

The impacts of internal audit quality and accounting information systems effectiveness on SME manager's perceptions of external audits

Ali Coskun¹  Ali Haydar Gungormus² 

¹ College of Business, Alfred University, New York, the United States

² Independent Researcher, Germany



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corresponding author:
coskun@alfred.edu

Abstract

External audits for SMEs are often voluntary, leaving the decision to managers or owners. This study examines how the effectiveness of accounting information systems (AIS) and the quality of internal audits influence SME managers' perceptions of external audits in a developing economy. Using Structural equation modeling, survey data from SME managers were analyzed. The results reveal that effective AIS and high-quality internal audits significantly enhance positive perceptions of external audits. Effective AIS, characterized by clear policies and adherence to accounting standards, improves financial transparency and decision-making. High-quality internal audits strengthen oversight, fostering trust in external audits. The findings highlight the interconnectedness of internal systems and external auditing, especially in SMEs transitioning to formal economies. By focusing on a developing market context, the study contributes to the literature by addressing the increasing importance of voluntary audits amid regulatory reforms. SME managers view external audits as beneficial for enhancing credibility, accessing loans, and ensuring financial reliability. The findings offer practical implications, emphasizing the need for stronger internal systems to support external audit adoption.

Keywords: Audit practices, Internal audit effectiveness, SME, Small and medium-sized enterprises, Voluntary audits.

JEL Code: M42, M15, O16

1. Introduction

Small and medium-sized enterprises (SMEs) are fundamental to the economic development of emerging economies, contributing significantly to employment, innovation, and GDP growth. However, SMEs often face challenges in accessing finance and achieving sustainable growth due to limited financial transparency and unreliable financial statements. In many developing economies, external audits are not mandatory for SMEs, leaving the decision to undergo an audit to the discretion of managers and owners. This voluntary nature of external audits highlights the importance of understanding the factors that influence SME managers' perceptions and decisions about auditing practices.

This study focuses on two key internal factors—accounting information systems (AIS) and internal audit quality—that influence SME managers' views on external audits. AIS plays a crucial role in ensuring the accuracy, transparency, and timeliness of financial reporting, which is critical for sound decision-making and building stakeholder trust. High-quality internal audits, on the other hand, enhance oversight, improve organizational governance, and ensure adherence to internal controls. Together, AIS and internal audits contribute to the credibility and effectiveness of external audits, making them more likely to be adopted by SME managers.

While the relationship between AIS, internal audits, and external audits has been explored in developed economies, limited research has focused on emerging markets, particularly in the context of SMEs. This study is situated in Turkey, where SMEs face unique challenges, including transitioning from informal to formal business practices, coping with complex regulations, and operating with limited resources. The Turkish Commercial Code (TCC) introduced in 2012 initially mandated external audits for all corporations; however, subsequent amendments exempted most SMEs, making external audits a voluntary decision for managers.

The originality of this study lies in its examination of the perceptions of SME managers in a developing economy, focusing on the interplay between AIS and internal audit quality in shaping their decisions regarding external audits. Although similar studies have been conducted in developed economies, findings from these contexts may not be fully applicable to the realities of emerging markets. SMEs in developing economies often face unique barriers, such as limited access to credit, lower financial literacy, and differing regulatory enforcement. By exploring these dynamics within Turkey, this research provides valuable insights into the factors influencing voluntary audit adoption in such economies, contributing to the global discourse on SME auditing practices.

This research seeks to answer the following key questions: How does the effectiveness of accounting information systems influence SME managers' perceptions of external audits? What

role does the quality of internal audits play in shaping managers' views on the adoption and implementation of external audits? How do these internal factors interact to influence SME managers' overall perceptions of the benefits and relevance of external audits? Finally, what insights can be drawn from the Turkish context to inform policies and practices aimed at improving audit adoption in developing economies? To address these questions, the study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze survey data from 173 SME managers in Istanbul, Turkey. This methodology is suitable for exploring complex relationships between latent variables, especially in contexts where data may not follow a normal distribution. The findings of this study provide empirical evidence of the significant impact of AIS effectiveness and internal audit quality on SME managers' perceptions of external audits.

In conclusion, this study makes several important contributions to the literature. It expands the understanding of voluntary audit adoption in emerging markets and highlights the importance of strengthening internal organizational systems, such as AIS and internal audits, to promote the adoption of external audits. This research also contributes to the theoretical discourse on SME auditing by providing a deeper understanding of how internal systems work together to enhance the effectiveness of external audits in developing economies.

2. Literature Review

In the literature review, we discussed the factors influencing SME managers' decisions regarding external audits, including the costs and benefits. We then developed a research model and hypotheses on the relationship between accounting information systems, internal audits, and external audits based on the literature. In the empirical research section, relying on survey results, we investigated SME managers' perceptions of external audits and the effects of internal factors on their decisions.

2.1. Voluntary Audit Decision of SMEs

The factors affecting the demand for voluntary audit adoption in SMEs are emerging in business literature. Weik et al. (2018) analyzed the drivers of voluntary audits in German SMEs, investigating agency conflicts with owners and lenders, the importance of financial statements for managers, and outsourced accounting services. Ha and Nguyen (2020) examined factors such as managers' views, related stakeholders, firm size, audit fees, subjective norms, and recommendations affecting voluntary audit decisions in Vietnamese SMEs. Mustapha and Yaen (2013) studied the perceptions and expectations of Malaysian SME owners regarding voluntary audits. Niemi et al. (2012) analyzed the factors influencing the voluntary audit decisions of owner-managers in Finnish SMEs. Ojala et al. (2016) also studied the drivers of voluntary audits in

Finnish SMEs, such as financial distress, dependency on suppliers, growth expectations, enhancing tax reporting credibility, and business ownership structure. Patel and Dahlin (2021) examined the benefits of voluntary audits for Swedish SMEs and analyzed the relationship between voluntary audits and factors such as sales volatility, asset tangibility, and return on assets

One of the underlying reasons behind the external audit decision of SMEs is the costs and benefits of the audit. Studies have investigated whether the benefits from the external audit were considered to be greater than the costs by the SME managers. Othman et al. (2013) mentioned that SMEs found external audits beneficial for them in the future by helping them increase the company's transparency and accountability. Lozano Montero et al. (2020) found that most SMEs are aware of the benefits of external audits, such as detecting and reducing the risks and getting loans at affordable costs. They indicated that SMEs are willing to have an external financial audit and value it if they are aware of the benefits of a financial audit and realize the difference between financial and fiscal audits.

The primary benefit of an external audit is that financing the business is more accessible. The SMEs obtain bank loans at a lower interest rate since external audits reduce the risk. Minnis (2011) found that lenders value third-party verifications of financial statements. They place more weight on audited financial information in setting the interest; therefore, firms with audited financial statements have a significantly lower cost of debt. Aslan and Elci (2009) also mentioned that SMEs prefer to get independently audited to increase their credit ratings and get lower-cost loans. In addition, Clatworthy and Peel (2013) found that audited accounts provide significantly greater reliability, reinforcing the premise of this study that external audits enhance financial statement credibility. Contrarily, Tervo, and Jokipii (2018) found that Finnish SMEs chosen for a voluntary audit paid higher interest rates for their obligations since audited companies had relatively weaker financial results and were considered audited to secure a loan.

Lozano Montero et al. (2020) discussed the SMEs' perception of auditing costs. They suggested that to motivate the request for voluntary auditing, a complete service must be offered to clients. Collis (2010) argued that the costs of auditing outweigh the benefits for firms below a specific size and reduce the compliance burdens on small companies. Even though, according to Collis (2008), only less than a quarter of the SMEs perceived the cost of the audit as a significant burden; a survey conducted by Collis (2003) found that the cost was a factor in deciding to discontinue the audit for the vast majority of the SMEs in the UK. Research has examined whether the benefits of audits outweigh the costs. It has also discussed whether the SMEs considered statutory audits valuable for their companies or performed external auditing only for regulatory compliance. (Collis, 2010; Farrugia & Baldacchino, 2005). Weik et al. (2018) found a difference between an ongoing voluntary audit and a first-time audit regarding cost-benefit considerations for German SMEs.

Kamarudin et al. (2012) found a significant relationship between the acceptance level of audit exemptions and the perceived value of an audit, audit burdens, and audit costs. In other studies, there are arguments on the criteria of audit exemption for SMEs in several countries such as the UK (Collis, 2010), Malaysia (Haron et al., 2016; Othman et al., 2013; Kamarudin, 2012), Finland (Haapamäki, 2021), Denmark (Collis, 2010), India (Bhatia, 2018), Malta (Tabone & Baldacchino, 2003) and Spain (Huguet, 2016). Othman et al. (2013) indicated that SMEs chose to continue with the statutory audit because of the benefits they expected from the audit, and the majority of them will not take up the level of audit exemption; however, especially confident SMEs with low turnover, self-financed and closely managed by shareholders prefer the audit exemptions.

Besides the cost and benefits of external audits, other factors affect SMEs' demand for external audits. According to Othman et al. (2013), the factors determining SMEs' external audit demand include the value of audit, financing strategy, plans, size of firms, director's qualification, dependent users, and audit cost. Collis (2010) measured factors such as size (size of the company as measured by turnover), management factors (audit cost, beneficial check on accounting records and systems, and quality of the financial information), agency factors (required for shareholders, wholly family-owned, external owners without access to internal financial information, bank/lenders and, suppliers/creditors), affecting the demand for voluntary audit by the directors of SMEs. Adeyemi et al. (2015) analyzed characteristics of owner-managers, the legal structure of SMEs, experience, level of education, possession of accounting skills, lukewarm attitude towards audit, and capital structure of SMEs as the determinants of demand for accounting and auditing services in SMEs.

By incorporating these perspectives, this research acknowledges prior findings while advancing understanding by exploring how these dynamics play out in a developing economy context. The focus on Turkish SMEs contributes a unique angle to the ongoing conversation about voluntary audits globally.

2.2. Accounting Information System Effectiveness and External Audit

Almasria et al. (2021) found that accounting information systems significantly improve the quality of external audit procedures such as planning, testing procedures, risk assessments, and audit implementation. Based on their analysis of the relationship between SMEs' accounting information systems, access to loans, and external audits, Palazuelos et al. (2018), found that if an SME is audited, accounting information quality is perceived as better, affecting the availability of funds. Tarek et al. (2017) investigated the external auditors' perceptions of the importance and the extent of the usage of information technology in SME auditing. Alawaqleh (2021) examined the impact of the accounting information system on the quality of internal audits and the role of organizational

culture in this relationship. He found that accounting information systems help to improve internal audit quality. Palazuelos et al. (2018) found that the accounting information system also directly affects the credit-granting decisions of lenders if the SME is audited. Since audited SMEs are more transparent, they face fewer financial problems and can finance their fixed-asset investments and working capital using domestic loans. (Barth et al., 2011, Nizaeva & Coskun, 2018, 2019, 2021)

An external audit is crucial in detecting material misstatement due to fraud; however, Tabone and Baldacchino (2003) indicated that owner-managers do not attach as much significance to the external audit as auditors do. According to their study, owner-managers consider that the external audit positively affects business by imposing financial discipline and providing professional advice. However, it is not so effective in detecting material fraud and errors in financial statements.

2.3. Internal Audit Quality and External Audit in SMEs

In the literature, the effectiveness of the internal audit function in SMEs is also considered a crucial factor affecting the quality of the external audit. The relationship between internal and external audits has been analyzed based on surveys conducted to investigate the opinions of external and internal auditors. For example, Al-Twaijry et al. (2004) investigated the external auditors' perceptions of the internal audit function, the level of cooperation between the internal and external auditors, and whether the external auditors' decisions rely on internal audit work. Endaya and Hanefah (2016) analyzed the relationship between the effectiveness of the internal audit and the senior management support from the perspective of external auditors. Morais and Franco (2017) examined the relationship between external and internal auditors' cooperation and trust and the differences between internal and external auditors with survey data collected from both groups. They mentioned that internal and external auditors' objectives, responsibilities, and activities differed. Still, even though they have different perspectives, they cooperate and coordinate the audit function to benefit the organization. Azzam (2020) surveyed external auditors to identify the relationship between internal and external audits and their effect on the quality of financial reporting.

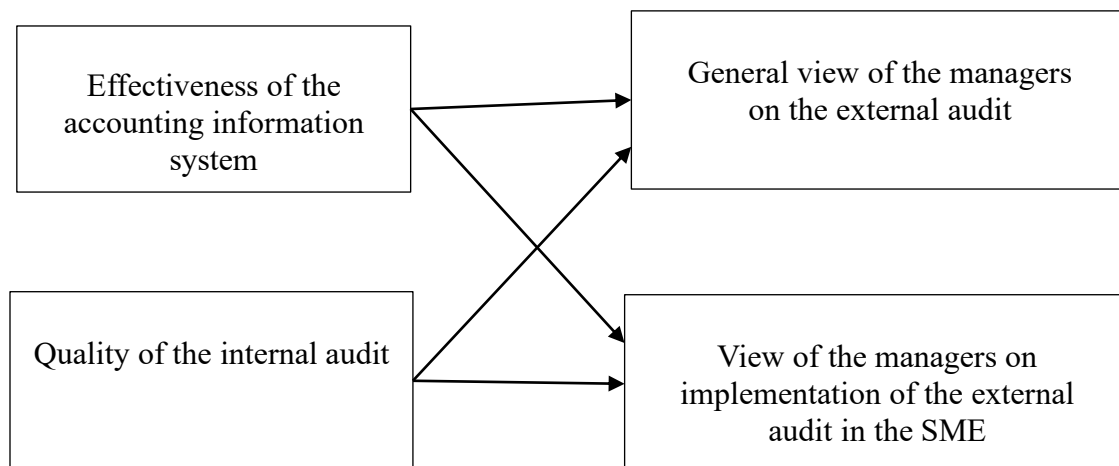
3. Hypothesis Development

In this study, the views of managers toward External (independent) audits in small and medium-sized enterprises (SMEs) and the impact of internal factors on their perceptions are analyzed. In the literature, there is a limited number of survey-based studies on the perceptions and views of managers on different aspects of the external audit. Tabone & Baldaccion (2003) searched the owner-managers perception of statutory audits, audit exemptions, alternatives to the mandatory audit requirements, and overall perception of the audit by surveying companies in Malta. Othman

et al. (2013) conducted a questionnaire survey to get the views and practices of the directors of SMEs in Malaysia on the value of audit and audit exemption. Collis (2008) searched the views of directors of SMEs in the UK on the accounting and audit requirements. This study contributes literature by investigating the effects of accounting information systems and internal auditing on external audit decisions based on the managers' views.

The research model was created in line with the research hypotheses set forth within the conceptual framework. The model was developed based on the purpose of the study, which is to examine how the effectiveness of the accounting information system of SMEs and the quality of the internal audit affects the perspectives of the SME managers on external audit. Figure 1 shows the theoretical model of the study. Based on the theoretical model in Figure 1, we developed four hypotheses and their sub-hypotheses to analyze the relationship between the perceptions of the external audit and the components of the accounting information system and the internal audit.

Figure 1: Theoretical Model of Research



In this study, the efficiency of the accounting information system and the quality of internal auditing are taken as internal factors affecting the external audit decision of the managers of SMEs. A proper functioning and reliable accounting information system is crucial for SMEs because it provides decision-makers -including the auditors- with high-quality financial and nonfinancial information (Uyar et al., 2017). In Model 1, with the following hypotheses, we tested the relationship between accounting information systems and the general views of managers on external audits. We first tested the relationship between the general views on external audit and the effective accounting information system; then, we analyzed sub-hypotheses on two components of the accounting information system, i.e., the bookkeeping system and the accounting reporting system.

H1: The effectiveness of the accounting information system has a positive impact on the general views of managers on the external audit

H1a: An effective bookkeeping system has a positive impact on the general views of managers on the external audit.

H1b: A high-quality accounting reporting system has a positive impact on the general views of managers on the external audit.

To test the relationship between accounting information systems and Views on the implementation of the external audit, we developed the following hypotheses and sub-hypotheses:

H2: The effectiveness of the accounting information system has a positive impact on the views of managers on implementing the external audit.

H2a: An effective bookkeeping system has a positive impact on the views of managers on implementing the external audit.

H2b: A high-quality accounting reporting system has a positive impact on the views of managers on implementing the external audit.

In Model 2, the following hypotheses have been developed to test the relationship between internal audits and general views and views on the implementation of external audits:

H3: The general views of managers on external audit are positive in SMEs with an effective internal audit system.

H4: The views of managers on the implementation of the external audit are positive in SMEs with an effective internal audit system.

4. Methodology

4.1. Data Collection

To investigate the specified relationships, we collected data from a survey conducted among SMEs in Istanbul, Turkey. Istanbul was chosen as the target region because it serves as the economic and business hub of Turkey, and the findings were assumed to provide insights applicable to the entire country. Data collection involved multiple methods, including direct interviews with business managers and online distribution of survey questionnaires to companies. The survey questionnaire, which addressed the variables of this study, is provided in the Appendix. The survey was directed toward executives with titles such as general manager, deputy general manager, financial manager, and similar roles. Out of the 194 completed surveys, 173 were deemed valid for analysis and included in the evaluation. Surveys with incomplete responses were excluded from the dataset.

4.2. Sampling and Respondent Profile

The 173 valid responses obtained through a general, non-statistical judgmental sampling approach were considered sufficient for the purpose of this study. 53% of the respondents were owner-managers, and 47% were professional managers. The participants operated in diverse sectors; 47% were manufacturers, 30% were merchandisers, and 23% were service companies. The number of staff in the participating companies is as follows: less than 10 (24%), 10-49 (34%), 50-99 (14%), 100-249 (18%), 250 or more (10%). 45% of the participants are only operating in the domestic market, 6% are only exporting, and 49% are operating in domestic and international markets. The year of activity (age) of the participants are as follows: Less than ten years (27%), 10-19 years (31%), 20-29 years (18%), 30-39 years (14%), 40 or more years (10%).

4.3. Model and Analytical Approach

We tested the validity and reliability of the model's variables by using Löhmoller's (1981) PLS-SEM (partial least square structural equation modeling) approach. The PLS method was preferred because it allows the use of data unsuitable for normal distribution and has a relatively small sample size. (Chin, 1998; Barclay et al., 1995). The method would enable the variables in the study to be measured, and the collected data were analyzed in line with the research model using the Smart PLS 2.0 M3 software (Ringle et al., 2005). We analyzed two models in the research by using the PLS-SEM Method. Model 1 explores the relationship between the accounting information system and perceptions of the external audit (Figure 2). Model 2 analyses the relationship between internal audit and perceptions of the external audit (Figure 3). In the first stage, the validity and reliability results of the model variables are determined. Then, hypotheses regarding the relationships between latent and observable variables were tested (Hair et al. 1998). The PLS method is preferred because it can be applied to data that does not show the normal distribution and can be used to analyze the relatively small sample size (Chin, 1998; Barclay et al., 1995).

5. Results

5.1 Reliability and Validity of Model 1

The results of the reliability and validity tests support the convergent validity of Model 1. The average variance extracted (AVE) values in Table 1 are between 0.55 and 0.68, above the accepted 0.5 value (Fornell and Larcker, 1981). The alpha reliability values of the model are between 0.84 and 0.89. This value is above the recommended confidence level of 0.70. Likewise, the Integrated reliability values are between 0.87-0.91, which is also above the recommended value of 0.70 (Nunnally, 1978). In light of these results, it can be stated that the internal consistency criteria were met for Model 1.

Figure 2: Relationship between Accounting Information System and View on the External Audit (Model 1)

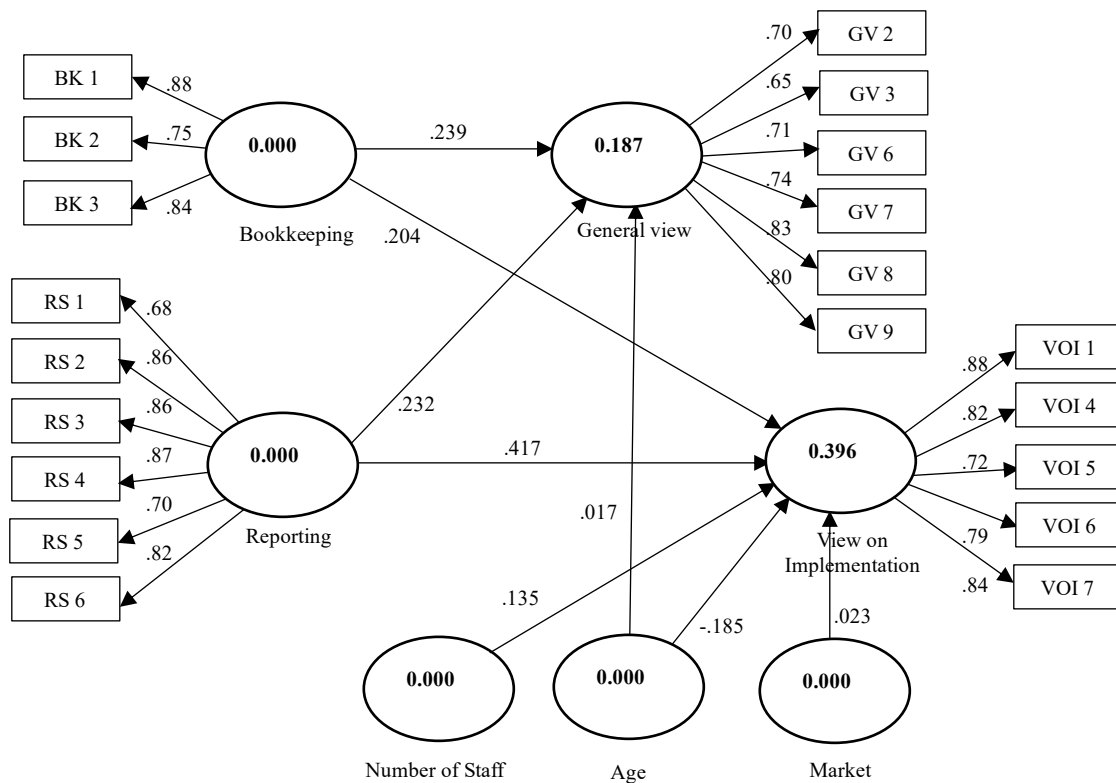


Table 1. Convergent Validity Coefficients of Model 1

Variables	AVE	Integrated reliability	Reliability coefficients	R-Squared
View on implementation (VOI)	0.63	0.89	0.85	0.40
General view (GV)	0.55	0.88	0.84	0.19
Bookkeeping System (BK)	0.68	0.87	0.77	0.00
Reporting System (RS)	0.64	0.91	0.89	0.00
Number of Staff	1.00	1.00	1.00	0.00
Market	1.00	1.00	1.00	0.00
Age	1.00	1.00	1.00	0.00

Factor loads are values expressing the relationship between observed variables and latent variables. Table 1 shows the relationships between the factor loads of the observable variables and the structure. The values obtained in the study are higher than the recommended threshold value of 0.5 (Hair et al., 1998). This indicates that the change in the observable variables explains the difference in the latent variable. In Table 2, loads of answers to the questions which show the factors are given. All the loads in Table 2 are very close to or greater than 0.7. Therefore, we can generally state that the model satisfies the convergent validity conditions.

Table 2: Factor Loads in Model 1

	View on implementation	General View	Bookkeeping system	Reporting System	Number of Staff	Market	Age
VOI 1	0.88	0.62	0.51	0.62	0.25	0.09	-0.01
VOI 4	0.82	0.63	0.40	0.46	0.24	0.09	0.01
VOI 5	0.72	0.44	0.27	0.28	0.21	0.23	-0.03
VOI 6	0.79	0.59	0.38	0.39	0.17	0.1	0.01
VOI 7	0.74	0.40	0.41	0.5	0.44	0.14	0.18
GV 2	0.41	0.70	0.26	0.21	0.25	0.11	0.09
GV 3	0.43	0.65	0.21	0.23	0.13	0.11	0.06
GV 6	0.61	0.71	0.36	0.35	0.19	0.15	-0.02
GV 7	0.48	0.74	0.23	0.25	0.23	-0.04	0.08
GV 8	0.54	0.83	0.37	0.35	0.22	0.09	0.12
GV 9	0.51	0.80	0.27	0.3	0.22	0.03	0.06
BK 1	0.45	0.32	0.88	0.63	0.27	0.15	0.06
BK 2	0.36	0.31	0.75	0.37	0.28	0.2	0.1
BK 3	0.45	0.35	0.84	0.61	0.26	0.17	0.15
RS 1	0.45	0.29	0.37	0.68	0.35	0.06	0.13
RS 2	0.56	0.37	0.64	0.86	0.34	0.21	0.11
RS 3	0.52	0.39	0.60	0.86	0.40	0.19	0.21
RS 4	0.52	0.29	0.64	0.87	0.37	0.19	0.15
RS 5	0.34	0.18	0.36	0.70	0.17	-0.01	0.02
RS 6	0.42	0.32	0.46	0.82	0.31	-0.02	0.14
# STAFF	0.34	0.28	0.32	0.41	1	0.23	0.39
MARKET	0.15	0.11	0.21	0.14	0.23	1	0.01
AGE	0.04	0.09	0.12	0.17	0.39	0.01	1

Then we examined whether the discriminant validity conditions of Model 1 were met. The square root values of each AVE value and the observed variable correlation values are compared for this analysis. AVE square root values are expected to be larger than the values of other variables (Chin, 1998). As shown in Table 3, the results obtained have met the necessary conditions.

Table 3. Correlations of Variables and AVE Square Root Values in Model 1 Discrimination Validity Test

Variables	1	2	3	4	5	6	7
1. View on implementation	0.79						
2. General view	0.68	0.74					
3. Bookkeeping System	0.51	0.39	0.82				
4. Reporting System	0.59	0.39	0.66	0.80			
5. Number of Staff	0.34	0.28	0.32	0.41	NA		
6. Market	0.15	0.11	0.21	0.14	0.23	NA	
7. Age	0.04	0.09	0.12	0.17	0.39	0.01	NA

Again, the factor loads of the observed variables with their latent variables are higher than the others. Therefore, it seems that there is no problem with its discriminant validity. Based on this data, we can say that the proposed model 1 is valid and reliable.

5.2 Result of the Analysis for Model 1

Table 1 of Model 1 shows the extent to which the independent variables explain the latent dependent variables. Accordingly, 40% of the general views on external audits were explained by independent variables. Likewise, it has been observed that 19% of the opinion regarding the views on the implementation of external audits in the firm is explained. Using the SEM method, the analysis uses the significant statistical values from the obtained R2 and path values. In this framework, significant statistical values between latent variables are discussed, and conclusions are drawn. While using the PLS method, it was increased to 500 using the bootstrapping method. The summary results of the analyses in Table 4 show that Hypothesis 1a, Hypothesis 1b, Hypothesis 2a, and Hypothesis 2b are supported.

Table 4: Summary Test Results of Model 1

		β Coefficients	T Values	Results
Bookkeeping System	► General view	0.24	2.12	**Supported
Reporting System	► General view	0.23	2.16	**Supported
Bookkeeping System	► View on implementation	0.20	2.23	**Supported
Reporting System	► View on implementation	0.42	4.56	***Supported
Number of Staff	► View on implementation	0.14	2.09	0.04
Market	► View on implementation	0.02	0.54	0.59
Age	► View on implementation	-0.10	1.86	0.07
Age	► General view	0.02	0.36	0.72

p<.05; *p<.01

Hypothesis 1a: As a result of the analysis, by considering the control variables of the number of staff, market, and age, a positive relationship was determined between the bookkeeping system and the general views of the managers of the firms on the external audit. This shows that the general views of the managers on the external audit are positive in SMEs with an effective accounting bookkeeping system. This relationship was statistically significant at the p<0.05 level and the path coefficient $\beta= 0.24$. Hypothesis 1a was accepted.

Hypothesis 1b: Considering the control variables, a positive relationship was determined between the reporting system and the general views of the managers on external audits. This shows that the general views of the managers on the external audit are positive in SMEs with a high-quality accounting reporting system. This relationship was statistically significant at the p<0.05 level and the path coefficient $\beta= 0.23$. Hypothesis 1b was accepted. This result shows that the general views of the managers of SMEs that have adequate budgets and financial statement analysis systems are positive.

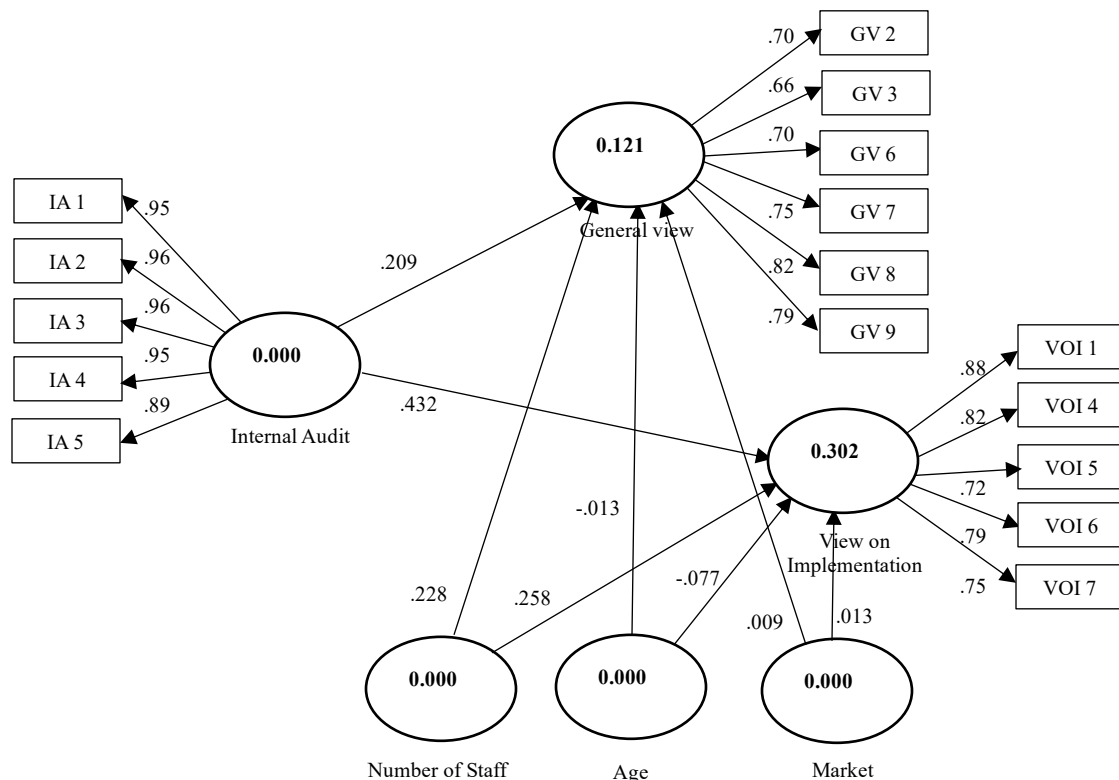
Hypothesis 2a: According to the result obtained; by considering the control variables of the number of staff, market, and age, a positive relationship was determined between the bookkeeping system and the views of the managers of the SMEs on the implementation of the external audit. This shows that managers' views on implementing the external audit are positive in SMEs with an effective accounting bookkeeping system. This relationship was statistically significant at the $p < 0.05$ level and the path coefficient $\beta = 0.20$. Hypothesis 2a was accepted.

Hypothesis 2b: By considering the control variables, a positive relationship was determined between the reporting system and the views of the managers of the SMEs on the implementation of the external audit. This shows that managers' implementing external audits is positive in SMEs with a high-quality accounting reporting system. This relationship was statistically significant at the $p < 0.01$ level and the path coefficient $\beta = 0.42$. Hypothesis 2b was accepted.

5.3 Reliability and Validity of Model 2

We also found that the results of the reliability and validity tests support the convergent validity of Model 2 in Figure 3. The AVE values in Table 5 are between 0.55 and 0.89, which are above the accepted 0.5 value (Fornell & Larcker, 1981). The alpha reliability values of the model in Table 5 are between 0.84 and 0.97, which are above the recommended confidence level of 0.70 (Nunnally, 1978).

Figure 3: Relationship between Internal Audit and Views on the External Audit (Model 2)



Likewise, the Integrated reliability values are between 0.88-0.97, which is also above the recommended value of 0.70. These results indicate that the internal consistency criteria were met for Model 2.

Table 5 shows the relationships between the factor loads of the observable variables and the structure. The values obtained in the study are higher than the recommended threshold value of 0.5 (Hair et al., 1998), which indicates that the change in the observable variables explains the difference in the latent variable.

Table 5: Coefficients of Convergent Validity of Model 3

Variables	Average variance extracted	Integrated reliability	Reliability coefficients	R-Squared
View on implementation	0.63	0.89	0.85	0.30
General view	0.55	0.88	0.84	0.12
Internal Audit	0.89	0.97	0.97	0.00
Number of Staff	1.00	1.00	1.00	0.00
Market	1.00	1.00	1.00	0.00
Age	1.00	1.00	1.00	0.00

The loads in Table 6 are very close to or greater than 0.7. Therefore, we can generally state that Model 2 satisfies convergent validity conditions.

Table 6: Factor Loads in Model 2

	View on implementation	General View	Internal audit	Number of Staff	Market	Age
VOI 1	0.88	0.62	0.52	0.25	0.09	-0.01
VOI 4	0.82	0.62	0.40	0.24	0.09	0.01
VOI 5	0.72	0.44	0.21	0.21	0.23	-0.03
VOI 6	0.78	0.59	0.33	0.17	0.10	0.01
VOI 7	0.75	0.40	0.41	0.44	0.14	0.18
GV 2	0.41	0.70	0.10	0.25	0.11	0.09
GV 3	0.43	0.66	0.18	0.13	0.11	0.06
GV 6	0.60	0.70	0.27	0.19	0.15	-0.02
GV 7	0.47	0.75	0.17	0.23	-0.04	0.08
GV 8	0.54	0.82	0.28	0.22	0.09	0.12
GV 9	0.51	0.79	0.16	0.22	0.03	0.06
IA 1	0.49	0.28	0.95	0.25	0.17	0.03
IA 2	0.48	0.26	0.96	0.25	0.20	0.07
IA 3	0.50	0.25	0.96	0.23	0.20	0.07
IA 4	0.46	0.25	0.95	0.25	0.19	0.06
IA 5	0.41	0.21	0.89	0.26	0.17	0.05
# STAFF	0.35	0.28	0.26	1.00	0.23	0.39
MARKET	0.15	0.10	0.20	0.23	1.00	0.01
AGE	0.05	0.09	0.06	0.39	0.01	1.00

Then, the square root values of each AVE value and the observed variable correlation values are compared to find whether the discriminant validity conditions of Model 2 were met. AOV square root values are expected to be larger than the values of other variables (Chin, 1998). As is seen in Table 7, the results obtained have met the necessary conditions.

Table 7: Model 2 Discriminatory Validity Test. Correlations of Variables and AVE Square Root Values

Variables	1	2	3	4	5	6
1 View on implementation	0.79					
2 General view	0.67	0.74				
3 Internal audit	0.50	0.27	0.94			
4 Number of Staff	0.35	0.28	0.26	NA		
5 Market	0.15	0.10	0.20	0.23	NA	
6 Age	0.05	0.09	0.06	0.39	0.01	NA

Again, the factor loads of the observed variables with their latent variables are higher than the others. Therefore, it seems that there is no problem with its discriminant validity. Based on this data, we can say that the proposed Model 2 is valid and reliable.

5.4 Result of the Analysis for Model 2

Table 5 shows the extent to which the independent variables explain the latent dependent variables. Accordingly, independent variables explained 30% of the general views on external audits. Likewise, it has been observed that 12% of the opinion regarding the views on the implementation of external audits in the firm is explained. Using the SEM method, the analysis uses the significant statistical values from the obtained R2 and path values. In this framework, significant statistical values between latent variables are discussed, and conclusions are drawn. While using the PLS method, it was increased to 500 using the bootstrapping method. The summary results of the analyses in Table 8 show that Hypothesis 3 and Hypothesis 4 are supported.

Table 8: Summary Test Results of Model 2

		β coefficients	T Values	Results
Internal audit	▶ View on implementation	0.43	6.65	***Supported
Internal audit	▶ General view	0.21	2.55	**Supported
Number of Staff	▶ View on implementation	0.26	3.65	0.00
Number of Staff	▶ General view	0.23	2.59	0.01
Age	▶ View on implementation	-0.08	1.38	0.17
Age	▶ General view	-0.01	0.27	0.79

p<.05; *p<.01

Hypothesis 3: According to the result obtained; by considering the control variables of the number of staff, market, and age, a positive relationship was determined between the internal audit and the general views of the managers of the SMEs on the external audit. This shows that the general views

of managers on external audit are positive in SMEs with an effective internal audit system. This relationship was statistically significant at the $p < 0.05$ level and the path coefficient $\beta = 0.21$. Hypothesis 3 was accepted.

Hypothesis 4: By considering the control variables, a positive relationship was determined between the internal audit and the views of the managers on the implementation of the external audit. This indicates that managers' views on implementing the external audit are positive in SMEs with an effective internal audit system. This relationship was statistically significant at the $p < 0.01$ level and the path coefficient $\beta = 0.43$. Hypothesis 1b was accepted.

6. Discussion

6.1. Theoretical Implications

This study provides significant theoretical contributions by examining the impact of accounting information systems (AIS) and internal audit quality on SME managers' perceptions of external audits. It adds to the literature by extending the understanding of how internal organizational factors influence external auditing decisions, particularly in the context of SMEs in emerging economies. The results of the study indicated that the general views of managers on external audits are positive in SMEs that effectively use the accounting information system. We found that managers' views on implementing the external audit are also positive in SMEs that use the accounting information system effectively. The results are consistent with the literature (Almasria et al., 2021; Palazuelos et al., 2018; Uyar et al., 2017; Tarek et al., 2017) that suggests a positive relationship between accounting information systems and external audit implementations.

The results also underscore the importance of internal auditing as a determinant of external audit adoption. By validating hypotheses related to the internal audit's role, this research supports earlier findings (Al-Twaijry et al., 2004, Endaya & Hanefah, 2016; Morais & Franco, 2017; Azzam, 2020) and uniquely emphasizes the Turkish SME context. It highlights how effective internal auditing bolsters managers' confidence in external audits, providing a novel perspective from a developing economy. This study extended the current literature by explaining the mentioned positive relationship with the managers' perspective. We found that the managers perceive the effective accounting information system and the internal audit quality as positively affecting the external audit function.

Finally, the study addresses the limited geographical diversity in existing research. Unlike prior studies conducted in Malta (Tabone & Baldaccion, 2003), Malaysia (Othman et al., 2013), and the UK (Collis, 2008), this research provides empirical evidence from a Middle Eastern developing country, contributing to the global discourse on auditing practices in SMEs.

6.2. Practical Implications

This study offers actionable insights for SME administrators, auditors, and policymakers. For SME managers, the findings emphasize the necessity of strengthening AIS and internal audit functions. Investments in high-quality bookkeeping and reporting systems, alongside well-organized internal audits, are essential to enhance the value derived from external audits. Managers should focus on implementing proper documentation, segregation of duties, and regular analysis of financial statements to ensure efficient AIS operation. For auditors and audit firms, the research highlights the importance of demonstrating how external audits complement internal systems. Auditors should emphasize the added value of credibility and transparency that their services bring, particularly for SMEs seeking to attract investors or expand into international markets. For policymakers, this study suggests that encouraging voluntary external audits can be achieved through targeted programs that enhance SMEs' internal capabilities. Policies promoting training in AIS management and internal audit practices could drive broader adoption of external audits, improving overall financial governance in the SME sector. Policymakers may also consider tailored guidelines or incentives for SMEs in developing economies to strengthen their internal controls. Lastly, international organizations and investors can leverage these insights to assess the financial credibility of SMEs in emerging markets. By prioritizing partnerships with SMEs that have robust AIS and internal audit systems, they can mitigate risks and foster growth in these businesses.

In summary, this study provides both theoretical insights that enrich the academic literature on SME auditing practices and practical recommendations to improve governance, transparency, and credibility in the SME sector. Future research could build upon these findings by exploring diverse cultural, economic, and regulatory contexts to provide a broader understanding of the dynamics influencing external audit adoption.

7. Conclusion

Auditing in SMEs is an evolving concept, driven by technological advancements and shifting regulatory landscapes. Although external audits are not mandatory for SMEs in many countries, many managers and owners opt to have their companies' financial statements audited by independent auditors. This study seeks to identify the key factors that influence SME managers' decisions to pursue external audits, with a focus on their perspectives while also recognizing the roles of other stakeholders within the organization.

Despite the broad exemption from mandatory audits, our findings indicate that SME managers generally hold a positive attitude toward external audits. This positive perception stems from the

belief that external audits provide significant benefits, such as enhancing business credibility and improving financial transparency. The study reveals that these favorable views are primarily shaped by the effectiveness of the accounting information system (AIS), especially its bookkeeping and reporting functions, as well as the quality of internal audits. A robust AIS relies on well-established policies, segregation of duties, and strong management controls over financial documentation. Additionally, SMEs must ensure accurate preparation of financial reports and supplementary documents, with regular analysis of financial statements. Maintaining operational efficiency, financial budgeting, and adherence to accounting standards are essential for a functional AIS. Similarly, the quality of the internal audit system hinges on the diligent execution of audit plans and timely reporting to senior management. Effective internal audit teams, backed by strong administrative support and the efficient use of audit findings, are crucial for ensuring sound governance and reinforcing the credibility of external audits.

This study contributes valuable insights into the factors driving voluntary audit adoption, particularly in the Turkish context. While it emphasizes the importance of AIS and internal audit quality, it also broadens the discussion on SME auditing practices in emerging economies. A notable limitation of the study is that data was exclusively collected from SME managers and owners in Turkey. Future research could broaden the sample to include input from other stakeholders, such as employees, financial advisors, and external auditors. Moreover, internationalizing the study by examining SMEs in other developing economies could provide more comprehensive insights. Another limitation is the exclusion of control variables such as company size, manager gender, and SME sector, which could be incorporated in future studies to offer deeper analysis.

In conclusion, this research underscores the pivotal role that internal organizational factors—such as AIS and internal audit quality—play in shaping SME managers' perceptions of external audits. Strengthening these internal systems enhances the adoption and effectiveness of external audits and contributes to greater financial transparency and governance within SMEs. Policymakers and practitioners can use these insights to craft targeted interventions that encourage voluntary audit adoption, ultimately improving the credibility of SMEs in emerging markets. Future research could further explore similar dynamics in other developing economies to better understand how local contexts, regulatory changes, and organizational factors influence SMEs' decisions regarding voluntary audits. Ultimately, this research provides valuable guidance for SMEs, auditors, and policymakers seeking to enhance audit practices and financial credibility in emerging markets.

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APPENDIX: Questions in the Survey

Accounting Information System (AIS)	
AIS - Bookkeeping System	
BK 1	Policies and procedures for how accounting processes are conducted have been established in our business.
BK 2	The individuals responsible for recording accounting transactions are always separate from those responsible for reviewing and controlling them.
BK 3	Documents in our business are always signed by the preparer and the recipient.
AIS - Reporting System	
RS 1	Guidelines have been prepared for how current accounts should be used in our business.
RS 2	In addition to basic (legal) financial reports, supplementary financial reports (such as changes in equity, fund flow statements) are also prepared in our business.
RS 3	At the end of the year, financial analysis reports (e.g., ratio analysis, vertical, horizontal, and trend analyses) are prepared and used for decision-making in our business.
RS 4	Financial statement data is used for evaluating management performance.
RS 5	Accounting records in our business are kept in accordance with Accounting Standards.
RS 6	Financial statements are prepared according to TFRS (Turkish Financial Reporting Standards).
Internal Audit	
IA 1	Internal audit processes are effectively conducted in our business.
IA 2	Findings from the internal audit process are regularly reported to senior management.
IA 3	Internal audit reports are considered by senior management.
IA 4	Internal audit activities are carried out in accordance with internal audit guidelines and plans.
IA 5	There is an efficient team in our business working on internal auditing.
Independent (External) Audit - General Opinions	
GV 1	External audits reduce costs and make it easier for businesses to obtain credit.
GV 2	External audits help identify errors, fraud, etc., in accounting records.
GV 3	External audits facilitate the legal auditing of financial statements.
GV 4	External audits may result in financial information being leaked to competitors.
GV 5	External audit results are used in senior management's decision-making processes.
GV 6	External audits increase the opportunities and possibilities for domestic and international partnerships.
GV 7	External audits help prevent problems arising from conflicts of interest among shareholders.
GV 8	External audits contribute to the implementation of corporate governance principles in businesses.
GV 9	External audits increase transparency in businesses.
Independent (External) Audit – Views on Implementation	
VOI 1	I believe external audits will positively contribute to our business.
VOI 2	I am concerned that external audits may reduce our business's competitiveness.
VOI 3	The benefits of external audits to our business are lower than their cost.
VOI 4	External audits will enhance the effectiveness of our internal audit system.
VOI 5	External audits are unnecessary as our financial reports are already reviewed for tax purposes.
VOI 6	I believe external audits will improve the quality of our accounting information system.
VOI 7	Our business is not large enough to require external auditing.
VOI 8	I believe external audits will positively contribute to our business.
VOI 9	I am concerned that external audits may reduce our business's competitiveness.

Note: Translated from Turkish