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OFFSHORE COMPANIES AUDIT PROCESS EFFECTIVENESS: EVIDENCE FROM LEBANESE AUDITING PROFESSION

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OFFSHORE COMPANIES AUDIT PROCESS EFFECTIVENESS: EVIDENCE FROM LEBANESE AUDITING PROFESSION

Abstract

This research aims to examine whether audit planning, audit strategy, and audit documentation have a significant impact on the effectiveness of the audit process. It also aims to explore the impact of audit technology on the audit process for offshore companies in Lebanon. This study adds to and contributes to the literature that has examined the separate impacts of each of the above variables on the effectiveness of the audit process. The sample size of this study is 106 certified public accountants who are members of the Lebanese Association of Certified Public Accountants (LACPA). Empirical data was collected using a questionnaire form to test four generated hypotheses. Results show that for e-commerce companies, there is a positive and significant impact of audit planning and audit documentation, on the effectiveness of the audit process. In contrast, there is no significant positive impact of audit strategy on the effectiveness of the audit process. On the other hand, the outcome for offshore companies shows that there is no positive significant impact of audit planning on the effectiveness of the audit process, while there is a positive significant impact of audit strategy and audit documentation on the effectiveness of the audit process. Regarding the association between the adoption of audit technology tools and the effectiveness of the audit process, results show that offshore companies support this association. The researcher faced restrictions on the size of the sample used in this study. This limitation can affect the final results, as the smaller the sample size, the higher the marginal error.

Keywords

Audit planning, audit strategy, audit documentation, effectiveness of audit process, audit tools technology, offshore companies, Lebanon.

1. INTRODUCTION

An audit is described as a procedure for gathering audit evidence that is sufficiently credible to reduce the audit risk assessed to the company to a manageable level. Audit design and process can differ between firms depending on the risk characteristics of the firm (Yu and Yang, 2021). Because the auditor must understand the client's objectives regarding the accuracy and reliability of financial reporting, the effectiveness and efficiency of operations, and compliance with laws and regulations, the primary objective of the audit is to identify and avoid errors and frauds. The audit process aims to reduce the uncertainties that stakeholders and investors are exposed to due to potential distortions and information biases.

According to the published literature, three key components—audit planning, audit strategy, and audit documentation—often have an impact on the effectiveness of the audit process. Decisions made during the planning phase affect audit and fieldwork data that will be evaluated later. Therefore, in order to establish an appropriate framework for a successful audit, the auditor must plan and perform the audit to obtain workable assurance that the financial statements are free from material misstatement due to fraud or error (PCAOB, 2010). Audit planning is an important part of the audit process as the auditor must establish strategies and techniques to avoid potential problems in order to ensure an objective and clean opinion regarding the integrity and credibility of the company's financial statements when audited (Bani Ahmed and Al-Sharairi, 2014). To reduce audit risk to an acceptably low level, a comprehensive audit strategy must then be put in place that defines the scope and methodology of the audit. The auditor must ensure that all audit tasks, such as planning, execution, monitoring and evaluation, are completed. Finally yet importantly, the auditor should document the overall audit approach, the audit plan, the justification for any material modifications made during the audit engagement, and other relevant information (Statements, 2004).

Nowadays, technology is transforming the accounting and auditing professions, and it has the potential to revolutionize auditing to improve its quality and increase its efficiency. It serves as a catalyst to enable the audit process to shift from retrospective to prospective, allowing for much deeper insights into clients and a richer narrative of companies' future performance and sustainability (Brown-Liburd and Vasarhelyi, 2015). Any auditing technology, including electronic worksheets, word processing, spreadsheets, statistical analysis, and computer application software, is included in Computer Assisted Audit Tools and Techniques (CAATs) (Braun and Davis, 2003). The audit process is given more responsibility and challenges as audit technology advances and core functions are offshored. Audit technology is becoming increasingly central to the audit process, forcing audit firms and auditors to diversify their technology skills and auditors to make effective use of technology for audit purposes (Mališ et al., 2021). Despite its value in enhancing audit productivity and reducing costs, CAATT is not widely used by audit firms in underdeveloped countries, according to Siew et al., (2020). The results indicate that the environment, the evolution of client accounting information systems, and the perception of support for professional accountancy bodies all have an impact on CAATT certification.

Although many studies have been conducted in various countries and industries, such as those conducted by Muydinov and Mamazhonov (2021; Blokdiik et al. (2006) and Hackenbrack and Knechel (1997), there are few that look at the general effects of audit planning, audit strategy, audit documentation, and the use of audit technology tools on the effectiveness of the audit process in developing countries. Most studies focused only on examining one of these variables separately. According to the researcher's knowledge, this study is the first to examine the effect of the four elements of audit planning, audit strategy, audit documentation, and adoption of audit technology tools on the effectiveness of the audit process in the Lebanese context, specifically the Lebanese offshore companies. Today, all accounting operations need to use computers and accounting software, as paperless audits that allow auditors to complete most procedures online will become popular in the near future. Like other countries, Lebanon is affected by the technological revolution and progress. The research problem arises from the fact that auditing technology has emerged as a factor that affects the tasks of auditors by converting accounting work from the traditional method to the electronic method. Although most audit offices use computer technology to conduct audits and provide additional services to companies and institutions that deal with them, Lebanon needs more research and clarification based on the ability of Lebanese companies to

adopt them. The Audit Order issued by the Minister of Finance does not refer to regulations for monitoring compliance or implementation of the ISA, nor does it address oversight or regulations for the auditing profession (World Bank, 2003). Thus, in the absence of an adequate financial audit, which enables taxpayers to reap huge profits inside and outside Lebanon, it is important to shed light on the factors that affect the effectiveness of the audit process, especially given that there is a relative dearth of studies that explore audit practices and specific features of audit work in Lebanese offshore companies.

Lebanese offshore companies are companies with roots in Lebanon that often employ people but conduct most of their business elsewhere. Lebanese offshore companies have grown to be a major tool for tax evasion. Offshore corporations and their shareholders are protected from paying corporate income tax at a rate of 17%, as well as from paying taxes on capital gains, dividends, and inherited shares. These exemptions are designed to entice companies based in the Middle East and North Africa region to use Lebanon as an important hub and to boost local production of basic commodities, particularly export services and technology markets (Bifani, 2021). With favorable terms for foreign managers and non-Lebanese employees, exemptions from work permits provided the total balance sheet of the company exceeds \$667,000 and complete bank secrecy on all transactions, setting up an offshore company in Lebanon has many advantages.

Thus, in order to investigate the research problem, the focus of this paper is to clarify the relationships among the model variables and find answers to the questions of: what is the relationship between audit planning, audit strategy, audit documentation, and audit process effectiveness? And what is the association between the adoption of audit technology tools and the effectiveness of the audit process in Lebanese offshore companies?.

The rest of the study covers the following sections: background, literature review and hypotheses development, methodology, empirical results and conclusion.

2. BACKGROUND

This section covers the various theories behind the effectiveness of the audit process. Since auditors are responsible for complying with auditing standards in order to enhance audit effectiveness, audit planning, audit strategy, and audit documentation must be properly implemented. It also presents the importance of adoption of audit technology tools in the audit process.

2.1. Effectiveness and Quality of the Audit Process

Inaccurate audit findings are usually the result of inadequate audit tools, such as standard internal audit evidence, lack of a comprehensive audit work plan, inadequate reporting structures, lack of professional independence, and unrestricted scope of work, unqualified auditors, and absence of professionalism. The context, in which the audit is conducted, as well as the interactions between the auditor, the audit process, and a variety of other players, must be taken into account in order to increase audit quality and effectiveness. For the review to be more effective and of higher quality, these other actors must similarly change their behavior. The audit process involves a variety of stakeholders, including directors, non-executive directors, standard setters, regulators, users, shareholders and others. Each of these parties must play their part in promoting a fully functional environment because a lack of effective communication can undermine all other efforts (Mardian and Avianti, 2019).

Accepting the business engagement, organizing the audit work, finding, assessing, and addressing risks of material misstatement and creating audit reports are all parts of the audit process. The overall objectives of an audit are to issue audit reports that comply with auditing standards, and to obtain reasonable assurance that there are no material misstatements, whether due to fraud or error, in the financial statements. As part of routine audit practices, auditors collect audit evidence by performing audits to find material misstatements in the financial statements (Rezaee et al., 2018).

Audit quality is one of the features of the effectiveness of the audit process (Nurjannah, 2019). It is the effective performance of the audit process in accordance with auditing standards, including the discovery of errors and irregularities and working to meet the desires and needs of users of financial statements. No standard definition or measure of audit quality

has been established. It is a complex term, and no definition or description of it has gained widespread acceptance (IAASB, 2015). It is commonly used in stakeholder dialogues, organizational communication, standard-setting communication, audit firms, etc., as well as in research and policy development. Although auditing the validity of financial statements is important, audit quality is what ultimately gives audit reports their credibility. It is crucial to improve the accuracy and integrity of financial accounts, and their importance to corporate operations must be considered (Haa and Minhb, 2020).

2.2. Theories Behind the Effectiveness of the Audit Process

Theories behind the effectiveness of the audit process suggest a wide body of literature for review. According to Mautz and Sharaf (1991), audit theory enables us to know why an audit is required and what the purpose of the audit system is in the interaction between firms and their circumstances. It explained the importance of several basic auditing guidelines and principles.

Due to the legitimacy of the audit, stakeholders have faith in the auditors. Before engaging in any commercial agreements, lenders, suppliers, and employees want a fair level of assurance regarding an organization's financial statements. To examine their investments and build trust, shareholders need unbiased opinions about the management of the firm and how it supports its oversight. They also need a clear and fair view of the financial statements in order to evaluate their investments and have faith in management (Hayes et al., 2005). It also makes an effort to clarify some key audit assumptions and concepts, uncover some of the legal frameworks that govern the audit process and its operations, and provide context for understanding the relationships and interactions among the many parties in the firm (Mautz and Sharaf 1961; Flint 1988). According to Hayes et al. (2005), four audit theories—the conditional theory, lending credibility theory, inspired confidence theory, and agency theory—provide a framework for auditing, highlight the importance of accountability in contemporary society, and highlight the function of auditing in providing reasonable assurance and a fair opinion to users of financial statements.

2.3. Audit Planning

The first and most important pre-audit sub-stage is audit planning. It is an essential step in the audit process and a widely accepted practice that outlines its essential steps and practices. Leading audit firms around the world closely adhere to audit planning concepts and practices to obtain a reliable, high-quality auditor report and understandable audit results (Meliyev, 2018). The performance of auditors has played a major role in avoiding corruption of financial statements, where the responsibility of the auditor is to communicate quality information, including timeliness, accuracy, reliability, completeness, and importance to stakeholders (Peecher et al., 2007).

Effective audit planning ensures that significant risks and key audit areas receive appropriate attention and that any problems are quickly detected and remedied (ISA/VSA, 2012). The auditor shall develop plans to conduct the audit effectively and efficiently and shall take into account the terms of his engagement and any legal responsibilities, the nature and timing of reports or other communications, applicable statutory or legal requirements, accounting policies approved by the client and changes in those policies. In addition to the effect of new accounting or audit data on the audit, the identification of significant audit areas and significant audit risks, the nature and timing of reports or other communications, and the nature and timing of reports or other communications (Popova, 2018).

2.4. Audit Strategy

The audit strategy defines the scope of the audit and aims to develop an appropriate response to the assessed risks of material misstatement at the assertion level for specific classes of transactions, account balances and disclosures. It also directs the development of the audit plan in a manner appropriate to the risks of material misstatement at the level of the financial statements. These responses may have an impact on the knowledge, abilities, and skills of employees with key engagement responsibilities, and may indicate that members of the engagement team need more direction, supervision, and time for an in-depth assessment of their work. The general approach to ordering behavior and management of the audit

engagement as well as the relative importance to be given to tests of objective controls were included in the audit strategy (Statements, 2004).

According to International Standard No. 300, the auditor must develop a comprehensive audit strategy that defines the scope, timing, and direction of the audit after knowing the client's justifications and providing assistance in developing the audit plan (Saleem, 2018). In formulating the overall audit strategy, the auditor should consider the important elements that will determine the direction of the engagement team's efforts, identify the characteristics of the engagement that define its scope, and set engagement communication objectives to plan the timing of the audit and the type of communications needed. The auditor should also take into account the results of early engagement activities, experience gained from previous engagements with the facility, and other factors relevant to planning the engagement and ensuring adequate resources to complete the engagement, as appropriate (Saleem, 2018). The client's business and industry, as well as any areas where there is a greater risk of material misstatement, must be considered during strategy development. Other factors to consider when planning the initial audit strategy include the number of client locations and the historical effectiveness over which the client has control. The strategy helps the auditor identify the resources needed to participate, such as staffing (Soto, 2014).

2.5. Audit Documentation

The process of creating sufficient and relevant documentation for the audit contributes to the quality of the audit. It not only checks how complete the audit engagement is, but also shows that it was structured in accordance with international standards, how well it was executed, and how much data the audit team obtained in order to form an audit opinion. The requirements for the auditor to create audit documents for the review of financial statements are spelled out in these International Standards on Auditing (Muydinov and Mamazhonov, 2021).

All information that the auditor considers required to properly conduct the audit and support the audit report should be included in the audit documentation. The items evaluated, any significant audit issues or findings, the steps taken to resolve them, and the basis for the conclusions drawn should be specified. There are a number of factors that make document recording critical to designing, implementing, and adopting a systematic approach to auditing. This assists in monitoring, reviewing and documenting the audit work performed and the audit evidence generated by the audit work performed to support the auditor's opinion by providing details of the problems encountered, including difficult and controversial issues, and how they were resolved, and the conclusions reached, as well as by allowing an experienced auditor, who has nothing to do with auditing, to understand the work done and the rationale for the main decisions made (Le, 2012).

2.6. Adoption of Audit Technology Tools

Nowadays, technology is widely used in the audit process, with very different levels of investment between companies in the form of mission-specific software to conduct an audit engagement assessment, as well as more comprehensive audit documentation platforms supporting the design and implementation of the audit process. Continuous development in technology and software applications has allowed auditors to anticipate the steps in their audits (Omitogun and Al-Adeem, 2019). It is widely recognized that the use of auditing technology is a successful strategy for addressing the extremely high demands placed on the auditing function. For internal auditors to use it in real-world situations, it must be reliable and secure. One type of audit technique used to increase the effectiveness and efficiency of audits is computer-aided audit techniques (Ahmi et al., 2016).

Adopting technology-based audits can improve auditor performance by reducing the possibility of material errors. Auditors take advantage of the usefulness of this technology to enhance the persuasiveness of the audit evidence they obtain in audits. In order to support their assessments of the possibility of material misstatement at the assertion level for large classes of transactions and account balances, they are increasingly adopting CATTs. Accordingly, CATT assists auditors in deciding where to focus additional audit procedures

(Pedrosa et al., 2020). Today, auditors are constantly working with computerized records, which have replaced a large portion of paper documents with electronic documents. In modern conditions of rapid technological progress, auditors must improve their audit procedures using various automated tools or the latest technology. An auditor who cannot use computerized audit tools effectively will be at a tremendous disadvantage. As a result, the current auditor needs to be familiar with alternative tools and techniques for checking the functionality of computerized systems as well as collecting and analyzing data from computerized records (Serpeninova et al., 2020).

3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

According to literature, one of the most effective way to improve the effectiveness of audit process is to improve audit quality, through effective audit planning, audit strategy, audit documentation, and adoption of audit technology tools (Xiao et al., 2020).

3.1. The Impact of Audit Planning on the Effectiveness of Audit Process

Several studies (e.g. Phornlaphatrachakorn and Kalasindhu, 2020; Setiawan, 2018; Pritama et al., 2018) examined the effect of audit planning on the effectiveness of the audit process or on audit quality. Since audit quality is a proxy of the audit process' effectiveness (Nurjannah, 2019), both groups of studies are taken into consideration. For example, for Al-Salami and Taha (2021), risk and materiality are the main factors in audit planning in multi-branch businesses, and the use of artificial intelligence techniques helps reduce auditors' bias and judgment. According to Burke (2015), proper audit planning enables the auditor to collect relevant and applicable audit evidence in order to form a sound opinion on the accuracy and fairness of the client's financial statements. Because of this, the effectiveness of the audit process, the quality of the financial reporting, and the reliability of the audit report will all strongly correlate with the results of proper planning. Accordingly, and based on these studies, the first hypothesis of this research is:

Hypothesis 1: There is a positive significant impact of audit planning on the effectiveness of audit process.

3.2. The Impact of Audit Strategy on the Effectiveness of Audit Process

According to previous studies (e.g. Baltos et al., 2018; Fleming et al., 2018; Sompong, 2018), the audit strategy supports companies in reporting their strategic performance and achievements by following real evidence. Karim et al., (2020) argued that there is a high role for adopting an audit strategy through auditing the company's status, internal environment auditing, external environment auditing, and auditing stakeholders to improve audit quality. The importance of the audit strategy stems from its review of the availability of resources and the feasibility of the plan, which makes the processes and operations controllable. According to Yu and Yang (2021), there is a significant correlation between a company's business risk and the auditor's audit strategy. Accordingly, the audit strategy is the second determinant of driving and explaining audit quality and achieving effectiveness in the audit process, and therefore, in order to clarify the role of strategic auditing in improving the performance of the company, ensuring its stability and continuity, and achieving its strategies, the researchers proposed the second hypothesis of this research as follows:

Hypothesis 2: There is a positive significant impact of audit strategy on the effectiveness of audit process.

3.3. The Impact of Audit Documentation on the Effectiveness of Audit Process

The critical role of audit documentation on the effectiveness of the audit process and audit quality has attracted the interest of scholars, as several studies have been conducted. For example, McNellis et al. (2021) showed that legal professionals are aware of performing the work themselves without documenting it to significantly increase audit quality and reduce auditor liability for audit failure. This is true when an audit procedure, such as an investigation of inconsistent evidence, does not need to be documented. It also revealed that legal professionals only perceive improved audit quality and reduced auditor responsibility

when documentation of the procedure is necessary in accordance with Auditing Standard 3 (AS3) and the function is properly recorded. Reliable audit evidence has a significant impact on the auditor's report; say Niktaba and Aslani (2015). Auditors can improve audit quality and create a productive audit process by creating good audit documentation. Accordingly, audit documentation is the third determinant of driving and explaining audit quality and achieving effectiveness in the audit process. Based on these arguments, the researchers proposed the third hypothesis as follows:

Hypothesis 3: There is a positive significant impact of audit documentation on the effectiveness of audit process.

3.4. The Impact of the Adoption of Audit Technology Tools on the Effectiveness of Audit Process

Several previous studies have addressed the question of whether the auditor should use Computer Assisted Auditing Techniques (CAATTs) to improve audit quality, and have been shown to enhance effectiveness and efficiency in making audit decisions (eg, Burton et al., 2012; Janvrin et al., 2008). Using technology, the auditor can enhance the accuracy of audit procedures and audit results (Mardian and Avanti, 2019). Vasarhelyi and Romero (2014) contend that bringing together technology support teams and auditors is a strategy that will enhance technology adoption in auditing while also enhancing usability. In this regard, Oni (2015) showed a link between CAATT use and audit quality. The researchers proposed the following hypothesis in light of these arguments:

Hypothesis 4: There is a positive significant association between the adoption of audit technology tools and the effectiveness of audit process.

4. RESEARCH METHODOLOGY

An empirical study was conducted to verify the hypotheses using information from the designed questionnaire. This part describes the study population and its sample, the data collection process, the developed research model, and finally the evaluation of the many variables of the research model.

4.1. Population and Sample

The population of this research is all the certified public accountants who are members of the Lebanese Association of Certified Public Accountants (LACPA). The researchers used the convenience sampling technique, which is based on selecting participants that are available in the database. The sample size is 106 auditors and accountants, members of the Lebanese Association of Certified Public Accountants, who filled the questionnaire.

4.2. Data Collection

The data were obtained from primary sources to suit the nature and purposes of this research. For the empirical part, the researcher relies on survey questionnaires distributed via email and text messages to the certified public accountants who are members of the LACPA. Thus, a questionnaire was used as the main research method for this study. The first section contains demographic information. The second section revolves around the general perceptions of auditors towards auditing offshore companies in Lebanon (this section covers items related to three variables: audit planning, audit strategy, and audit documentation). The purpose of Section 3 is to assess the level of agreement of auditors with regard to the use of audit technology tools to audit offshore companies in Lebanon. Section four is designed to determine the level of auditors' agreements regarding the effectiveness of the audit process in offshore companies in Lebanon. A 5-point Likert scale with the choices strongly agree and strongly disagree was used to rank the responses on the constructed questionnaire. The researchers to provide feedback on the questionnaire in order to assess its validity contacted four academic experts. They were asked to comment on the questionnaire's completeness and comprehensiveness, the challenges they faced in responding to the questions, and any other structural concerns they had.

4.3. Research Approach and Strategy

The approach of this research is deductive as the researcher formulates a set of hypotheses from the theory that already exists and needs to be tested using an appropriate

methodology. This rigorous empirical examination is performed on each hypothesis before it is rejected, reviewed or accepted (Zalaghi and Khazaei, 2016), knowing that the current research hypotheses are drawn from the existing literature and are tested through data collection. Since the deductive approach is often aligned with explanatory research, then the researcher follows quantitative methods of data collection. The data collected are expressed in terms of numbers and analyzed based on statistical relationships techniques. After evaluating the variables' measurements and assessing the model's validity, the results reveal the accepted and rejected hypotheses based on the statistical significance of associations between the variables.

4.4. Research Model and Measurement of Variables

The researchers refer to Al-Sharairi (2016) and Abou-El-Soud et al. (2015) to measure the variables of this study. Audit planning was measured through nine items, audit strategy was measured through 11 items, and audit documentation was measured through 10 items. Four items measured the use of audit technology tools. However, 11 items measured the effectiveness of the audit process.

The researchers used multiple regression analysis to evaluate the hypotheses and consider the significant effects of each explanatory variable on the dependent variable.

The model's regression equation is formulated as:

$$EAP = \beta_0 + \beta_1AP + \beta_2AS + \beta_3AD + \beta_4AATT + \epsilon_{it}$$

Where Effectiveness of Audit Process (EAP) is the dependent variable, Audit Planning (AP), Audit Strategy (AS), and Audit Documentation (AD), and Adoption of Audit Technology Tools (AATT) are the independent variables

The model of the current study is presented in Fig. 1.

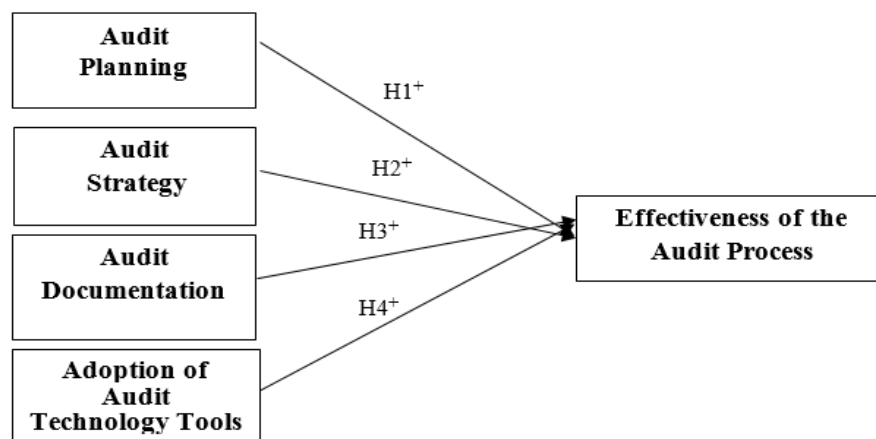


Fig.1: Conceptual Framework

Source: Prepared by the Researchers

5. EMPIRICAL RESULTS

Descriptive statistics for the dependent and explanatory variables are presented in this section, along with reliability and validity test, correlation and multicollinearity analysis, and multiple linear regression analysis.

5.1. Descriptive Statistics

According to table 1, the highest mean is 4.28, which is the audit documentation process in the offshore, with a standard deviation of 0.623, the minimum value is 2.90, and the maximum value is 5. The effectiveness of the auditing process then comes with an average value of 4.22, a standard deviation of 0.63, a minimum value of 2.74, and a maximum value of 5. However, the lowest mean is related to the mean of audit technology tools is 4.134 with

a standard deviation of 0.78, a minimum value of 2.00, and a maximum value of 5. The means of audit planning, audit strategy, audit documentation and the types of technology tools indicate a value greater than 4, which means that most of the respondents agreed on the importance of these variables in the audit process.

Table 1: Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Audit Planning	106	2.56	5.00	4.1572	.57559
Audit Strategy	106	3.00	5.00	4.1681	.62441
Audit Documentation	106	2.90	5.00	4.2887	.62310
Types of Technology Tools	106	2.00	5.00	4.1344	.78085
Effectiveness of Audit Process	106	2.73	5.00	4.2264	.63124
Valid N (listwise)	106				

Source: SPSS Report

5.2. Reliability and Validity of Variables

The researchers test the reliability of the variables through Cronbach's Alpha. Table 2 demonstrates that all constructs are reliable because audit planning with 9 items ($\alpha=0.834$), audit strategy with 11 items ($\alpha=0.937$), audit documentation with 4 items ($\alpha=0.777$), and audit process effectiveness with 11 items ($\alpha=0.938$) all show high internal consistency with Cronbach's alpha's above 0.7 (Nunnally, 1994).

Table 2: Reliability Test and Cronbach's Alpha (α)

Scale	Cronbach's alpha (α)	Number of items
Audit Planning	0.834	9
Audit Strategy	0.937	11
Audit Documentation	0.943	10
Types of Technology Tools	0.777	4
Effectiveness of Audit Process	0.938	11

Source: SPSS Report

The Appendix presents all the Kaiser–Meyer–Olkin (KMO) values for all constructs. Except for the audit planning after removing the question 7, all of the values are greater than 0.6 and have a significant Bartlett's test of sphericity values (p -values <0.05). This indicates that the data were sufficient to proceed with the factor analysis (Huck, 2012). The analysis provides evidence of convergent validity, whereas the scales are highly reliable. Convergent validity is a way of expressing internal consistency (Russell, 1978).

5.3. Correlation Analysis

Results in table 3 indicate that the correlation between audit strategy and audit planning is significant, strong, and positive ($r=0.688$; $\text{sig}<0.01$), as well as between audit documentation and audit planning ($r=0.569$, $\text{sig}<0.01$) that it is weak, significant, and positive between the types of technology tools and the audit planning ($r=0.318$, $\text{sig}<0.01$), while it is moderately positive and significant between the effectiveness of the audit process and the audit planning ($r=0.490$, $\text{sig}<0.01$). The correlation between audit strategy and audit documentation is strong, positive, and significant ($r=0.806$, $\text{sig}<0.01$), as is the correlation between audit documentation and audit process effectiveness ($r = 0.681$, $\text{sig} 0.01$). On the other hand, the relationship between audit strategy and technology types is positive, moderate, and significant ($r = 0.476$, $\text{sig} 0.01$). Finally, the correlation between audit documentation and the effectiveness of the audit process is significant, strong, and positive ($r=0.753$; $\text{sig}<0.01$), while it is positive, significant, and moderate between effectiveness and types of technology ($r=0.421$; $\text{sig}<0.01$).

Table 3: Correlation Matrix between the Variables

	Variables	1	2	3	4	5
1	Audit Planning	1				
2	Audit Strategy	0.688**	1			
3	Audit Documentation	0.569**	0.806**	1		
4	Types of Technology Tools	0.318**	0.476**	0.355**	1	
5	Effectiveness of the Audit Process	0.490**	0.681**	0.753**	0.421**	1

** Sig<0.01, significant correlation at the level of 0.01

5.4. Multiple Linear Regression

According to Table 4, the adjusted R-square was calculated to be 0.594, which indicates that the Audit Planning (AP), Audit Strategy (AS), Audit Documentation (AD), and Adoption of Audit Technology Tools (AATT) explain 59.4% of the variance of the Effectiveness of the Audit Process (EAP). Multicollinearity was checked using tolerance and VIF, while autocorrelation was tested using Durbin-Watson. Positive serial correlation is associated with a DW value that is below 1.5, and negative serial correlation is associated with a DW value that is above 2.5 (Krämer, 2011). The Durbin Watson value presented in table 4 is 2.270>1.5, which shows that there is no serial autocorrelation. Furthermore, as shown in table 6, there is no multicollinearity problem because there are no tolerance values less than 0.1 or a VIF greater than 10. The ANOVA test reveals in table 5 that the regression model as a whole is appropriate and significant (F=39.391;p=0.000;sig<0.05).

Table 4: Model Summary

Model	R	R-Square	Adjusted R-Square	Standard Error of the Estimate	Durbin Watson
1	0.781	0.609	0.594	4.425	2.270

Table 5: ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3084.989	4	771.247	39.391	.000 ^b
	Residual	1977.501	101	19.579		
	Total	5062.491	105			
a. Dependent Variable: Effectiveness of audit process						
b. Predictors: (Constant), Types of technology tools, Audit planning, Audit documentation, Audit strategy						

The results of the hypotheses tests are presented in table 6. The first hypothesis (H₁) predicts a positive significant impact of audit planning on the effectiveness of the audit process. As presented in table 7, the result did not confirm this hypothesis. The outcomes show that there is no significant relationship between the variables (sig=0.672>0.1, β=0.052, t=0.425). Unexpectedly, the results revealed that audit planning has no impact on the effectiveness of the audit process and contradicts the study of Setiawan (2018) which examined the impact of risk-based audit planning on audit quality. The rejection of this hypothesis reflects that the Lebanese accountants and auditors believe there is lack of awareness among offshore companies about the importance of having audit planning, and provides evidence that the requirements for this planning still do not exist. Since the risk assessment is a major requirement of the audit planning stage, the offshore companies did not take advantage of this to avoid misunderstandings with the client.

The second hypothesis (H₂) suggests that the audit strategy has a significant positive impact on the effectiveness of the audit process. There is a statistically significant relationship between the two variables as indicated by the results (sig = 0.093<0.1, t = 0.235, t = 1.695). Results of a study conducted by Karim et al., (2020) who came to the conclusion that adopting an audit strategy plays a major role in enhancing audit quality and the overall audit process,

supported by the results of this hypothesis. This prevents them from falling under any legal or regulatory restrictions that would materially affect the financial statements.

The third hypothesis (H3) predicts a positive significant impact of audit documentation on the effectiveness of the audit process. The result shows that the variables are significantly associated (sig = 0.000<0.01, p = 0.560, t = 4.297). This finding supports the idea that audit documentation is a means by which the auditor can demonstrate to outsiders that an effective audit has been planned and performed while minimizing their liability for an unsuccessful audit. It confirms the findings of a study by McNellis et al., (2021) which showed that when audit documents are written properly in accordance with requirements, legal professionals notice improved audit quality and reduced auditor responsibility.

The fourth hypothesis (H4) suggests a positive significant association between the adoption of audit technology tools and the effectiveness of the audit process. The results showed a significant positive relationship between the variables, (sig=0.064<0.1, β =0.282, t=1.871). The findings are in line with those of (Pedrosa et al., 2020), which showed that the use of CAATs as an audit methodology enables auditors to conduct fast and effective audits of IT audit assignments. Ensuring timely completion of work and enhancing auditor effectiveness are all things CAATT may do to assist auditors in doing a better job in terms of performance, accuracy, quality and efficiency. In addition, it improves the effectiveness and efficiency of the audit profession (Pedrosa and Costa, 2012; Jacob, 2011; Curtis and Payne, 2008).

Table 6: Results of Regression Analysis for Offshore

Hypothesis	Variable	VIF	Unstandardized Coefficient Beta	t	P-value
	Constant B ₀		5.313	1.418	0.159
H ₁	Audit Planning	1.796	0.052	0.425	0.672
H ₂	Strategy	4.848	0.235	1.695	0.093*
H ₃	Documentation	3.541	0.560	4.297	0.000***
H ₄	Types of Technology	1.184	0.282	1.871	0.064*

*significant at 10% level; **significant at 5% level; ***significant at 1% level

Source: SPSS Report

6. CONCLUSION

The ability of the audit function to achieve an intended outcome that affects business operation, risk management, and good governance is known as audit effectiveness (Lenz and Hahn, 2015; Alzeban and Gwilliam, 2014). The aim of this study is to examine the effects of audit planning, audit strategy, and audit documentation on the effectiveness of the audit process. It also seeks to investigate the relationship between the effectiveness of the audit process and the use of audit technology tools.

Data was collected from 106 certified public auditors and accountants who are members of the Lebanese Association of Certified Public Accountants (LACPA). A questionnaire was conducted to collect useful information from respondents in order to test four hypotheses through multiple regression analysis. The data collected reflect the perceptions of auditors regarding the audit process of offshore companies in Lebanon.

For offshore companies, the results showed that the second, third, and fourth hypotheses were supported, while hypothesis one was not. In particular, the results show that both audit strategy and audit documentation have a positive and significant impact on the audit process's effectiveness. This reveals that offshore companies take into account these two dimensions in their audit process as a forward step to come to terms with the International Standards on Auditing requirements. On the other hand, audit planning has been found to have no significant impact on the effectiveness of the audit process. The lack of the adherence to accounting standards and regulations, the environment in which offshore companies operate and the presence of tax havens that encourage tax evasion are all important factors that may impede audit planning to enhance the effectiveness of the audit process of offshore companies. The result of hypothesis four shows an association between the adoption of audit technology tools and the effectiveness of audit

process. This reflects that offshore companies have benefited from using audit technology taking its advantage in terms of time spent digitizing the audit process, as it allows auditors to spend less time on paperwork and manage risks effectively.

Regarding the impact of audit planning, audit strategy, and audit documentation on the effectiveness of the audit process in the Lebanese offshore companies, this study makes a significant contribution to the literature. It also investigates the usefulness of audit technology in the audit process of Lebanese offshore companies. Research in Lebanon regarding those associations is limited, and there is insufficient literature highlighting the importance of this topic. As well as highlighting the significance of improving the effectiveness of the audit process in offshore companies. On the other hand, the practical importance of this research will be in its findings and results that provide significant benefits to audit professionals and practitioners who follow appropriate audit planning, audit strategy, and audit documentation while conducting the audit to avoid risks, errors, and high costs. This research aims to help develop appropriate policies to avoid any risks arising from improper use of audit technology tools and to provide policymakers with guidance on the opportunities to use these tools in the audit process.

The researchers faced restrictions regarding the size of the sample used in this study. This limitation could affect the concluded results, as the smaller the sample size, the higher the marginal error. In addition, the current research approached the topic from LACPA's point of view only, and it was limited to offshore companies, so findings may not be generalized to other companies.

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Appendix: Validity Tests Factor Loading, KMO and Bartlett's

Variable	Item	Factor loading	Factor loading after removing low items	KMO	Bartlett's	Significance (P-value)
Audit planning	Q1	0.636	0.631	0.788	350.476	0.000
	Q2	0.783	0.783			
	Q3	0.767	0.768			
	Q4	0.438	0.443			
	Q5	0.573	0.587			
	Q6	0.645	0.677			
	Q7	0.242*				
	Q8	0.590	0.599			
	Q9	0.693	0.701			
Audit strategy	Q10	0.895		0.842	929.405	0.000
	Q11	0.821				
	Q12	0.781				
	Q13	0.709				
	Q14	0.688				
	Q15	0.732				
	Q16	0.749				
	Q17	0.745				
	Q18	0.638				
	Q19	0.514				
Audit documentation	Q20	0.622		0.880	916.944	0.000
	Q21	0.676				
	Q22	0.718				
	Q23	0.689				
	Q24	0.709				
	Q25	0.631				
	Q26	0.598				
	Q27	0.674				
	Q28	0.687				
	Q29	0.722				
Adoption of audit technology tools	Q30	0.580		0.709	125.574	0.000
	Q31	0.501				
	Q32	0.492				
	Q33	0.707				
Effectiveness of audit process	Q34	0.718		0.864	975.061	0.000
	Q35	0.595				
	Q36	0.639				
	Q37	0.444				
	Q38	0.638				
	Q39	0.441				
	Q40	0.580				
	Q41	0.491				
	Q42	0.747				
	Q43	0.763				
	Q44	0.671				
	Q45	0.841				

Source: SPSS Report