

The Role of Analytical Procedures in Minimizing Audit Expectation Gap (AEG): A Survey of Academics and External Auditors in Palestine

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ABSTRACT: *The current study aimed at investigating the role of analytical procedures in audit environment, as well as explaining analytical procedures and how different procedures can help reduce the Audit Expectation Gap (AEG). This is done using a survey of academics and external auditors. The survey included (120) forms which were distributed equally between the two groups, where (51) were retrieved from auditors and (58) retrieved from academics. Using SPSS, the study concluded that there is a strong relationship between analytical procedures and AEG with a correlation of (0.794) and there is a significant effect of analytical procedures on minimizing AEG within Palestine.*

KEYWORD: Analytical procedures, Audit Expectation Gap (AEG), Audit environment, Audit Independence.

INTRODUCTION

The audit profession is considered a social one, which aims at providing services to others, and is based on mutual trust between auditors and others. Auditing follows recent trends in technology and environmental change, thus; the financial community became very interested in the auditors' role in their operating results, and relied on them for financial decision-making. Palestine, as many other developing countries, focuses on developing the audit profession, so as to use it as a tool for organizing the relationship between auditors and users of financial statements, as well as promoting the audit profession in order to help reducing the AEG.

The main difference between auditors and users of financial statements is related to what users think the duty of auditors is, and what auditors themselves believe their responsibilities are. This difference is known as Audit Expectation Gap (AEG), which

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led to lowering the reliance on auditors, and trust in financial statement (Pinho et. al, 2022). Analytical procedures are considered one of the most important attempts to restore the trust in financial statements, which recently became a major research topic in audit and accounting professions.

The information provided in financial statements is the most important source of information for users of these statements, and in order for this information to be reliable and relevant, the auditor should do his duty to the best quality possible. In order to do this at the minimum cost and time, auditors can use analytical procedures, which is the main objective of this study. The focus is brought about the importance of analytical procedures, and its role in minimizing AEG, and its use to increase users' trust in using financial statements to make financial decisions.

The next parts of this study are as follows: the second part of this research discusses in details previous literature of the topic, whereas the following part explains the methodology of the study. Then explanation and analysis of the data gathered for the purposes of this study is presented, and finally, a part is provided to present conclusions and some recommendations.

LITERATURE REVIEW

Recent literature investigated the role of analytical procedures on AEG (Jezovita, et. Al, 2018). A study by Matrood, et. al, (2019), investigated the extent of adopting ISA 520 by audit firms in Iraq. They found that auditors acknowledge the importance of analytical procedures, and that one of the most important obstacles for applying suitable analytical procedures is the lack of training courses on the subject. On the other hand, Abu Sonideh (2015) tried to identify the role of analytical procedures in eliminating AEG from auditor's view in Palestine. The study found that analytical procedure is mostly used as substantive tests, and the least used was statistical tools, and that these actually positively impact on narrowing AEG in Palestine. Another study by Jezovito, et. al, (2018) investigated the role of auditors in promoting the performance of businesses using analytical procedures in Croatia. The study revealed that internal auditors use analytical procedures with confident but inconsistently apply these to their auditing process.

Many other studies investigated the practicality of the subject in local and international environment (Pinho et. al, 2022). The current study is related to the fact that it is amongst a small number of studies in Palestine about this topic, and that it investigated the same area from two different viewpoints; i.e. the academics, and the auditors.

Explaining analytical procedures

Analytical procedures are considered one of the most important steps in audit process. It helps identify the weaknesses in a business (Mohamed, 2016). Analytical procedures started gaining interest and recognition from local and international bodies from the

early 1970's, as the AICPA issued its 1972 (No. 54) which explained that analytical procedures are considered an audit evidence. Also, the (No. 28) issue of 1978, which focused on comparison between analytical procedures to identify the relationship between different data streams (Hussien, 2017; and Othman and Kulalah, 2020). On the other hand, ISA 520 issued by IFAC explained that analytical procedures include ratios and indicators, as well as any signs of conflict between the numbers related to a specific financial statement item (Jabbar, 2011). Qareet (2009) also explained that analytical procedures include special testing and analysis of financial information through a business books, and making sure they follow the overall performance of the business (Pinho et. al, 2022). Based on the above; analytical procedures help minimize time, cost, and fluctuations and material deviations of financial statements using a thorough investigation between financial and nonfinancial data to reach certain conclusions.

The main objective of analytical procedure is to anticipate relationships between data and its continuity unless a special situation is inherent in the financial statements. Amongst the most important objectives of conducting audit procedures are: understanding the scope of business, estimating going concern issues, highlighting expected material misstatements, and reducing detailed audit test (Saqqa, 2013, Fulop et. al., 2019). On the other hand, Matar (2015), explained that analytical procedures could be used to minimize time and effort needed to conduct the audit process, provide indicators of material misstatements, and estimating going concern issues for a business.

Analytical procedures include many tests such as: comparing the business's financial statements with its actual performance, comparing financial performance with previous periods, comparing financial statements with expectations, comparing financial statements with auditor's expectations, and analyzing financial statements using nonfinancial measures (Qareet, 2009, Fulop et. al., 2019). Analytical procedures are carried through three main stages: planning (where we estimate the risk of material misstatements) audit testing (where analytical procedures are carried to increase efficiency and effectiveness of audit process), and finally; finalizing the audit process (using the results of analytical procedures to establish a critical and realistic view on the financial statements of a business) (Iman, 2017).

Explaining AEG

The literature suggests that there is no one right definition for AEG, as different researchers view it in different ways. The AEG was early mentioned in the 19th century in England, as auditors were expected to highlight and detect fraud, which led to trusting the auditors, who sometimes failed to detect it, and this eventually resulted in losing the trust in audit profession in general (Sab'ah, 2016). The AEG was first defined by Carl D. Liggo (1974), who explained that the gap exists as a result of difference between auditors and users of financial statements about the role of auditors. Whereas others explained AEG as the difference between what the perceived quality of financial

statements is, and what auditors' functions actually include (Marhaj; 2018, and Othman and Kulalah; 2020).

Recent studies highlighted some features of AEG including: that AEG is usually related to excess demand of auditors' services, that AEG is not static as it is related to both expectations from users of financial statements and auditors (Akthar and Xu, 2020), AEG is harmful to both auditors and society in general as it leads to losing trust in the audit profession, and finally; AEG is universal and is inherent in all countries where auditing is performed (Marhaj, 2018; and Ahmed, 2017).

The AEG have many components, some of these relate to auditors, some to users of financial statements, and some relate to society in general (Yasin, 2011). These components include: Reasonableness gap (what society and users of financial statements expect auditors to do, and what auditors reasonably do) (Othman and Kulalah; 2020), Performance gap (difference between reasonable expectations of auditor's work and their actual work), Standards gap (the difference between reasonable expectations of auditors' work and their work according to audit standards) (Brir, 2014), Reporting gap (difference between society expectations of auditor's opinion and the auditor's actual opinion), Legal Liability gap (the difference between legal bodies' expectations of auditors' responsibilities, and auditor's actual responsibilities), Independence gap (results of group pressure on auditors that limit their independence), and Communication gap (lack of understanding by users of financial statements of auditors' opinion) (Othman and Kulalah; 2020, Samerrai; 2018, Dori; 2010, Yasin; 2011, Brir; 2014, Farhan; 2011, Deepal and Jayamah; 2022).

According to previous literature, AEG results from three main groups of reasons: those related to auditors, those related to audit environment, and those related to users of financial statements (Abdullah, 2017). In the first group both lack of independence and professional competence lead to inadequate quality of audit work (Qudat, 2013). Whereas in the second group; lack of auditor's job description, ineffective communications, weak self-control of audit function, and insufficient legal and professional standards all lead to increasing the gap (Abdullah; 2017, Akthar and Xu 2020). The final group contributes to higher AEG as a result of: users' expectations that an unqualified opinion assures business continuity, lack of knowledge of audit nature and accounting differences, and the responsibility of auditors to detect material misstatements and fraud (Sabouh, 2015).

Based on the above, it can be concluded that AEG can be minimized by understanding the types, components, and reasons for AEG, and study financial statements users' expectations to be able to improve communications between auditors and different stakeholders of the audit process.

The role of analytical procedures in minimizing AEG:

The role of descriptive analytical procedures in minimizing AEG:

Descriptive analytical procedures can help minimizing AEG by gathering descriptive data about the nature of the business, its internal control, its board of directors' meeting records, and the descriptive analytical procedures followed by the auditors (Fulop et al, 2019). All this provides insight about the business's policies, as well as the relationship between management and employees, the business competitors, and how the auditing procedures should be planned and executed (Qudat; 2013, and Samerrai'; 2018).

The role of quantitative analytical procedures in minimizing AEG:

The external auditor usually compares business performance to overall economy. This performance includes indicators on GDP, inflation, unemployment, and price indexes (Al-Baz, 2015). Such comparisons help promote the overall audit quality; as auditors focus on establishing relationships between historical and market performance, and then estimate the actual value of a business, and how some changes in accounts might be acceptable or not (Abdullah, 2017). These irregularities are then further investigated by means of applying more sophisticated analytical procedures, which might highlight a fraud or misleading information to users of financial statements (Sabouh; 2015, Olojede; 2020).

The use of such basic descriptive analytical procedures usually relies on auditor's judgment, which means a lack of professional set of procedures. This led to the need for more subjective methods to help generate more realistic estimates. Such methods can help determine whether misstatements are related to unintentional errors, fraud, or cheating (Abusonideh; 2015, Deepal and Jayamah; 2022).

The above discussion highlights the fact that different types of analytical procedures are of major concern for auditors who use these to analyze business performance, solve problems in reporting process, and minimize the gap between auditors' work and expectations of users of financial statements. (Sabouh, 2015). One way to help minimize the gap is also related to improving the reporting process, as auditors already follow audit standards is providing their professional opinion on financial statements. This accompanied with more advanced analytical procedures can solve one of the most recent audit problems, i.e. AEG (Abosonideh; 2015, Olojede; 2020).

METHODOLOGY

Study sample

The study sample consists of two groups: external auditors who are certified to perform audit services in Palestine, and Academics in Palestine who hold a masters or PhD in Accounting and Auditing and work at local colleges and universities. The survey was distributed to (120) participants equally, where (51) were received from auditors and (58) from academics with a response rate of approximately (91%). The reasons for such

high response rate are related to personal delivery of surveys to respondents, ability to communicate directly with auditors, and the ability to communicate and visit academics in different local universities.

Statistical analysis

The statistical tools used vary according to the level of complexity and purpose of performing the tests. The following tests were performed for inserted data on SPSS: research reliability, means, percentages, standard deviation, Cronbach's Alpha, and others. The following table (1), highlights the reliability test for the survey used:

Table (1): Survey reliability test

Variables		No. of statements	Cronbach's Alpha	Score
1 st variable	Analytical procedures	14	0.81	0.90
2 nd variable	Minimizing AEG	13	0.77	0.88
Total		27	0.87	0.93

The above table shows that the survey is reliable and has a total Cronbach's Alpha score of (0.87); with a score of (0.93). As Cronbach's Alpha is higher than (0.70), it is acceptable statistically, and shows that the tools is accepted as a method of data collection. The following table, (2) also explains the demographics of the study sample:

Table (2): Demographics of the sample:

Variable		Percentage
Gender	Male	75
	Female	25
Total		%100
Age (yrs)	Less than 25	1
	25-34	24
	35-44	44
	45-54	19
	55 and above	12
Total		%100
Education level	Undergraduate	9
	Masters	68
	PhD and equivalent	23
Total		%100
Specialty	Accounting	69
	Auditing	24
	Finance and banking	5
	Others	2
Total		%100
Experience (yrs)	Less than 5	14
	5-10	26
	11-5	25
	16-20	22
	21 and above	13
Total		%100
Area of work	Academic	53

	Auditing	47
Total		%100
Professional certificates	CPA	5
	ACPA	37
	ACCA	2
	None	49
	Others	7
Total		%100
Training courses	Accounting	72
	IT	9
	Auditing	13
	Others	6
Total		%100

The above table highlights the fact that majority of those working in the accounting and auditing professions, whether it is academic or practical are males. It also points to the need to encourage participants for more training courses and receiving more professional certificates. Also, the study highlights the need for additional focus on IT training courses that can help adapt to changes in modern technology, as well as encouraging business to apply these to their business operations.

Explaining research results and analysis:

This part is focused on analyzing the results of the study based on the data gathered through survey distributed to both academics and auditors. The different statements in the questionnaire are analyzed using different analytical procedures including means, standard deviation, and variance tests. The following table (3) provides the descriptive analysis of the different statements of the survey related to analytical procedures:

Table (3): Mean, Standard deviation, and coefficient of variation for questionnaire statements related to analytical procedures

Paragraphs	High agree	Agree	Neutral	Disagree	Highly disagree	Mean	Std. Div.	Var	%
1	34.9	58.9	5.4	0.8	0	4.28	0.60	13.95	85.58
2	32.6	55.8	9.3	2.3	0	4.19	0.69	16.5	83.72
3	39.5	38	19.4	3.1	0	4.14	0.83	20.12	82.79
4	50.4	41.9	5.4	2.3	0	4.40	0.70	15.88	88.06
5	32.6	54.3	9.3	3.9	0	4.16	0.74	17.84	83.10
6	23.3	52.7	22.5	1.6	0	3.98	0.72	18.11	79.53
7	31.8	45	21.7	0.8	0.8	4.06	0.79	19.57	81.24
8	16.3	42.6	31	9.3	0.8	3.64	0.89	24.36	72.87
9	17.8	48.8	24.8	8.5	0	3.76	0.84	22.41	75.19
10	18.6	62	17.1	2.3	0	3.97	0.67	16.88	79.38
11	24.8	51.9	19.4	3.9	0	3.98	0.77	19.42	79.53
12	16.3	58.1	18.6	4.7	0	3.77	0.78	20.77	75.35
13	18.6	49.6	28.7	5.4	0	3.91	0.74	18.97	78.14
14	14.7	51.2	27.1	4.7	2.3	3.71	0.86	23.04	74.26
Total	26.6	50.8	18.5	3.8	0.3	4.00	0.41	10.26	79.91

The overall results of the table suggests that the mean for this variable is (4.00) and standard deviation is (0.41). The results also suggest an overall direction of agreeing with need for analytical procedures. The highest mean was that of (statement 4), whereas the lowest mean was that of (statement 8). The overall scores show that respondents from both groups agree on the importance of analytical procedures for the audit process, and the need to focus on implementing additional analytical procedures for the audit process in order to minimize material misstatements resulting from different sources.

On the other hand, the following table (4) highlights the mean, standard deviation, and coefficient of variation for questionnaire statements related to AEG.

Table (4): Mean, Standard deviation, and coefficient of variation for questionnaire statements related to AEG

Paragraphs	High agree	Agree	Neutral	Disagree	Highly disagree	Mean	Std. Div.	Var	%
1	17.8	48.1	24	7.8	2.3	3.71	0.93	24.91	74.26
2	45.7	41.9	10.1	1.6	0.8	4.3	0.77	17.98	86.05
3	51.2	31	15.5	2.3	0	4.31	0.81	18.9	86.2
4	11.6	28.7	27.1	24.8	7.8	3.12	1.14	36.54	62.33
5	28.7	54.3	14	2.3	0.8	4.08	0.76	18.73	81.55
6	31	48.1	16.3	3.9	0.8	4.05	0.83	20.61	80.93
7	56.6	29.5	7.1	1.6	1.6	4.38	0.86	19.53	87.6
8	32.6	43.4	14	9.3	0.8	3.98	0.95	23.94	79.53
9	19.4	53.5	26.4	0.8	0	3.91	0.69	17.72	78.29
10	33.3	48.8	14.7	3.1	0	4.12	0.77	18.61	82.48
11	24	51.2	17.1	3.1	4.7	3.87	0.97	25.01	77.36
12	24.8	47.3	23.3	3.9	0.8	3.91	0.84	21.34	78.29
13	36.4	48.1	12.4	1.6	1.6	4.16	0.81	19.57	83.26
Total	31.8	44.1	17.4	5.1	1.6	3.99	0.45	11.27	79.86

The above table highlights the fact that AEG is of major concern to respondents. The results suggest an overall mean of (3.99) and standard deviation of (0.45). The highest mean was that of (Statement 7) with a mean of (4.38), and the lowest mean was that of (Statement 3.12) with a mean of (3.12). The respondents seemed to agree on the need for analytical procedures to perform audit function, and help reduce AEG. The sample also showed a high level of acceptance to the fact that AEG is not subject to one party, rather it is related to different parties.

Hypothesis testing:

Based on previous literature and the focus of the current study to understand the effect of analytical procedures on AEG, and the descriptive results obtained above, the following is hypothesized (H1): There is a positive statistical relationship between analytical procedures and minimizing the AEG at statistical level of significance ($\alpha \geq 0.05$) in Palestine.

The following table (5) provides the results of correlation test for this hypothesis:

Table (5): Correlation test for (H2)

Variable		Minimizing AEG
Analytical procedures	Cor.	0.794
	Sig.	0.00

The above table shows that correlation coefficient is (0.794) with a significance level of (0.00), which is lower than (0.05) level, suggesting to reject the null hypothesis and accepting the alternate hypothesis of establishing a relationship between analytical procedures and AEG in Palestine. This result is similar to previous results obtained by Iman (2017), Matar (2015), and Marhaj (2018) and Fulop et. al (2019).

On the other hand, and as the current results agree on the relationship between analytical procedures and AEG, The researchers made the following hypothesis (H2): There is statistical effect of analytical procedures on minimizing AEG at statistical level of significance ($\alpha \geq 0.05$) in Palestine. The following table (6) highlights the testing results based on sample's responses:

Table (6): T test and F test for (H2)

Variable	R ²	T test		F test		B
		level	P value	level	P value	
Analytical procedures	%48	10.87	0.00	118.24	0.00	0.794

The results show that the P-value of the test is (0.00) which is lower than the accepted significance level of (0.05). The results also show that T test is (10.87) which means that there is an effect of analytical procedures on reducing AEG. This is also supported by the fact that F test showed a level of (118.24), which all together support the rejection of the null hypothesis and support of the alternate hypotheses, i.e. there is an effect of analytical procedures on minimizing AEG in Palestine. These results are similar to previous results obtained by Iman (2017), Othman and Kulalah (2020), and Abusonideh (2015).

CONCLUSIONS AND RECOMMENDATIONS

The current study attempted to focus on the important role of analytical procedures in minimizing AEG. Some of the most important conclusions reached include: that different types of analytical procedures minimize AEG in Palestine. Also, that using analytical procedures increase users' trust in financial statements and audit profession in general. Furthermore, using analytical procedures at different auditing stages helps ease the audit process and make it more efficient. Also, that there is a relationship between analytical procedures and AEG in Palestine. Finally, that AEG is a result of different views between auditors, users of financial statements, and society in general. Based on the above conclusions, and results obtained through the current study, the following recommendations for future efforts are as follows: firstly, analytical

procedures should gain more support and use in the audit process. Secondly, efforts should be made to increase users' of financial statements awareness about the AEG, as well as increasing auditors' awareness through training courses about analytical procedures. Thirdly, an additional effort should be made to establish more local standards and policies suitable for the Palestinian environment, and this could be done by enhancing communication between academics and practitioners of the audit profession. Finally, future research can focus on the use of analytical procedures to solve IT and other modern age problems, and how audit quality can minimize AEG in Palestine.

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