

CHAPTER 4

DATA ASSESSMENT AND DESCRIPTIVE STATISTICS

4.1 Introduction

This chapter begins by describing the data collecting and survey response rate, as well as the demographic profile of the respondents, which covers both the respondents' and the audit process' characteristics. The chapter then moves on to the results of the first and second-order latent constructs and their relative measurement items, followed by the data screening results in terms of missing values, outliers, and the assessment of the data normality. Moreover, this chapter includes the results of confirmatory factor analysis (CFA) for the measurement models (model 1 and model 2) in terms of uni-dimensionality, reliability, and validity. In addition to the acquired the findings for the assessment of the structural model in the testing of hypotheses on direct and moderation effects are given, the chapter presents the descriptive analysis for all items of the study variables. Finally, the chapter provides a summary of SAIs' audit reports that related to municipalities either issue by the FACB or MOLG-GDCG.

4.2 Analysis of Survey Response

The following subsections discuss the data collection including the respond rate and the demographic profile for respondents including characteristics of the respondents and the characteristics of audit process.

4.2.1 Data Collection

The MOLG website registered 155 municipalities in Palestine, and the questionnaires were sent to these municipalities via their official email addresses, mainly, directed the URL of the Google Form to key persons in accounting and internal audit departments (Refer to Table 3.8). As a result of personal communication with accountants and internal auditors by telephone, mobiles, emails, WhatsApp groups, and other social media, the total of 186 questionnaires were collected, yielding a general response rate of 60.2%, but the respond rate in class C was 89%, 68% in class A, and 39% in class B as appeared in the Table 4.1. The response rate by official emails without following with telephone or other media around 17% was used by many scholars (Carini et al., 2018), but response rate increases after reminders sending (Saleh & Bista, 2017), if the first email followed by other email, the response rate will increase by 11.8% (Converse et al., 2008). Prior researchers accepted response rates of 31% and 26% when using email surveys distributed to financial statement preparers (accountants), and 21% when using email surveys distributed to financial statement users (Al-Dhubaibi, 2020). In light of this, the study's response rate of 60.2% seems appropriate.

Table 4.1: Responses Rate

Class	A	B	C	Total
Estimated number of employees (Population)	75	141	93	309
The number of respondents	51*	52	83	186
The respond rate	68%	39%	89%	60.2%
The number of municipalities	15	47	93	155
Average number of respondents in one municipality	3.4	1.1	0.89	1.2

*22 respondents in class A+(center of area) and 29 in class A (center of governance)

Source: Author

The relative decrease in response rate in municipalities class B and class A can be attributed to the municipality's management notion that few respondents from the municipality is sufficient, particularly from the main accountants who represent the municipality. And the overall average number of respondents in one municipality was 1.2 employees, indicating that the majority of municipalities were participating in the questionnaire response. As a result, the response rate is valid and representative of the study population. All of the questionnaires that were collected were used for the analysis in the study because each questionnaire had been verbally scanned to remove any missing responses, but there were no missing values in the study's variables because each question's response was eligible. As a result, all questionnaires were immediately verified using the Google occlusion tool.

The general rule of thumb for determining sample size, according to Sekaran and Roger (2003), is to multiply the number of constructs by 10. Given that there are 10 constructs (variables) in this study, the required sample size should be at least 100 observations (10*10). However, the 186 usable measured values in the current study met the aforementioned criteria, allowing the researcher to move forward with additional analyses.

4.2.2 Demographic Profile

All accountants and internal auditors of municipalities in Palestine make up the study's population. In order to see the description of the demographic profile of respondents and the audit process in the municipalities, frequency analysis was performed using SPSS version 27. Table 4.2 displays the demographic profile of this study, which is divided into two categories: (1) respondents' characteristics, which relate to the description of the respondents' personal qualifications, and (2) audit

process characteristics, which relate to the respondents' experience with audit processes performed by external auditors, internal auditors, and SAI auditing.

Table 4.2: Sample Profile ($N = 186$)

Group	Frequency	Percentage	Cumulative Percentage
The first Group: Respondents Characteristics			
Occupation			
Accountant	44	23.7	23.7
Senior Accountant	57	30.6	54.3
Accounting Department Head	72	38.7	93
Internal Auditor	13	7.0	100
Gender			
Male	132	71.0	71
Female	54	29.0	100
Age			
Less than 30 years old	26	14.0	14
30-40 years old	62	33.3	47.3
41-50 years old	65	34.9	82.3
More than 50 years old	33	17.7	100
Qualification			
Less than Bachelor Degree	1	.5	0.5
Bachelor's Degree or equivalent	144	77.4	77.9
Master Degree	36	19.4	97.4
PhD Degree	3	1.6	99
Bachelor's Degree in other field	2	1.1	100
Experience			
Less than 5 years	20	10.8	10.8
5-10 years	40	21.5	32.3
11-15 years	43	23.1	55.4
More than 15 years	83	44.6	100
Second Group: Audit Process Characteristics			
Municipality Class			
Class A+	22	11.8	11.8
Class A	29	15.6	27.4
Class B	52	28.0	55.4
Class C	81	43.5	98.9
Class D	2	1.1	100
Audit Fees in USD			
Less than 2000	102	54.8	54.8
From 2001 to 4000	47	25.3	80.1
From 4001 to 6000	13	7.0	87.1
More than 6000	18	9.7	96.8
I do not know	6	3.2	100
Accounting Basis			
Cash Basis	79	42.5	42.5
Accrual Basis	63	33.9	76.4
Modified Accrual Basis	31	16.7	93.1
Mix as the type of budget	13	7.0	100
Number External Auditor in the team			
Two auditors	104	55.9	55.9
Three auditors	48	25.8	81.7
Four auditors	21	11.3	93
Five auditors or more	13	7.0	100

Table 4.2, continued

Group	Frequency	Percentage	Cumulative Percentage
Internal Auditors Number			
None	97	52.2	52.2
One employee	48	25.8	78
Two employees	19	10.2	88.2
Three employees or more	22	11.8	100
Last Year Audit Report			
2018	6	3.2	3.2
2019	2	1.1	4.3
2020	32	17.2	21.5
2021	138	74.2	96
Never Audited	8	4.3	100
Last Year Auditor's Report type			
Standard Unmodified	131	70.4	70.4
Unmodified with Emphasis Matter	12	6.5	76.9
Qualified Opinion	15	8.1	85
Adverse Opinion	2	1.1	86
Disclaimer	7	3.8	90
No audit in the municipality	19	10.2	100
Last Year SAIs Audit			
2019	23	12.4	12.4
2020	33	17.7	30.1
2021	72	38.7	68.8
2022	43	23.1	92
Never Audited	14	7.5	100

Source: SPSS 27 Software

4.2.2.1 The First Group: Demographic Characteristics

The first demographic question was the subject of the respondents' employment position (occupation). According to Table 4.2, the Accounting Department Head (38.7%) received the most responses, followed by Senior Accountants (30.1%), Accountants (23.7%), and Internal Auditors (7%). Given that the head of the accounting department and senior accountant are constantly deeply involved in the preparation of the financial statements as well as communication with external auditors in addition to internal auditors, this suggests that the respondents were competent in responding to the questionnaires that were distributed.

The second demographic question was the subject of the gender of the respondents. The results of Table 4.2 show that 71% of the respondents were men and

29% were women. As a result, men make up the bulk of the respondents in this study. This might be a result of the Palestinian culture, which discourages women from working outside the home as employees, especially in municipalities. However, in recent years, this culture has changed as a result of women attending universities and earning degrees that qualify them for high-level positions in the workforce.

The third question asked respondents to enter their age. According to frequency statistics, the majority of respondents were between the ages of 41 and 50 (34.9%), followed by those between the ages of 31 and 40 (33.3%), those over 50 (17.7%), and those under 30 (14%) respectively. This result as Table 4.2 shows means that younger people now play a less significant role than older people in the accounting departments of municipalities. This goes back to the era of municipality establishment, which began following the establishment of the PNA in 1993. The elderly is never in favor of implementing new accounting methods like accrual accounting, new accounting software, and the adoption of (IPSASs). However, older accountants may have more practical experience and be more qualified to respond to this survey with reliability.

Regarding the fourth question, which related to the respondents' work experience. Table 4.2 shows that the majority of respondents (44.6%) had more than 15 years of experience, followed by those with 11 to 15 years of experience (23.1%), those with 5 to 10 years of experience (21.5%), and those with less than 5 years of experience (10.8%). This result suggests that the respondents have relevant experience working in municipal accounting. As a result, this shows that the respondents have sufficient knowledge of audit quality and its factors, and raises the credibility of the responses provided on the distributed questionnaires.

The fifth demographic question asked about the respondents' current educational status in relation to their level of education. The most common level of education among respondents was a bachelor's degree (77.4%), a master's degree (19.4%), a doctorate (1.6%), a bachelor's degree in another field (1.1%), and respondents with less than a bachelor's degree (0.5%). Although the law of local governmental units and the regulations permit the employment of accountants from diploma degree if the accountant was employed before year of 2009 (Office, 2020), as shown in Table 4.2, the municipalities in Palestine were concerned about the educational level of the accountants and the internal auditors. This suggests that the respondents were competent in responding to the questionnaires that were distributed.

4.2.2.2 The Second Group: Audit Process Characteristics

In the first question of audit process characteristics, participants were asked to enter the classification of the municipality where the participant works. Frequency statistics demonstrates that the majority of municipalities was classified as class (C) for (43.5%), followed by class (B) for (28%), class (A) for (15.6%), class (A+) for (11.8%) and lowest class (D) was (1.1%) which is transmitted to class (C) according the minister of the Local government ministry in Palestine. The structure of these percentages alignment with the actual structure classes of municipalities of Palestine. This structure of participants gives more credible for the answers of the questionnaire, in class (C), always there is one accountant who responsible on the accounting system and the communication with the external auditors, therefore he will have qualified perfectly to answer the questions.

The second question of the audit process characteristics was the subject of the audit fees. According to Table 4.2, most municipalities audit fees were in lowest

category less than 2000 USD (54.8%), followed by category from 2001USD to 4000 USD (25.3%), category from 4001 USD to 6000 USD (7.0%), category more than 6000 USD (9.7%) and (3.2%) the respondents did not know the audit fees. These rates reflect the municipalities size and their classification, and in general, the amount of audit fees in the municipalities is low when we compare it to the level of audit fees in the business organization in Palestine.

The use of accounting bases was the subject of the third audit process query. According to Table 4.2, the majority of municipalities in Palestine (42.5%) still use the cash basis for accounting, which is followed by accrual basis (33.9%), modified accrual basis (16.7%), and mixed basis (7.0%), respectively. Participants are better able to respond to questions about the accounting basis as a factor of internal control effectiveness and audit quality in municipalities as a result of their growing familiarity with various accounting bases and their impact on the accuracy of financial statements and the quality of audits.

Regarding the fourth question, which inquired about the number of audit team individuals in the audit engagement in the municipality, table 4.2 shows that the majority of municipalities (55.9%) were audited by two auditors, followed by three auditors (25.8%), four auditors (11.3%) and (7.0%) five auditor or more. This result means that most municipalities are audited by small audit firms which they have limited number of auditors, and may reflects the simplicity and small size of most municipalities in Palestine.

The fifth question of the audit process was related to number of internal auditors in the municipality, table 4.2 shows that (52.2%) of the municipalities have not internal audit as a separate function, because the function of internal audit is not required from the municipalities by law and regulations, However, MOLG issued

organizational structure models for municipalities based on their size and class to serve as guidelines for preparing a proper organizational structure for each municipality. According to these models, MOLG required all classes of municipalities to form a committee of municipal council members to perform at least the function of internal auditing and controlling, and required class (A) and recommended class (B) to establish an internal audit department, either supervised by the council or the financial manager (Office, 2020). Also, 25.8% of the participants have one internal auditor in their municipalities, 10.2% have two internal auditors, and 11.8% of the participants have three internal auditors.

The sixth question of the audit process characteristics was the subject of the last year audit report is issued by the external auditor for the municipality. According to Table 4.2, most municipalities audited their financial statements in year 2021, this means that most municipalities have recent experience in the external audit process and make audit regularly, therefore the percentage of participants who finished the external audit for 2021 year in the last quarter of 2022 year is (74.2%), and 17.2% of participants have audit report for year 2020, but (4.3%) have not external auditing, and (3.2%) did not audit since 2018, and (1.1%) since 2019.

The seventh question of the audit process characteristics was the subject of the last year audit report type is issued by the external auditor for the municipality. According to Table 4.2, most municipalities get a standard unmodified audit report which reached (70.4%) of participants who get unmodified audit report, followed by qualified opinion was (8.1%), unmodified with emphasis matter was (6.5%), disclaimer was (3.8%), and (1.1%) for the adverse opinion.

The last question of audit process was related with to last year the municipality are audited by SAIs auditors in order to know the extent of the experience of the

participants with audit of FACB as SAI in Palestine, most of participants have recent experience with the audit of FACB, this means that the participants able to evaluate the impact of auditing of FACB on the external audit quality. Table 4.2 shows that (23.1%) of the participants exposed for the audit of FACB in 2022, but 38.7% in year 2021, 17.7% in year 2020, 12.4% in 2019, and 7.5% of the participants have not exposed to this type of audit.

4.3 Construct Measures

The primary construct measures were built upon already-in-use tools. The measurement components for the research variables, as well as the first and second order constructs, are summarized in Table 4.3.

Table 4.3: List of Constructs and Measurement Items

2 nd Order Construct	1 st Order Construct	Items Number (50)	Measurement Scale
	Audit Quality (AQ)	8	5-Point Likert
	Supreme Audit Institutions (SAI)	11	//
Auditor Characteristics (ACH)	Ethics (ET)	6	//
	Independence (IN)	6	//
	Competency (CM)	7	//
Audit Firm Attributes (AFA)	Audit Fees (AF)	2	//
	Audit Firm Size (AFS)	2	//
Effectiveness of the Municipal Internal Control (EMIC)	Internal Auditing (IA)	2	//
	Accounting Basis (AB)	3	//
	Laws and Regulation (LR)	3	//

Source: Author

4.4 Data Screening

In order to ensure that data are correctly entered and free of missing values, data screening is required. This section also looked at normality, univariate outliers, and multivariate outliers.

4.4.1 Missing Values

For administering or distributing the survey to the respondents in the current study, a self-administered method was used through using the information technology and current communication tools such as Emails, WhatsApp, Telephone Calls, and other social media. But if any of the survey participants appeared to be having trouble understanding a particular question or statement, they were given personal assistance to clarify it. And all questionnaires were immediately verified using the Google occlusion tool, therefore no missing values in the study's items which related to variables of the study, because each question's response was eligible.

Following the collection of data via the survey, the data was coded and labeled according to the various sections and item numbers of the questionnaire. The researcher then checked the data file for any missing information by entering the frequency of occurrence of each indicator into SPSS. The results of the descriptive analysis showed that there are no invalid or missing entries, thereby attesting to the respondents' full cooperation and the high level of accuracy of their answers. The appropriateness of the items, suitability of the questions, and choice of respondents all had an impact on these results.

4.4.2 Outliers

The treatment of outliers is an essential step in the data screening process. Outliers are observations that have a distinct set of characteristics that distinguish them from the rest of the observations (Hair et al., 1998). According to Hawkins (1980), an outlier is an observation that differs so significantly from other observations that it raises questions about whether it was produced by a different mechanism. An extreme response from a participant to any or all questions is

considered an outlier (Hair et al., 2019). It might also be a distinct subcategory of the sample (Hair et al., 2019). Outliers were identified using univariate (histograms, box-plots and standardized z score) and multivariate detections (Mahalanobis D^2 distance).

4.4.2.1 Univariate Outliers

The term "univariate outliers" describes observations with a single variable's unusual value (Tabachnick & Fidell, 2007). In addition to looking at histograms and box plots, each variable's standardized (z) score was looked at for univariate detection (Tabachnick & Fidell 2007). A case is considered an outlier in accordance with Hair et al., (2006) if its standard score is ± 3.0 or beyond. As a result, any Z-score that is either greater than 3 or lower than -3 is regarded as an outlier. Table 4.4 provides a summary of the standardized (z) scores for each item in each construct.

Table 4.4: Result of Univariate Outlier Based on Standardized Values

1st Order Construct	Item	Standardized value (Z-Score)	
		Lower Bound	Upper Bound
Ethics (ET)	ET1	-2.607	1.434
	ET2	-2.391	1.188
	ET3	-2.297	1.278
	ET4	-2.471	1.289
	ET5	-2.432	1.361
	ET6	-2.262	1.266
Independence (IN)	IN1	-2.480	1.372
	IN2	-2.386	1.252
	IN3	-2.483	1.295
	IN4	-2.439	1.310
	IN5	-2.521	1.299
	IN6	-2.316	1.319
Competency (CM)	CM1	-2.494	1.188
	CM2	-2.432	1.330
	CM3	-2.520	1.530
	CM4	-2.291	1.557
	CM5	-2.296	1.604
	CM6	-2.245	1.483
	CM7	-2.340	1.511
Audit Fees (AF)	AF1	-2.692	1.145
	AF2	-2.638	1.249
Audit Firm Size (AFS)	AFS1	-2.627	1.353
	AFS2	-2.610	1.289
Internal Auditing (IA)	IA1	-2.657	1.436
	IA2	-2.639	1.288

Table 4.4, continued

1st Order Construct	Item	Standardized value (Z-Score)	1st Order Construct
		Lower Bound	Upper Bound
Accounting Basis (AB)	AB1	-2.476	1.299
	AB2	-2.708	1.421
	AB3	-2.600	1.324
Laws and Regulation (LR)	LR1	-2.605	1.383
	LR2	-2.701	1.425
	LR3	-2.436	1.233
Supreme Audit Institutions (SAI)	SAI1	-1.673	1.188
	SAI2	-1.768	1.364
	SAI3	-1.798	1.372
	SAI4	-1.759	1.202
	SAI5	-1.672	1.142
	SAI6	-1.665	1.189
	SAI7	-1.721	1.472
	SAI8	-1.744	1.212
	SAI9	-1.661	1.247
	SAI10	-1.721	1.349
	SAI11	-2.324	1.040
Audit Quality (AQ)	AQ1	-2.309	1.162
	AQ2	-2.103	1.123
	AQ3	-2.211	1.342
	AQ4	-2.224	1.188
	AQ5	-2.300	1.364
	AQ6	-2.450	1.332
	AQ7	-2.343	1.244
	AQ8	-2.181	1.271
N = 186			

Source: Smart PLS3

As can be seen in Table 4.4, the findings showed that the cases' standardized (z) scores for the research variables ranged from -2.708 to 1.604, meaning that none of the items' values exceeded the threshold of ± 3.0 . So none of the 186 cases contain a single univariate outlier.

4.4.2.2 Multivariate Outliers

Since the variables in the current study were measured using a 5-point Likert scale, outliers were expected because some participants might have had an extreme or different opinion about a given question by selecting a response of 1 or 5. Thus, the Mahalanobis distance measure was employed in the current study to identify outliers.

The multivariate outliers have been successfully identified using Mahalanobis distance. To choose the best empirical values for the current study, the table of chi-square statistics was first applied. Two techniques exist to recognize outliers: (1) Based on the number of measurements in the questionnaire; (2) Based on the number of study variables.

The results indicated that the most significant Mahalanobis value was 27.386 (belonged to case#28) significant at 0.01 level. No any cases having Mahalanobis value less than 27.368 was found in this study, indicating the absence of any multivariate outliers, according to (Kline, 2010).

4.4.3 Assessment of the Data Normality

To ascertain whether the data for a variable are distributed according to a normal curve, the normality test was performed, either univariate or multivariate normality.

4.4.3.1 Univariate Normality

Due to the existence of kurtosis variables, data with non-normal distribution would appear to either skew to the left or to the right (Brown, 2012), leading to misleading results regarding the relationships between the variables under study and the significance of these relationships. Skewness and kurtosis values are used to evaluate the univariate normality. The values of skewness and kurtosis should both fall within the range of ± 2 and ± 7 , respectively (HO, 2006; Olsson et al., 2000; Oppenheim, 1966). The data seem to support this hypothesis with sufficient normality.

The values for skewness and kurtosis for each item are summarized in Table 4.5.

Table 4.5: Assessment of Normality of All Items

1st Order Construct	Item	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
Ethics (ET)	ET1	-0.666	0.178	0.013	0.355
	ET2	-0.733	0.178	-0.219	0.355
	ET3	-0.61	0.178	-0.279	0.355
	ET4	-0.683	0.178	-0.002	0.355
	ET5	-0.647	0.178	-0.077	0.355
	ET6	-0.724	0.178	-0.265	0.355
Independence (IN)	IN1	-0.657	0.178	0.056	0.355
	IN2	-0.566	0.178	-0.279	0.355
	IN3	-0.703	0.178	0.041	0.355
	IN4	-0.553	0.178	-0.223	0.355
	IN5	-0.719	0.178	0.035	0.355
	IN6	-0.481	0.178	-0.415	0.355
Competency (CM)	CM1	-0.73	0.178	-0.085	0.355
	CM2	-0.582	0.178	-0.111	0.355
	CM3	-0.599	0.178	0.083	0.355
	CM4	-0.614	0.178	-0.003	0.355
	CM5	-0.514	0.178	-0.041	0.355
	CM6	-0.583	0.178	-0.062	0.355
	CM7	-0.558	0.178	-0.177	0.355
Audit Fees (AF)	AF1	-0.733	0.178	-0.056	0.355
	AF2	-0.909	0.178	0.555	0.355
Audit Firm Size (AFS)	AFS1	-0.583	0.178	-0.147	0.355
	AFS2	-0.625	0.178	-0.067	0.355
Internal Auditing (IA)	IA1	-0.521	0.178	-0.37	0.355
	IA2	-0.77	0.178	0.098	0.355
Accounting Basis (AB)	AB1	-0.412	0.178	-0.537	0.355
	AB2	-0.841	0.178	0.486	0.355
	AB3	-0.925	0.178	0.364	0.355
Laws and Regulations (LR)	LR1	-0.915	0.178	0.507	0.355
	LR2	-0.681	0.178	0.235	0.355
	LR3	-0.747	0.178	-0.083	0.355
Supreme Audit Institutions (SAI)	SAI1	-0.383	0.178	-1.215	0.355
	SAI2	-0.48	0.178	-0.862	0.355
	SAI3	-0.553	0.178	-0.905	0.355
	SAI4	-0.393	0.178	-1.031	0.355
	SAI5	-0.415	0.178	-1.212	0.355
	SAI6	-0.35	0.178	-1.187	0.355
	SAI7	-0.399	0.178	-0.97	0.355
	SAI8	-0.401	0.178	-1.115	0.355
	SAI9	-0.4	0.178	-1.135	0.355
	SAI10	-0.34	0.178	-1.029	0.355
	SAI11	-0.877	0.178	0.001	0.355
Audit Quality (AQ)	AQ1	-0.829	0.178	-0.133	0.355
	AQ2	-0.748	0.178	-0.478	0.355
	AQ3	-0.685	0.178	-0.402	0.355
	AQ4	-0.699	0.178	-0.404	0.355
	AQ5	-0.544	0.178	-0.423	0.355
	AQ6	-0.728	0.178	-0.123	0.355
	AQ7	-0.772	0.178	-0.121	0.355
	AQ8	-0.603	0.178	-0.428	0.355

N = 186

Source: Smart PLS3

The result demonstrates that all 50 items' skew and kurtosis fell between ± 2 and ± 7 , respectively. Therefore, it can be said that a normal distribution accurately described the entire data set of the items. The skew ranged from -0.925 to -0.340, and the kurtosis ranged from -1.215 to 0.555, as shown in Table 4.5.

4.4.3.2 Multivariate Normality

Mardia's procedures, which are regarded as a common test for multivariate normality in regard to skewness or kurtosis as suggested by Hair et al., (2017) and Cain et al., (2018) are used to analyze multivariate skewness and kurtosis, according to Mardia (1970) and Mardia (1974). In these procedures, it can be concluded that the data is not multivariate normal if the p-value of either multivariate skewness or kurtosis is lower than the significance level of 0.05, and thus suitable to use SmartPLS 3 using a 1,000-sample re-sample bootstrapping procedure (Hair et al., 2019; Ramayah et al., 2018).

The following link provides suitable software to assess the multivariate skewness and kurtosis as suggested by Hair et al. (2017) and Ngah et al. (2020) (<https://webpower.psychstat.org/models/kurtosis/results.php?url=c6c8ce84a2efb7ec83569e241bed548a>).

The result of applying Mardia's multivariate normality on the collected data according to the table 4.6 and table 4.7 was $\beta = 19.197$ and $p < 0.00001$ for the multivariate skewness, and $\beta = 188.074$ and $p = 0.01677$ for the multivariate kurtosis, this is yielded the conclusion that the multivariate skewness was not normal due to the p-value being less than 0.05. Additionally, because the multivariate kurtosis had a p-value of less than 0.05. Accordingly, the collected data was not multivariate normal.

Table 4.6: Mardia's Multivariate Normality

1st Order Construct	Skewness	SE_skew	Z_skew	Kurtosis	SE_kurt	Z_kurt
AB	-0.943	0.178	-5.293	0.158	0.355	0.446
ACH	-1.001	0.178	-5.621	0.140	0.355	0.395
AF	-1.013	0.178	-5.684	0.563	0.355	1.589
AFA	-1.103	0.178	-6.191	0.528	0.355	1.490
AFS	-0.719	0.178	-4.035	-0.138	0.355	-0.391
AQ	-1.070	0.178	-6.006	0.371	0.355	1.048
CM	-0.960	0.178	-5.390	0.256	0.355	0.722
EMIC	-1.156	0.178	-6.489	0.399	0.355	1.125
ET	-0.820	0.178	-4.604	-0.123	0.355	-0.346
IA	-0.754	0.178	-4.232	-0.074	0.355	-0.209
IN	-0.846	0.178	-4.750	0.039	0.355	0.109
LR	-0.971	0.178	-5.449	0.330	0.355	0.932
SAI	-0.418	0.178	-2.349	-1.345	0.355	-3.794

Table 4.7: Mardia's Multivariate Skewness and Kurtosis

Skewness and Kurtosis	b	z	p-value
Skewness	19.19667	595.096915	0.00001
Kurtosis	188.07378	-2.391609	0.01677

Source: <https://webpower.psychstat.org>

As a result, Smart PLS, a second generation non-parametric analysis software that can be used in this study to examine complicated models with latent variables and does not require normally distributed data (Hair et al., 2019). According the suggestions of (Hair et al., 2019), the structural model's path coefficients, standard deviation, t-values, and p-values were reported using a 1,000-sample re-sample bootstrapping procedure (Hair et al., 2019; Ramayah et al., 2018).

4.5 Common Method Bias (Harman's single-factor test)

Common method bias, which is described as variance due to the measurement technique rather than the constructs the measure represents, may pose a problem in behavioral studies (Podsakoff et al., 2012). The phenomenon describes a bias in the dataset brought on by a factor independent of the measurements. It's possible that something

unrelated to the question had an effect on the answer. This study's data collection method, an online questionnaire survey using Google Form, may have introduced systematic response bias, which could have impacted or inflated responses.

As this study used a one-wave self-reported design, in which all the data for all the variables were collected at the same time, Harman's single-factor test (Hoyle, 1995) was used to determine whether common method variance was a significant issue. The results of Harman's single factor test suggested that common method variance was not a major problem because one factor model explained 46.48% of the total variance, which was below 50% (Hoyle, 1995). Harman's single-factor test's results are shown in Appendix 5.

4.6 Measurement Model (Confirmatory Factor Analysis) – Stage 1 of SEM

To determine the relationships between manifest or observed and latent or unobserved variables, the measurement model or confirmatory factor analysis (CFA) is used. Therefore, it could be said that the measurement model specifies how latent or unobserved variables are evaluated in relation to the manifest variables (HO, 2006). The process of ensuring accuracy includes the operationalization of constructs, which is a crucial step (Hair et al., 2006). In an effort to ensure theoretical accuracy, researchers can choose from a number of recognized scales. Although there are many different scales available, researchers are frequently constrained by the problem of a lack of well-established scales, which forces them to either create new measurement scales from scratch or significantly modify existing scales to fit a new context. Given all of these factors, the selection of items to measure the constructs serves as the foundation for the SEM analysis (Hair et al., 2006).

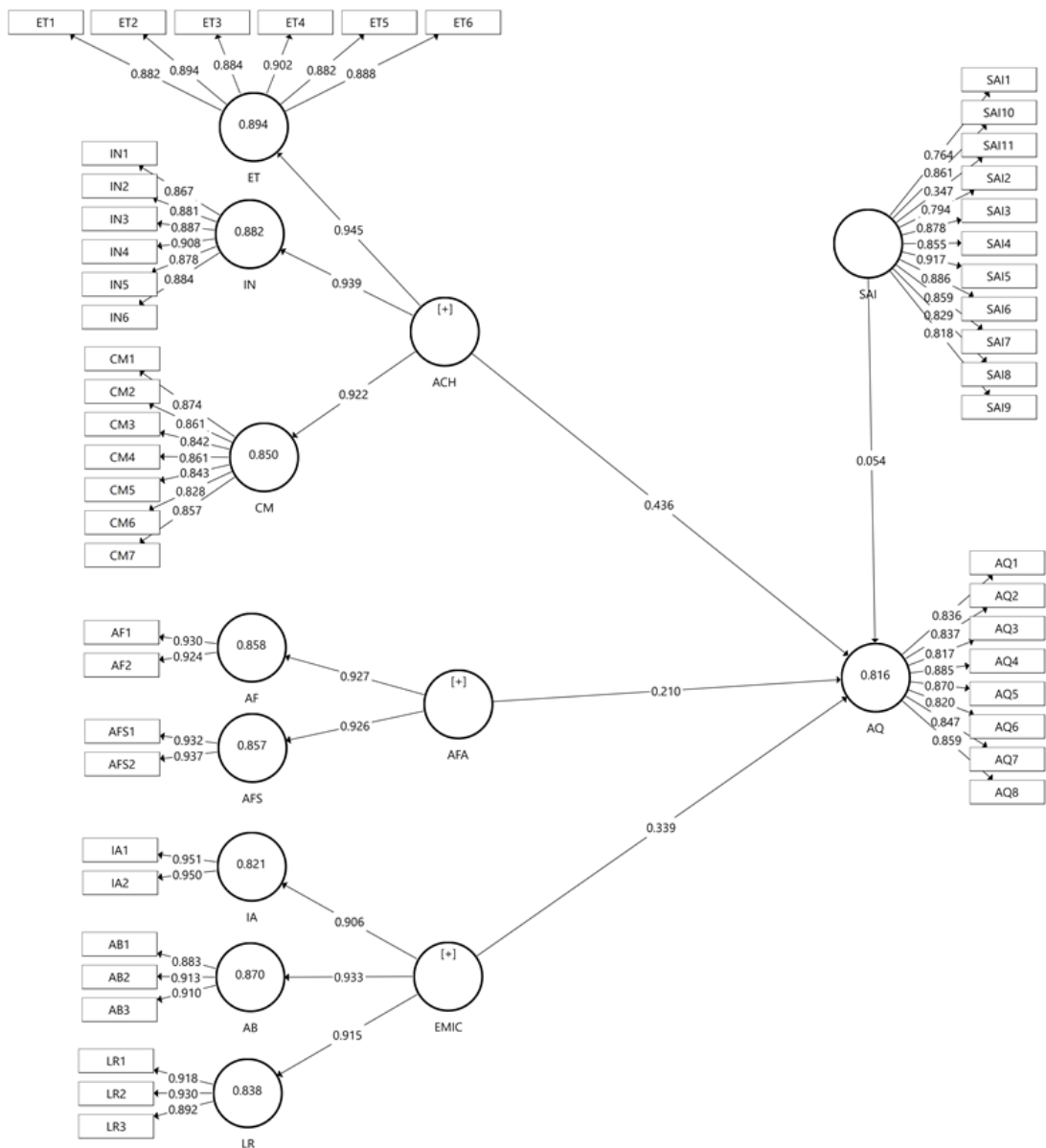
Each of the constructs in the CFA models had its reliability and validity evaluated. Cronbach's alpha, construct reliability (CR), and average variance extracted (AVE) are used to measure reliability, while constructs, including convergent and discriminant functions, are used to measure validity.

This research included two overall measurement models, as well as the two research structural models depicted in Section 3.4. The following subsections go over the evolution of each measurement model. The results of testing the unidimensionality of each construct using SmartPLS 3 are presented.

4.6.1 Measurement Model 1

Confirmatory factor analysis was used to assess the overall measurement model

1. The overall measurement model 1 including all latent constructs with their indicators was portrayed by Smart PLS3 as the following figure 4.1 of the Initial Measurement Model 1 before omitting the item SAI11.



Source: Smart PLS3

Figure 4.1: The Initial Measurement Model 1

4.6.1.1 Convergent Validity and Reliability

Table 4.8 represents the result of convergent validity and Cronbach alpha for the measurement model 1 after omitting item SAI11 as was portrayed by Smart PLS3 in appendix 7.

Table 4.8: Convergent Validity and Cronbach Alpha for Measurement Model 1

Construct	Item / 1 st Order Construct	Factor Loading	Average Variance Extracted (AVE) ^a	Composite Reliability (CR) ^b	Internal Reliability Cronbach Alpha
1st Order Constructs					
Ethics (ET)	ET1	0.882	0.790	0.957	0.947
	ET2	0.894			
	ET3	0.884			
	ET4	0.902			
	ET5	0.882			
	ET6	0.888			
Independence (IN)	IN1	0.867	0.781	0.955	0.944
	IN2	0.881			
	IN3	0.887			
	IN4	0.908			
	IN5	0.878			
	IN6	0.884			
Competency (CM)	CM1	0.874	0.727	0.949	0.937
	CM2	0.861			
	CM3	0.842			
	CM4	0.861			
	CM5	0.843			
	CM6	0.828			
	CM7	0.857			
Audit Fees (AF)	AF1	0.930	0.860	0.925	0.837
	AF2	0.924			
Audit Firm Size (AFS)	AFS1	0.932	0.873	0.932	0.855
	AFS2	0.937			
Internal Auditing (IA)	IA1	0.951	0.903	0.949	0.893
	IA2	0.950			
Accounting Basis (AB)	AB1	0.883	0.814	0.929	0.885
	AB2	0.913			
	AB3	0.910			
Laws and Regulation (LR)	LR1	0.918	0.834	0.938	0.900
	LR2	0.930			
	LR3	0.892			
Supreme Audit Institutions (SAI)	SAI1	0.780	0.739	0.966	0.969
	SAI2	0.804			
	SAI3	0.907			
	SAI4	0.867			
	SAI5	0.926			
	SAI6	0.902			
	SAI7	0.880			
	SAI8	0.825			
	SAI9	0.833			
	SAI10	0.864			
Audit Quality (AQ)	SAI11	0.347 ^c	0.717	0.953	0.944
	AQ1	0.836			
	AQ2	0.837			
	AQ3	0.817			
	AQ4	0.885			
	AQ5	0.870			
	AQ6	0.820			
	AQ7	0.847			
	AQ8	0.859			

Table 4.8, continued

Construct	Item / 1 st Order Construct	Factor Loading	Average Variance Extracted (AVE) ^a	Composite Reliability (CR) ^b	Internal Reliability Cronbach Alpha
2nd Order Constructs					
Auditor Characteristics (ACH)	Ethics (ET)	0.945	0.875	0.954	0.928
	Independence (IN)	0.939			
	Competency (CM)	0.921			
Audit Firm Attributes (AFA)	Audit Fees (AF)	0.926	0.858	0.923	0.834
	Audit Firm Size (AFS)	0.926			
Effectiveness of the Municipal Internal Control (EMIC)	Internal Auditing (IA)	0.906	0.843	0.942	0.907
	Accounting Basis	0.933			
	Laws and Regulation (LR)	0.915			

^a: Average Variance Extracted = (summation of the square of the factor loadings) / {(summation of the square of the factor loadings) + (summation of the error variances)}.

^b: Composite reliability = (square of the summation of the factor loadings) / {(square of the summation of the factor loadings) + (square of the summation of the error variances)}.

^c: denotes an item that was discarded because it didn't have enough factor loading to meet the cutoff of 0.6.

Source: Smart PLS3

The initial standardized factor loading of the SAI11 was 0.347, below the cut-off 0.6, as shown in Table 4.8 analysis of the standardized factor loadings of the model's items. Therefore, as advised by Hair et al. (2006) this item was taken off the model. Compared to the overall number of items in the constructs, the number of deleted items was not significant. Furthermore, the removal had little effect on the conceptualization of the constructs' content. The remaining 49 items and 8 first order constructs all had standardized factor loadings above 0.6, ranging from 0.780 (for SAI1) to 0.951 (for IA1).

Each of the constructs was evaluated for reliability after the unidimensionality of the constructs was achieved. Average variance extracted (AVE), construct reliability (CR), and Cronbach's alpha are used to evaluate reliability. According to Hair et al., (2006), the cut-off value for first and second order constructs is 0.5. Table 4-8 demonstrate that the AVE values, which reflect the overall amount of variance in

the indicators accounted for by the latent construct, were above this cutoff and ranged between 0.717 (for Audit Quality (AQ)) and 0.903 (for Internal Auditing (IA)).

The composite reliability values, which show how well the construct indicators predict the latent construct, were higher than Bagozzi and Yi (1988) recommended value of 0.6 for all first and second order constructs, ranging from 0.923 for the Audit Firm Attributes (AFA) to 0.966 for the Supreme Audit Institutions (SAI).

According to Nunnally and Bernstein, (1994), the Cronbach's Alpha values, which indicate how error-free a measure is, were higher than the cut-off point of 0.7 for all first and second order constructs. These values ranged from 0.834 for the Audit Firm Attributes (AFA) to 0.969 for the Supreme Audit Institutions (SAI).

4.6.1.2 Discriminant Validity

A construct's discriminant validity describes how it differs from other constructs based on the correlation and square root of AVE values that were determined. It indicates sufficient discriminant validity when the square root of AVE for both constructs is greater than the correlation between the two constructs (Fornell and Larcker 1981; Hair et al., 2006)

As shown in Appendix 6, who represents the results of cross loadings of the indicators to assess the discriminant validity of all Items and 1st order constructs. The cross loadings of the indicators specified that an indicator's outer loading on the associated construct was greater than all of its loadings on other constructs on each item row. These results demonstrated no any discriminant validity problem (Hair et al., 2011).

4.6.1.2.1 Fornell-Larcker Criterion

The results of the Fornell-Larcker criterion to assess the discriminant validity of the measurement model are shown in Table 4.9.

Table 4.9: Results of Fornell-Larcker Criterion in Measurement Model 1

	ACH	AFA	EMIC	SAI	AQ
Auditor Characteristics (ACH)	0.935				
Audit Firm Attributes (AFA)	0.704	0.926			
Effectiveness of the Municipal Internal Control (EMIC)	0.755	0.762	0.918		
Supreme Audit Institutions (SAI)	0.056	-0.012	0.062	0.860	
Audit Quality (AQ)	0.842	0.774	0.831	0.096	0.847

Note: The diagonals represent the square root of the average variance extracted, while the other entries represent correlations.

Source: SmartPLS 3

The inter-correlations between the five hypothesized latent constructs in measurement model 1 ranged from -0.012 to 0.842, as shown in Table 4.9, falling short of the cut-off of 0.85 (Kline, 2005). The analysis also revealed, as shown in Table 4.9, that the value of the off-diagonal elements was lower than the value of the AVE square root. Thus, it demonstrates that each latent construct measurement was completely discriminatory with respect to one another based on the Fornell-Larcker approach (Fornell and Larcker 1981; Hair et al., 2014).

4.6.1.2.2 HTMT Discriminant Criteria

The findings of the HTMT discriminant criteria used to evaluate the measurement model 1's discriminant validity are shown in Table 4.10.

Table 4.10: Results of HTMT Discriminant Criteria in Measurement Model 1

	ACH	AFA	EMIC	SAI	AQ
Auditor Characteristics (ACH)					
Audit Firm Attributes (AFA)	0.800				
Effectiveness of the Municipal Internal Control (EMIC)	0.823	0.876			
Supreme Audit Institutions (SAI)	0.073	0.068	0.042		
Audit Quality (AQ)	0.899	0.872	0.898	0.067	

Source: Smart PLS3

All of the HTMT values between the five hypothesized latent constructs in measurement model 1 were below 0.90, ranging from 0.042 to 0.899, as shown in Table 4.10. Thus, it demonstrates that each latent construct measurement was completely discriminatory with respect to one another (Henseler et al., 2015).

After looking at the measurement model 1's convergent validity and discriminant validity, it can be said that the modified measurement model 1 is valid and reliable for evaluating the constructs, their related items, and sub-constructs. The modified measurement model 1 is shown in Appendix 7 with uniform factor loadings for all latent constructs and related items.

4.6.2 Measurement Model 2

The overall measurement model 2 was evaluated using confirmatory factor analysis.

4.6.2.1 Reliability and Convergent Validity

All of the constructs in measurement model 2 have already been examined in measurement model 1 for standardized factor loading, Cronbach alpha, and convergent validity as shown in Table 4.8.

4.6.2.2 Discriminant Validity

Fornell-Larcker Criterion and HTMT Discriminant Criteria are used to evaluate the validity of the measurement model 2.

4.6.2.2.1 Fornell-Larcker Criterion

The findings of the Fornell-Larcker criterion used to evaluate the measurement model 2's discriminant validity are shown in Table 4.11.

Table 4.11: Fornell-Larcker Criterion in Measurement Model 2

	AB	AF	AFS	AQ	CM	ET	IA	IN	LR
AB	0.902								
AF	0.698	0.927							
AFS	0.691	0.715	0.935						
AQ	0.798	0.721	0.711	0.847					
CM	0.715	0.647	0.633	0.797	0.852				
ET	0.669	0.618	0.594	0.780	0.803	0.889			
IA	0.770	0.597	0.648	0.735	0.623	0.577	0.950		
IN	0.681	0.597	0.572	0.787	0.786	0.849	0.629	0.884	
LR	0.793	0.635	0.610	0.757	0.675	0.620	0.728	0.648	0.913

Note: Diagonals represent the square root of the average variance extracted while the other entries represent the correlations

Source: Smart PLS3

The inter-correlations between the nine hypothesized latent constructs in measurement model 2 ranged from 0.572 to 0.849, as shown in Table 4.11, falling below the cut-off of 0.85 (Kline, 2005). The analysis also revealed, as shown in Table 4.11, that the value of the off-diagonal elements was lower than the value of the AVE square root. This demonstrates that each latent construct measurement was completely discriminatory to each order based on the Fornell-Larcker approach (Fornell and Larcker, 1981; Hair et al., 2014).

4.6.2.2.2 HTMT Discriminant Criteria

The findings of the HTMT discriminant criteria used to evaluate the measurement model 2's discriminant validity are shown in Table 4.12.

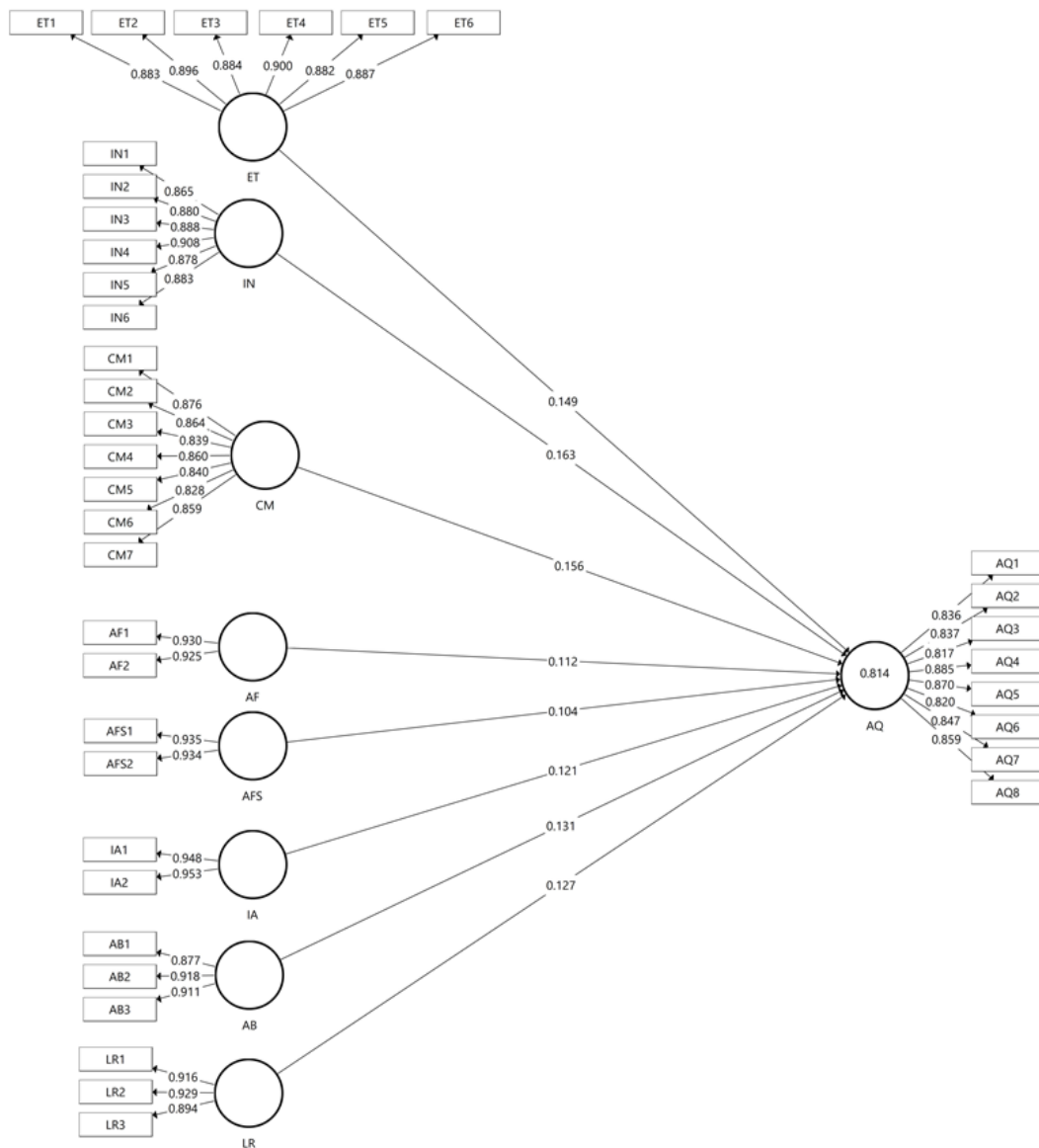
Table 4.12: HTMT Discriminant Criteria in Measurement Model 2

	AB	AF	AFS	AQ	CM	ET	IA	IN	LR
AB									
AF	0.811								
AFS	0.797	0.845							
AQ	0.871	0.812	0.792						
CM	0.783	0.729	0.706	0.845					
ET	0.730	0.694	0.659	0.825	0.851				
IA	0.867	0.690	0.741	0.800	0.681	0.627			
IN	0.745	0.672	0.637	0.833	0.835	0.898	0.685		
LR	0.888	0.732	0.695	0.821	0.733	0.671	0.812	0.702	

Source: Smart PLS3

All of the HTMT values between the nine hypothesized latent constructs in measurement model 2 were below 0.90, ranging from 0.627 to 0.898, as shown in Table 4.12. Thus, it demonstrates that each latent construct measurement was completely discriminatory with respect to one another (Henseler et al., 2015).

After analysing the convergent validity and discriminant validity of the measurement model 2, it can be said that the modified measurement 2 is a valid and reliable method for evaluating the constructs, their related items, and sub-constructs. The modified measurement model 2 is shown in Figure 4.2 with uniform factor loadings for all latent constructs and associated items.



Source: Smart PLS3

Figure 4.2: Measurement and Structural Model 2

4.7 Descriptive Analysis

To account for all of the variables in this analysis, the descriptive function was computed using the covariance matrix method. The variables' composite scores were calculated by parcelling the original measurement item scores. Parcels are summation or averages of several individual indicators or items based on their factor loadings on

the construct (Coffman & Maccallum 2005; Hair et al., 2006). Table 4.13 displays the mean and standard deviation of the constructs, assessed on a 5-point Likert scale:

Table 4.13: Results of Descriptive Statistic for Variables

Constructs	Mean	Standard Deviation	Minimum	Maximum
Auditor Characteristics (ACH)	3.560	0.872	1.365	4.746
• Ethics (ET)	3.597	0.959	1.167	5
• Independence (IN)	3.603	0.945	1	5
• Competency (CM)	3.480	0.891	1.143	5
Audit Firm Attributes (AFA)	3.710	0.884	1.25	4.75
• Audit Fees (AF)	3.761	0.960	1	5
• Audit Firm Size (AFS)	3.659	0.949	1	5
Effectiveness of the Municipal Internal Control (EMIC)	3.635	0.856	1.222	4.889
• Internal Auditing (IA)	3.642	0.949	1	5
• Accounting Basis (AB)	3.633	0.916	1	5
• Laws and Regulations (LR)	3.629	0.932	1	5
Supreme Audit Institutions (SAI)	3.299	1.184	1	4.9
Audit Quality (AQ)	3.576	0.965	1.125	4.75

N = 186

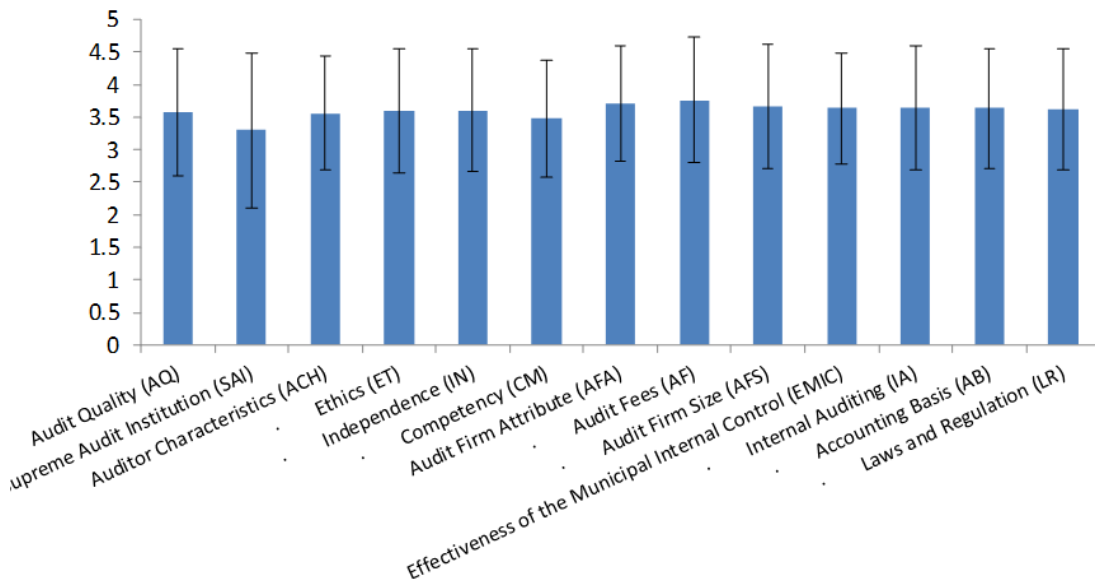
Source: Smart PLS3

As a measure of central tendency, the mean was used, and it showed that all constructs' mean values were higher than the midpoint of 3 on a 5-point Likert scale. The phenomenon showed that the consensus respondents had a more favorable perception toward these variables were above the average.

Audit Fees (AF), which had the highest mean score of (3.761), was followed by Audit Firm Attributes (AFA) (3.71), and Audit Firm Size (AFS) (3.659). Supreme Audit Institutions (SAI) had the lowest mean rating, with a mean score of (3.299).

The standard deviation was used as a dispersion index to show how much deviations within each variable are from the mean of the variable. The Supreme Audit Institution's (SAI) individual value deviated from the mean the most of any of the variables under study (SD = 1.184). The standard deviation indicated that respondents' perceptions of the Supreme Audit Institutions (SAI) varied somewhat. In other words,

the survey respondents' responses to this variable varied the most from one another. On the other hand, Effectiveness of Municipal Internal Control (EMIC), with a standard deviation of 0.856, had the lowest deviation from the mean. The mean of all constructs and their standard deviations are well represented in Figure 4.3 along with their respective ranges.



Source: Excel

Figure 4.3: Means and Standard Variations of All Constructs

4.7.1 Descriptive Analysis of Auditor Characteristics (ACH) Items

Table 4.14 shows the mean, standard deviation, minimum and maximum of all items on ACH. The obtained mean values exceeded the three-point mark (above average), ranging from 3.35 (CM5) to 3.71 (CM1). Furthermore, ET6 was found to have the highest deviation from its mean value (SD = 1.134), indicating that the responses obtained from respondents for ET6 varied the most from one another, whereas CM3 recorded the lowest deviation from its mean value (SD = 0.988).

Table 4.14: Results of Descriptive Statistic for the Items of ACH Constructs

Constructs	Code	Mean	Standard Deviation	Minimum	Maximum
Auditor Characteristics	ACH	3.560	0.872	1.365	4.746
Ethics	ET	3.597	0.959	1.167	5
The overall reputation of the audit firm is positive.	ET1	3.58	0.99	1	5
The audit team members as a group always exercise due care throughout the engagement.	ET2	3.67	1.117	1	5
The audit firm has strict guidelines on the procedures that must be completed before signing the audit report.	ET3	3.57	1.119	1	5
The audit firm actively encourages staff members to take courses and attend seminars in fields where the firm has major clients.	ET4	3.63	1.064	1	5
The senior auditors supervise junior audit staff.	ET5	3.56	1.055	1	5
The engagement auditors maintain high ethical standards.	ET6	3.56	1.134	1	5
Independence (IN)	IN	3.603	0.945	1	5
The audit firm has a skeptic's mindset, not a client advocate's mindset.	IN1	3.58	1.038	1	5
The audit fee is less than 10% of the total revenue of the audit firm.	IN2	3.62	1.1	1	5
The audit firm and individual audit team members never participate in any conduct that might undermine its/their independence, either in fact or in appearance, in any of your contact with them.	IN3	3.63	1.059	1	5
The audit firm performing the audit does not provide consultancy services to the municipality.	IN4	3.6	1.067	1	5
The audit firm has a high audit staff turnover rate.	IN5	3.64	1.047	1	5
Members of the audit team are cycled off the audit on a regular basis.	IN6	3.55	1.101	1	5
Competency	CM	3.480	0.891	1.143	5
The audit team assigned to the audit engagement (partner, manager, and supervisor) is well educated on local government units.	CM1	3.71	1.086	1	5
Other municipalities are audit clients of the auditor that is conducting the audit.	CM2	3.59	1.063	1	5
The auditors assigned to the engagement have extensive understanding of accounting and auditing standards, as well as professional certifications such as the CPA.	CM3	3.49	0.988	1	5

Table 4.14, continued

Constructs	Code	Mean	Standard Deviation	Minimum	Maximum
The audit team members as a whole have a good understanding of the municipality's operations.	CM4	3.38	1.039	1	5
In completing the audit, the audit company makes considerable use of computers and statistical methodologies.	CM5	3.35	1.026	1	5
Each audit area has a strict time budget that the audit firm wants its auditors to stick to.	CM6	3.41	1.073	1	5
The total number of hours spent on the audit by the audit team (from the beginning of field work to the audit report date).	CM7	3.43	1.039	1	5

N = 186

Source: Smart PLS3

According to the results of Table 4.14, the majority of respondents believe that auditor characteristics (ethics, independence, and competence) influence audit quality and that these characteristics can determine audit quality in the municipalities.

4.7.2 Descriptive Analysis for of Audit Firm Attributes (AFA) Items

Table 4.15 shows the mean, standard deviation, minimum and maximum of AFA.

Table 4.15: Descriptive Statistic for the Items of AFA Constructs

Constructs	Code	Mean	Standard Deviation	Minimum	Maximum
Audit Firm Attributes	AFA	3.710	0.884	1.25	4.75
Audit Fees	AF	3.761	0.960	1	5
The amount of audit fees that is paid	AF1	3.81	1.042	1	5
The amount of audit fees is related to the efforts of the auditors in the audit engagement.	AF2	3.72	1.029	1	5
Audit Firm Size	AFS	3.659	0.949	1	5
The suitable number of professionals in the audit team to achieve audit quality	AFS1	3.64	1.005	1	5
The legal form of the audit firm and its size affect audit quality	AFS2	3.68	1.026	1	5

N = 186

Source: Smart PLS3

Table 4.15 presents the mean and standard deviation of all items on AFA. The obtained mean values exceeded the three-point mark (above average), ranging from 3.64 (AFS1) to 3.81 (AF1). Furthermore, AF1 was found to have the highest deviation (SD = 1.042) from its mean value, indicating that the responses obtained from respondents for AF1 varied the most from one another, whereas AFS1 recorded the lowest deviation (SD=1.005) from its mean value.

According to the results of Table 4.15, the majority of respondents believe that audit firm attributes (audit fees, audit firm size) influence audit quality and that these attributes can determine audit quality in the municipalities.

4.7.3 Descriptive Analysis of Effectiveness of Municipal Internal Control

(EMIC) Items

Table 4.16 shows the mean, standard deviation, minimum and maximum of EMIC. It presents the mean and standard deviation of all items on EMIC. The obtained mean values exceeded the three-point mark (above average), ranging from 3.60 (IA1) to 3.69 (IA2). Furthermore, LR3 was found to have the highest deviation (SD = 1.09) from its mean value, indicating that the responses obtained from respondents for LR3 varied the most from one another, whereas AB recorded the lowest deviation (SD=1.005) from its mean value.

According to the results of Table 4.16, the majority of respondents believe that effectiveness of municipal internal control (internal auditing, accounting basis, laws and regulations) influence audit quality and that these attributes can determine audit quality in the municipalities.

Table 4.16: Results of Descriptive Statistic for the Items of EMIC Constructs

Constructs	Code	Mean	Standard Deviation	Minimum	Maximum
Effectiveness of the Municipal Internal Control	EMIC	3.635	0.856	1.222	4.889
Internal Auditing	IA	3.642	0.949	1	5
The nature and type of the internal audit function in the municipality.	IA1	3.6	0.977	1	5
External auditors work closely with internal auditors.	IA2	3.69	1.019	1	5
Accounting Basis	AB	3.633	0.916	1	5
The accounting basis used in the municipality's accounting system.	AB1	3.62	1.059	1	5
The transition from cash basis to accrual basis improves the relevance and reliability of the financial statements.	AB2	3.62	0.969	1	5
Accrual basis requires the auditor to increase his efforts in the auditing process.	AB3	3.65	1.019	1	5
Laws and Regulations	LR	3.629	0.932	1	5
The existence of appropriate laws and regulations increases the audit quality.	LR1	3.61	1.003	1	5
The commitment of the client to the laws and regulations enhances audit quality.	LR2	3.62	0.97	1	5
The commitment of the auditors with the investigation of client's adherence with applicable laws and regulation increases audit quality.	LR3	3.66	1.09	1	5

N = 186

Source: Smart PLS3

4.7.4 Descriptive Analysis of Supreme Audit Institutions (SAI) Items

Table 4.17 shows the mean, standard deviation, minimum and maximum of SAI. It presents the mean and standard deviation of all items on SAI. The obtained mean values exceeded the three-point mark (above average), ranging from 3.16 (SAI7) to 3.76 (SAI11). Furthermore, SAI5 was found to have the highest deviation (SD = 1.421) from its mean value, indicating that the responses obtained from respondents for SAI5 varied the most from one another, whereas SAI11 recorded the lowest deviation (SD=1.189) from its mean value.

According to the results of Table 4.17, the majority of respondents believe that Supreme Audit Institutions audit influence the relationship between audit quality and its determinants of auditor characteristics, audit firm attributes, and effectiveness of municipal internal control.

Table 4.17: Results of Descriptive Statistic for the Items of SAI Constructs

Constructs	Code	Mean	Standard Deviation	Minimum	Maximum
Supreme Audit Institutions	SAI	3.299	1.184	1	4.9
The SAIs and choosing of a good reputation auditor with a high professional ethics	SAI1	3.34	1.398	1	5
The SAIs and choosing of an independent auditor either in his mind and appearance	SAI2	3.26	1.277	1	5
The SAIs and choosing of a high professional competence auditor	SAI3	3.27	1.262	1	5
The SAIs and choosing of a highly qualified and professional audit team.	SAI4	3.38	1.351	1	5
The SAIs and choosing of an audit firm whose audit fees are reasonable and fair.	SAI5	3.38	1.421	1	5
The SAIs and choosing of a large-size audit firm such as the Big 4	SAI6	3.33	1.401	1	5
The SAIs and establishing an internal audit unit in the municipality, and works to increase its efficiency and effectiveness	SAI7	3.16	1.253	1	5
The SAIs audit affects the municipal administration in order to adopt the accrual basis of accounting.	SAI8	3.36	1.353	1	5
The SAIs and complying with the applicable laws and regulations.	SAI9	3.28	1.375	1	5
The audit team always relies on the reports and findings of the SAIs audit in the audit engagement process.	SAI10	3.24	1.303	1	5
The SAIs audit supports and increases the quality of the external audit in general.	SAI11	3.76	1.189	1	5

N = 186

Source: Smart PLS3

4.7.5 Descriptive Analysis of Audit Quality (AQ) Items

Table 4.18 shows the mean, standard deviation, minimum and maximum of AQ. Table 4.18 presents the mean and standard deviation of all items on AQ. The obtained mean values exceeded the three-point mark (above average), ranging from 3.49 (AQ3) to 3.66 (AQ1). Furthermore, AQ2 was found to have the highest deviation (SD = 1.24) from its mean value, indicating that the responses obtained from respondents for AQ2 varied the most from one another, whereas AQ6 recorded the lowest deviation (SD=1.085) from its mean value.

According to the results of Table 4.18, the majority of respondents believe that audit quality will be achieved if the auditors detect and report the deficiencies, advise

the municipal management with new accounting standards, and satisfy the audit committee through effective communication.

Table 4.18: Results of Descriptive Statistic for the Items of AQ Constructs

Constructs	Code	Mean	Standard Deviation	Minimum	Maximum
Audit Quality	AQ	3.576	0.965	1.125	4.75
Audit quality detects and reports the material errors and fraud in the client's financial statements.	AQ1	3.66	1.152	1	5
Audit quality detects and reports the material weakness of the internal control system.	AQ2	3.61	1.24	1	5
The audit firm agrees to complete the audit by a deadline stipulated by the client.	AQ3	3.49	1.126	1	5
The audit team and the audit committee of the council communicate often.	AQ4	3.61	1.173	1	5
There is a communication between the audit team and the council's management.	AQ5	3.51	1.092	1	5
Throughout the year, the audit firm keeps the council management informed about accounting and financial reporting developments that have an impact on the council.	AQ6	3.59	1.058	1	5
During the audit, the audit engagement partner and manager conduct numerous visits to the council.	AQ7	3.61	1.115	1	5
The auditor adds benefits to the municipality by generating useful improvement ideas.	AQ8	3.53	1.159	1	5

N = 186

Source: Smart PLS3

4.8 Reports of SAIs in Palestine

Financial and Administrative Control Bureau (FACB) and MOLG - GDGC issue annual, interim, and specialized reports. The reports that SAIs produce, the effects they have on society, and their capacity to fight corruption, protect public finances, and less an abuse of public office all have an impact on how strong and effective they are. The degree to which the recommendations in these reports are carried out as soon as possible will determine how well SAIs work. It is also evaluated based on the Legislature's capacity to act on recommendations and comments made in reports. The study summarized the SAIs reports to demonstrate the influence of these

reports on the study variables, as well as to support the study's data analysis in the effect of the SAIs as a moderator variable between audit quality and its factors.

4.8.1 FACB Reports

Annual reports of FACB issued semi-regularly in the period from 2006 to 2021, and the interim and the specialized reports which were issued sometimes in this period, these reports are available at FACB's (old name SAACB) web site <https://www.saacb.ps/BruRptsTestSAACB/IndexRPTArabic>). The FACB wants to make audit findings available to decision-makers and stakeholders because doing so will encourage an audit culture at audited institutions and result in more recommendations being followed through on. This will facilitate the use of preventative measures (FACB, 2014). The FACB has posted its fifteenth report online as evidence of compliance with the requirements of FACB Law no. 15 for 2004 since the publication of the FACB's reports which began in 2006 (FACB, 2020). Prior to 2011, these reports were not distributed on a regular basis or in a consistent format. Following that, the reports became more regular in format and subject matter, and they were issued on an annual basis except report of 2013. All FACB reports either annual report or interim reports on LGUs were examined and summarized in the Table 4.19 and Table 4.20. These tables show how the FACB influenced audit quality in the municipalities and the selected determinants of audit quality, auditor characteristics, audit firm attributes, and effectiveness of internal control, through its notes and recommendations, as well as the procedures implemented to address violations of laws and regulations and strengthen internal controls in LGUs.

Table 4.19: General Data of FACB Audit Reports

The years/ Items	2011	2012	2014	2015	2016	2017	2018	2019	2020	Average
Total FACB reports	156	123	104	118	119	123	139	125	115	125
Audit report related to LGUs	55	50	25	37	43	70	71	63	60	53
LGUs reports %	35%	41%	24%	31%	36%	57%	51%	50%	52%	42%
The responds rate to audit reports	70%	66%	72%	71%	79%	63%	79%	81%	72%	73%
Municipality Audited	7	35	12	16	17	20	25	21	17	19
Percentage of municipalities to audit reports for LGU	13%	70%	48%	43%	40%	29%	35%	33%	28%	38%
Complaints received	306	267	352	360	485	412	360	319	174	337
Complaints of LGUs	*	28	64	111	106	143	152	95	76	97
Percentage of Complaints of LGUs	*	10%	18%	31%	22%	35%	42%	30%	44%	29%
Complaints of Municipalities	*	*	*	*	51	20	19	16	16	24
Percentage of municipalities complaints to LGUs	*	*	*	*	48%	14%	13%	17%	21%	22%
Orders of Anti-Corruption Commission-ACC transferred to FACB for auditing	*	*	*	*	120	65	125	52	36	80
Cases are transferred to ACC	33	29	37	27	24	*	*	*	*	30
LGU cases transferred to ACC	13	17	*	11	14	23	11		26	19
Financial impact LGU in thousand USD	12,379	3,922	689	895	*	*	19,432	*	*	7,464
Total Financial impact in thousand USD	22,624	7,828	4,441	20,316	*	*	*	*	*	13,803
Attendance of tenders	414	550	676	*	368	*	*	*	*	402

Source: Author

According to Table 4.19, the average percentage of audit reports from local government units was 42%, while the average percentage of complaints was 29% of total reports. This demonstrates the importance of local government units in FACB auditing and the importance of this type of audit through the high percentage of responses to FACB reports, which average was 73%. Furthermore, the cooperation between ACC and FACB in dealing with corruption cases increased the importance of FACB auditing, because municipal councils recognized that compliance with laws,

regulations, and regulator recommendations is critical in order to avoid punishments and fines. Furthermore, the employees of FACB attend the bidding meetings in order to control the tendering policies and procedures for public sector organizations, particularly municipalities including the external audit bid for hiring the external auditors. The average number of bidding meetings was 402. The financial effect of the cases under audit is sometimes shown in FACB audit reports; for example, the financial effect in year 2018 was 19,432,978 USD, but the average was 7,463,627 USD.

Most of FACB auditing reports related to compliance auditing, and few of them related to financial statements auditing. Table 4.20 summarizes general auditing notes and recommendations which they appeared in the annual reports of FACB since 2006 and related with the audit quality and its selected determinants.

Table 4.20: General Notes and Recommendations of FACB on AQ

#	The Notes and the Recommendations	The Audit Quality Attributes
1	Employees in certain local governments abused their authority and misappropriated funds.	Weakness of internal auditing
2	Occasionally, spending can be done without all the required paperwork and necessary documents.	Weakness of internal auditing
3	Violation of the provisions of the Building and Organization Code 1996 for Local Authorities in terms of licensing fees, violation fees, and granting discounts.	Failure to comply with the laws and regulations
4	Some local governments did not put the code of conduct for local government employees into effect.	Failure to comply with the laws and regulations
5	When hiring new employees, some municipal governments do not always adhere to conceptual knowledge and legal procedures.	Failure to comply with the laws and regulations
6	Violation of code provisions for supplies and project implementation at local governments in terms of supplying, executing, or servicing.	Failure to comply with the laws and regulations
7	Some local government entities have a lack of internal control and a robust internal control system that protects assets.	Weakness of internal control
8	Violation of laws, regulations, and ordinances governing budgeting and revenue/expense measurement.	Failure to comply with the laws and regulations

Table 4.20, continued

#	The Notes and the Recommendations	The Audit Quality Attributes
9	Some municipalities do not have external auditors.	Laws and Regulations, Public Interest Theory for auditing.
10	Local government accounts are untrustworthy and raise concerns about accuracy, authenticity, and occurrence due to a lack of corroborating documents and a governing documentation cycle.	Accounting Basis
11	Some local government entities failed to collect fees mandated by applicable laws and regulations, particularly fees for billboards, crafts, and industries.	Failure to comply with the laws and regulations
12	Accounting software might not meet all the requirements of local governments because it does not assign user rights or incorporate actions, making financial statements susceptible to loss, damage, and deletion as well as casting doubt on their objectivity and fairness.	Weakness in accounting Information System and Accounting basis
13	The Municipality did not follow laws and decisions regarding its participation in licensed electricity distribution companies.	Failure to comply with the laws and regulations
14	The Municipality failed to comply with the Council of Ministers' 2017 electricity tariff.	Failure to comply with the laws and regulation
15	Internal supervision and audit system weakness.	Audit quality
16	A flaw in the financial system's application.	Accounting basis
17	Insufficient promises made by the financial system to local governments in terms of spending, budget planning, and document reinforcement	Weakness in Internal Auditing
18	Failure to prepare financial statements in accordance with regulations and legislation.	Accounting Basis and violation of laws and regulations
19	Weakness in audit regulations that govern spending, resulting in a lack of a tight internal control system.	Internal control and internal auditing
20	Some local governments may fail to perform proper bank reconciliations in order to keep track of their bank accounts.	Weakness in Internal Auditing
21	Many local governments fail to manage public finances due to a lack of control systems and a division of powers, resulting in cases of misappropriation, credit misuse, and public funds theft.	Weakness in the internal control system
22	The municipality violated international accounting rules by failing to disclose the accounting policies used to record the grant in the financial statements and failing to describe the nature of the grant.	Accounting Basis
23	Despite the accounting accrual concept, waste charges from previous years were recorded in the current books.	Accounting Basis
24	As required by accrual accounting, the municipality did not record expenses and allowance for doubtful debts for current books.	Accounting Basis

Source: Author

The majority of the preceding notes and recommendations are concerned with the internal control system and its dimensions: internal auditing, accounting basis and compliance with applicable laws and regulations.

These notes and recommendations serve as a warning to the management of all local government units to avoid them and improve their internal controls and accounting information systems. This is leading to an improvement in external audit quality by producing high-quality financial statements that are used as input in the external auditing process. However, the FACB audit reports notes and recommendations do not specifically and clearly mention the other inputs of the auditing process, such as the auditor characteristics (auditors' ethics, competency, and independence) and the audit firm attributes (audit fees and audit firm size), but the FACB auditors may take into account the audit firm's attributes and the auditor's characteristics as specified in the Palestinian government's auditing standards and the MOLG approved guidelines of ToR for hiring external auditors in the LGUs.

4.8.2 MOLG-GDCG Reports

MOLG prepares periodic (annual or semi-annual) reports on local government units (LGUs) through GDCG auditors, but these reports remain confidential and are not available to the public. The researcher obtained some of them for the study through personal contact with some municipalities. The audit report is a semi-structured document with many questions pertaining to the audit scope, including the reviewing of the financial aspects such as cash balances, debts, inventories, checks, accounting records of revenues and expenses. Also, this type of auditing includes the examination of the budget process including the compliance with stated expenditures and revenues amounts as appeared in the budget, internal controls and procedures in the accounting system, external audit reports, FACB audit reports, and the compliance with the applicable laws and regulations.

In comparison to the notes and recommendations of the FACB, the GDCG's are more precise, thorough, and detailed. The majority notes of this type of auditing referring to violations of the related laws, rules, policies, and MOLG directives, as a result, the focus of this audit is on operational and compliance audits, including internal control system audits. Table 4.21 shows the summary of the most notes and the recommendations of the GDCG.

Table 4.21: The Notes and the Recommendations of MOLG GDCG

#	The Notes and the Recommendations	The Audit Quality Attributes
1	Payment vouchers may be issued in the absence of all necessary paperwork, official authority approvals, beneficiary signatures, dates, and other data.	Weakness of internal auditing
2	Laws, regulations, and ordinances governing budgeting and revenue/expense measurement are being broken.	Failure to comply with the laws and regulations
3	Some municipalities use Excel to keep track of paper records instead of appropriate accounting software because they lack the necessary internal controls.	Internal control over accounting system
4	Due to an insufficiency of supporting documentation and a cycle for governing documentation, local government entities' accounts are unreliable and raise questions about their accuracy, authenticity, and occurrence.	Accounting Basis
5	Violation of some storekeeping procedures, particularly complete records, physical counting, and item evaluation and organization.	Failure to comply with the laws and regulations. And weakness of internal auditing
6	Accounting software that does not incorporate actions or assign user authorities may not meet the needs of some local governments, leaving financial statements vulnerable to data loss, destruction, and deletion, raising questions about their legitimacy and fairness.	Weakness in accounting Information System and Accounting basis
7	Spending more cash than the limit of 50 JOD without using current checks, and possibly using postponed checks, is a violation of financial regulations.	Failure to comply with the laws and regulations. And weakness of internal auditing
8	violation of income tax for council members' and employees' salaries and wages	Weakness in Internal Auditing
9	Not producing the financial statement in accordance with the rules and regulations that apply.	Accounting Basis and violation of laws and regulations
10	Both real cash counting and cash insurance are not practices on a regular basis. For the purpose of monitoring their bank accounts, some municipal governments might not carry out proper bank reconciliations.	Weakness in Internal Auditing

Source: Author

4.9 Summary of Chapter Four

In this chapter, there are two main stages to the data analysis process. An initial analysis of the data was part of the first stage. In order to use SEM effectively, the

data must adequately meet the fundamental assumptions. The entire data set of the items was, in general, normally distributed and devoid of errors, missing values, and univariate outliers. The two SEM stages were applied in the second phase. The first step involved creating measurement models for the research's latent constructs. Following the first stage's confirmation of the constructs' unidimensionality, reliability, and validity, the second stage was created to put the research hypotheses to the test by creating structural models. This chapter analyzes and discusses SAIs' reports in addition to the descriptive analysis of each variable in the research.

