion and 0 otherwise. COMPLEX is the number of business segments disclosed in the financial statements. FINPERF is the financial performance measured by return on equity. SIZE is the natural logarithm of total assets. LEV is calculated as the ratio of total liabilities to total assets. SG, sales growth, is the percentage growth of net sales revenue from 2019 to 2020. ***, ** and * denote significance level at 0.01, 0.05 and 0.10, respectively.

Beside correlation coefficient, variance inflation factor (VIF) can be utilized to detect multicollinearity issue. Table 5 reports variance inflation factors. When the value of VIF is greater than 10, multicollinearity problems may emerge (Yan & Su, 2009; Maindonald & Braun, 2006). Based on the results reported in Table 5, no VIF value exceeds 10. Hence, it can be concluded that multicollinearity does not exist among variables.

Table 5: Variance Inflation Factors

Variables	VIF	1/VIF
AUDITOR	1.67	0.597432
AUDOPINION	1.08	0.929449
COMPLEX	1.17	0.855402
ROE	1.15	0.872126
SIZE	1.48	0.674114
LEV	1.23	0.813716
SG	1.03	0.967901
Mean VIF	1.26	

Notes: KAM is the number of key audit matters reported by each firm in the sample at the end of 2019. AUDITOR is the type of the auditor and takes value 1 when the audit firm is one of the Big-4 auditors and 0 otherwise. AUDOPINION is dummy variable that takes value of 1 when the audit firm issues unmodified audit opinion and 0 otherwise. COMPLEX is the number of business segments disclosed in the financial statements. FINPERF is the financial performance measured by return on equity. SIZE is the natural logarithm of total assets. LEV is calculated as the ratio of total liabilities to total assets. SG, sales growth, is the percentage growth of net sales revenue from 2019 to 2020.

5.2. Regression Results

In the present paper, Poisson regression model is employed to investigate how independent variables impact the dependent variable. Poisson regression model is much more statistically suitable when the dependent variable is a count (Cameron & Trivedi, 2013; Andersen & Skovgaard; 2010). Table 6 reports the results of Poisson regression.

The coefficient on AUDITOR is negative and statistically significant at 0.01 level. This finding appears to contradict the findings of Velte (2018) and Ferreira & Morais (2020). This result yields support to the fact that firms audited by a non-Big 4 auditor reports more KAMs than firms audited by a Big-4 auditor. This result can be explained that non-Big 4 auditors include more KAMs in their reports so as to gain credibility, enhance their reputation and avoid possible litigation costs. Another explanation for this finding may be that non-Big 4 auditors tend to perform more conservatively auditing procedures. Therefore, the hypothesis that there is a positive association between the appointment of a Big-4 audit firm and the number of KAM disclosures is rejected.

The insignificant relationship was found between audit opinion and the disclosure of KAMs, implying that the receiving modified audit opinion does not increase the likelihood of disclosing more KAMs. This result is inconsistent with the findings of Velte (2018) and Pinto & Morais (2019). According to agency theory, stakeholders demand modified audit opinion when the firm's financial statement include misstatement. Auditors may be more inclined to issue unmodified audit opinion when the stakeholders of the firm are informed about firm-specific risks via KAMs (Segal, 2017). The hypothesis that there is a positive association between modified audit opinion and the number of KAM disclosures is rejected.

The result of Poisson regression presents evidence that there is a positive and statistically significant relationship between firm complexity and the disclosure of KAMs. This results is in line with the findings of Ferreira & Morais (2020) and Suttipun (2020) who found that the high level of firm complexity leads to more disclosure of KAMs. In the auditing environment, the client with a high level of organizational complexity is riskier. With the intention of mitigating their liability and safeguarding their reputation, auditors tend to disclose more KAMs for riskier firms. Accordingly, the hypothesis that there is a positive relationship between firm complexity and the number of KAM disclosures is accepted.

With regard to control variables, auditors of large-sized firms issue more KAMs, as the coefficient on SIZE is positive and statistically significant at the level of 0.10. This result corroborates the findings of Velte (2018), Taylor & Liu (2008) and Suttipun (2020) who found evidence that there is positive association between firm size and the disclosure of KAMs.

The disclosure of KAMs can be a useful tool that effectively alleviates agency conflicts led by information asymmetry in large-sized firms which are likely to face agency problems. The regression results indicate that the coefficient on sales growth is 0.020 and statistically significant at the level of 0.01, implying that an increase of 1% in the sales growth is related with 2% in the number of KAMs. Contrary to the expectation, the coefficients on return on equity and leverage are not statistically significant. Even though these variables are not statistically significant, they may be useful in the aggregate level. They are included in the empirical model to invigorate the accuracy of the empirical model. Lastly, it is worth stating that the empirical model is statistically significant (p- value < 0.01).

Table 6: Poisson Regression Results

Variables	Coefficient	z-stat.
AUDITOR	-0.216***	-3.49
AUDOPINION	0.088	1.23
COMPLEX	0.142***	14.33
ROE	-0.017	-1.01
SIZE	0.060*	1.81
LEV	0.096	0.68
SG	0.020***	5.88
Constant	-0.882	-2.79
Pseudo R-squared	0.113	
Prob > chi2	0.000	
Number of observation	164	

*Notes: AUDITOR is the type of the auditor and takes value 1 when the audit firm is one of the Big-4 auditors and 0 otherwise. AUDOPINION is dummy variable that takes value of 1 when the audit firm issues unmodified audit opinion and 0 otherwise. COMPLEX is the number of business segments disclosed in the financial statements. FINPERF is the financial performance measured by return on equity. SIZE is the natural logarithm of total assets. LEV is calculated as the ratio of total liabilities to total assets. SG, sales growth, is the percentage growth of net sales revenue from 2019 to 2020. ***, ** and * denote significance level at 0.01, 0.05 and 0.10, respectively.*

5.3. Robustness Checks

In this part of the paper, robustness checks are provided. Robustness checks enable us to examine how regression coefficients on independent variables behave when the empirical model is modified by including other variables. It is asserted that corporate governance variables may influence the disclosure of KAMs. To empirically investigate this, board independency (BIND) and size (BSIZE) are included in to the empirical model. Also, return on equity is replaced with profit margin (PM). Table 7 indicates that estimates of coefficients on independent variables are similar to the results reported in Table 6. The additional analysis shows that AUDITOR, COMPLEX, SIZE and SG maintained their significance. All new independent variables (BIND and BSIZE) show significant results. A high level of board independency and board size increases the number of disclosures of KAMs.

Table 7: Additional Analysis

Variables	Coefficient	z-stat.
AUDITOR	-0.093***	-3.67
AUDOPINION	0.066**	2.58
COMPLEX	0.011*	1.82
PM	-0.006	-0.03
SIZE	0.043**	2.84
LEV	0.013	0.28
SG	0.004**	3.47
BIND	4.425***	14.58
BSIZE	0.037**	2.45
Constant	-1.627	-11.14
Pseudo R-squared	0.154	
Prob > chi2	0.000	
Number of observation	164	

*Notes: AUDITOR is the type of the auditor and takes value 1 when the audit firm is one of the Big-4 auditors and 0 otherwise. AUDOPINION is dummy variable that takes value of 1 when the audit firm issues unmodified audit opinion and 0 otherwise. COMPLEX is the number of business segments disclosed in the financial statements. FINPERF is the financial performance measured by return on equity. SIZE is the natural logarithm of total assets. LEV is calculated as the ratio of total liabilities to total assets. SG, sales growth, is the percentage growth of net sales revenue from 2019 to 2020. BSIZE is the total number of members on the firm's board. BIND is the percentage of independent members on the firm's board. ***, ** and * denote significance level at 0.01, 0.05 and 0.10, respectively.*

6. Conclusion

Auditing practices rapidly evolve to meet the needs of today's business world. Past experiences demonstrated that a well-established audit process can serve as a mechanism that decreases the agency conflicts between firm management and shareholders. The disclosure of KAMs that enhance the quality of audit reports can be useful in reducing agency problems within the firm. The mitigation of agency conflicts between internal and external stakeholders contributes to the value-added business operations.

The trust in independent auditing activities has been deteriorated by financial reporting scandals. As a reaction, International Auditing and Assurance Standards Board (IAASB) issued ISA 701 that enables auditors to communicate important matters that may influence the decisions of stakeholders. Since 2016, the auditors are required to communicate KAM depending on circumstances of audit process and the client. Key audit matters grab too much attention over the recent years in the global business environment. The disclosure of key audit matters may mitigate the litigation risk of auditors.

This paper aims to contribute to the literature by empirically analyzing factors that affect the disclosure of KAMs in an emerging market. In the present study, a multivariate model that aims to investigate factors affecting the disclosure of KAM is employed. The sample used in

this paper covers firms 164 manufacturing firms listed on Borsa Istanbul. Poisson regression is used to test research hypotheses. The result of empirical analysis indicates that firms audited by a non-Big 4 auditor report more KAMs than firms audited by a Big-4 auditor. There is also compelling evidence that the type of audit opinion does not influence the number of KAM disclosure.

The result of Poisson regression firmly confirms the positive association between the disclosure of KAMs and firm complexity. The findings suggest that auditors are more inclined to disclose more KAMs for large-sized firms and firms exhibiting high sales growth. This study proved that key audit matters are heavily influenced by the characteristics of client.

Taken together, the results of this paper enable us to comprehensively expatiate the auditors' judgments on the disclosure of KAMs. Absolutely, the auditors' judgments on KAMs are influenced by culture, macroeconomic factors and regulatory framework. Additionally, the results of the empirical analysis are relevant to the regulatory bodies, firm management, investors and creditors. Regulatory bodies should effectively contemplate the main framework of KAMs reported in audit reports to boost the quality of financial reporting practices. Lastly, future studies can analyze the influences of corporate governance on the disclosure of KAMs and use cross-country data to identify similarities and differences in the implementation of KAM disclosure.

References

- Alzoubi, E. S. S. (2016). Audit quality and earnings management: Evidence from Jordan. *Journal of Applied Accounting Research*, 17(2), 170-189.
- Andersen, P. & Skovgaard L. T. (2010). *Regression with linear predictors*. New York: Springer-Verlag.
- Basioudis, I. G., Papakonstantinou, E. & Geiger, M. A. (2008). Audit fees, non-audit fees and auditor going-concern reporting decisions in the United Kingdom. *Abacus*, 44(3), 284-309.
- Beasley, M. S., Carcello, J. V. & Hermanson, D. R. (1999). *Fraudulent financial reporting: 1987-1997. An analysis of US public companies*. New York: Committee of Sponsoring Organizations of the Treadway Commission (COSO).
- Cameron, A. C. & Trivedi, P. K. (2013). *Regression analysis of count data (Vol. 53)*. 2. Edition, New York: Cambridge University Press.
- Chen, T. (2015). Institutions, board structure, and corporate performance: Evidence from Chinese firms. *Journal of Corporate Finance*, 32, 217-237.
- Church, B. K., Davis, S. M. & McCracken, S. A. (2008). The auditor's reporting model: A literature overview and research synthesis. *Accounting Horizons*, 22(1), 69-90.
- Dogan, B. & Arefaine, B. (2017). *The implementation of ISA 701 – Key audit matters: Empirical evidence on auditors' adjustments in the new audit report (Unpublished Master Dissertation)*. Uppsala University.
- Eshleman, J. D. & Guo, P. (2014). Do Big 4 auditors provide higher audit quality after controlling for the endogenous choice of auditor?. *Auditing: A Journal of Practice & Theory*, 33(4), 197-219.
- Fan, J. P. & Wong, T. J. (2005). Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research*, 43(1), 35-72.
- Ferreira, C. & Morais, A. I. (2020). Analysis of the relationship between company characteristics and key audit matters disclosed. *Revista Contabilidade & Finanças*, 31(83), 262-274.

- Gold, A., Heilmann, M., Pott, C. & Rematzki, J. (2020). Do key audit matters impact financial reporting behavior?. *International Journal of Auditing*, 24(2), 232–244.
- Gujarati, D. N. (2003). *Basic econometrics*. 4. Edition, New York: McGraw-Hill.
- Güvemli, O. & Özbirecikli, M. (2011). Türkiye’de bağımsız muhasebe denetiminin gelişim süreci: 1990-2011. *Muhasebe ve Finans Tarihi Araştırmaları Dergisi*, (1), 146-180.
- Hair Jr., J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2009). *Multivariate data analysis*. 7. Edition, New Jersey: Pearson Prentice Hall.
- Hudaib, M. & Cooke, T. E. (2005). The impact of managing director changes and financial distress on audit qualification and auditor switching. *Journal of Business Finance & Accounting*, 32(9-10), 1703-1739.
- Krishnan, G. V. (2003). Does Big 6 auditor industry expertise constrain earnings management?. *Accounting Horizons*, 17(1), 1-16.
- Lee, K. W. & Yeo, G. H. H. (2016). The association between integrated reporting and firm valuation. *Review of Quantitative Finance and Accounting*, 47(4), 1221-1250.
- Loebbecke, J. K., Eining, M. M. & Willingham, J. J. (1989). Auditors experience with material irregularities- frequency, nature, and detectability. *Auditing-A Journal of Practice & Theory*, 9(1), 1-28.
- Maindonald, J. & Braun, J. (2006). *Data analysis and graphics using R: An example-based approach*. 2. Edition, Cambridge: Cambridge University Press.
- Markarian, G. & Parbonetti, A. (2007). Firm complexity and board of director composition. *Corporate governance: An International Review*, 15(6), 1224-1243.
- Pinto, I. & Morais, A. I. (2019). What matters in disclosures of key audit matters: Evidence from Europe. *Journal of International Financial Management & Accounting*, 30(2), 145-162.
- Pratoomsuwan, T. & Yolrabil, O. (2020). Key audit matter and auditor liability: Evidence from auditor evaluators in Thailand. *Journal of Applied Accounting Research*, 21(2).
- Reid, L. C., Carcello, J. V., Li, C., Neal, T. L. & Francis, J. R. (2019). Impact of auditor report changes on financial reporting quality and audit costs: Evidence from the United Kingdom. *Contemporary Accounting Research*, 36(3), 1501-1539.
- Reynolds, J. K. & Francis, J. R. (2000). Does size matter? The influence of large clients on office-level auditor reporting decisions. *Journal of Accounting and Economics*, 30(3), 375-400.
- Segal, M. (2017). ISA 701: Key audit matters-an exploration of the rationale and possible unintended consequences in a South African. *Journal of Economic and Financial Sciences*, 10(2), 376-391.
- Suttipun, M. (2020). Factors influencing key audit matters reporting in Thailand. *Asian Journal of Accounting Perspectives*, 13(1), 26-39.
- Velte, P. (2018). Does gender diversity in the audit committee influence key audit matters’ readability in the audit report? UK evidence. *Corporate Social Responsibility and Environmental Management*, 25(5), 748-755.
- Yan, X. & Su, X. G. (2009). *Linear regression analysis: Theory and computing*. Singapore: World Scientific Publishing.