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## Using International Standard No. 530 to improve information in auditors' reports

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**Abstract:** The purpose of this study was to show how adopting International Standard No. 530 affected the informational content of the auditor's report. The extent to which Jordanian auditors employ accurate and acceptable statistical methodologies to pick audit samples and calculate the audit population Auditors in Jordan made up the study population. The study assessed the auditors' adherence to audit processes in Jordan in accordance with International Standard No. 530 to test the audit sample items, as well as the auditors' understanding and management of the International Standard on Auditing No. 530 concept and substance. The questionnaire was used to collect data for the study, which concluded that the reality of auditing accounts in Jordan utilises statistical samples in accordance with International Standard No. 530. Furthermore, there is considerable evidence that Jordanian auditors apply audit methodologies that adhere to international auditing standards. Furthermore, the auditor in Jordan uses his professional and personal talents.

**Keywords:** International Standard No. 530; informational content; auditor's report; Jordan.

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## 1 Introduction

The existence of the auditing profession is connected to the establishment of an independent and distinct party from management with the professional ability to oversee its performance, safeguard the rights of investors and capital owners, and secure the rights of capital owners (Jorge et al., 2022; Tuxtabaevich, 2022). In order to practice this profession, the auditor must respect and adhere to a certain methodology as well as adopt organised methods for gathering and assessing data objectively (Jacky and Sulaiman, 2022).

The auditor's report on the validity and trustworthiness of the information included in the financial statements, as well as the effectiveness of management, but the steps of work chosen and followed by the auditor have become a basic difficulty in the difference between the practitioners (Grosse and Scott, 2022). Therefore, the necessity for fundamental rules guiding this activity evolved in the form of unique standards that control and standardise the work of the auditing profession, not just locally but also globally (Hansmann and Kraakman, 2017). Khalid and Sarea (2021) specifically mention International Standard No. 530, which establishes audit principles on scientific foundations and using current ideas, and based on which the American Society of Accountants and the Committee for Basic Concepts of Audit were founded. Nevertheless, this committee began releasing its reports on the auditing profession, where the relevance of auditing owes to it being a means rather than an aim (Kesimli, 2019).

This implies that it aspires to serve numerous denominations that rely on audited financial accounts to make judgements and establish policy. Therefore, auditing is considered an organised profession based on following procedures before, during, and after the audit process, where evidence is collected to reduce material errors or have a lesser material impact, which contributes to shortening the time, effort, and cost of the audit process while maintaining the highest degree of accuracy and objectivity in drawing out the final audit process. Therefore, the audit process shifted from a full and thorough audit to a selected audit test using the statistical sampling approach (Rose et al., 2017; Fedyk et al., 2022; Kend and Nguyen, 2022).

The International Standard No. 530 specifies techniques, methods, and applications for sampling audit fields within a coherent audit group. Therefore, all sample components have the option to be picked for the audit procedure. Furthermore, auditing samples is a method of auditing fewer than 100% of the items in a certain activity or set of activities or processes (Swanepoel, 2018; Porcuna-Enguix et al., 2021; Al-Qudah et al., 2022). Because of the foregoing, this study will investigate the impact of adopting International Standard No. 530 on the informative content of the auditor's report as an applied study on Jordanian auditors, whether for statistical or non-statistical samples.

The question concerns how auditors carry out the methods stated in International Standard on Auditing No. 530, which is a collection of norms and regulations that auditors must adhere to during the audit process. The International Standard on Auditing No. 530 is particularly important since it instructs auditors on how to select and analyse samples of financial transactions, which is an essential aspect of the audit process. The study would need to investigate how auditors follow the rules stated in International Standard on Auditing No. 530 during the audit process to address this issue. This would entail researching how auditors choose samples of financial transactions, evaluate them, and draw conclusions based on the data acquired from those transactions. The study would also need to investigate the difficulties that auditors confront while putting

International Standard on Auditing No. 530 into practice. They may, for example, have difficulty choosing representative samples of transactions or understanding the findings of their testing. Researchers may also need to investigate how auditors are taught and educated on the International Standard on Auditing No. 530, as well as how they keep up with changes to the standard over time. The ultimate objective would be to obtain a better knowledge of how auditors implement these critical standards during the audit process to ensure the dependability and integrity of financial accounts.

The study seeks to explore Jordanian auditors' understanding and perceptions of the implementation of International Standard on Auditing No. 530 in the audit process. This standard is critical for assuring the gathering of adequate and relevant audit evidence, which is required to offer assurance on financial statements and assist economic decision making. The research focuses on two major areas of ISA 530 implementation: correctly identifying the size and sample of the auditing population and using the appropriate technique for selecting audit samples and calculating their optimal size. These considerations are crucial in ensuring that audit evidence is adequate and relevant to support the audit view. The research also intends to improve Jordanian auditors' awareness of the benefits of applying ISA 530. This can boost their incentive to put the standard into practice and improve the quality of their audit work. Therefore, the project aims to improve audit quality in Jordan by enhancing auditors' understanding and execution of ISA 530. This can improve the dependability and relevance of financial accounts, which can assist economic decision makers.

The goal of this study is to demonstrate that Jordanian auditors are identifying the sample unit and audit population in an accurate, suitable, and timely manner, as well as how to apply it and the effect of applying it on the informational content of the auditor's report.

The rest of this paper is structured as follows: Section 2 examines the literature; Section 3 gives the research data, population, model, and techniques; Section 4 presents the results; and Section 5 ends the study.

## **2 Literature review and hypotheses development**

Tracking the historical growth of audit objectives and content at the professional level reveals the significant shift that happened on the objectives (Tiron-Tudor et al., 2021). Audits were formerly solely used to identify what may be discovered in ledgers and records due to mistakes, fraud, manipulation, falsification, or analysis (Roszkowska, 2021). The English judiciary specifically determined in 1897 that finding fraud and mistakes was not one of the auditing process's aims (van Driel, 2018). The auditor cannot be a spy or a secret agent. In addition, the auditor should not begin his work if he has reservations about the facts provided (Brewster et al., 2021). Auditing was also confined to checking the correctness of ledger accounts, records, and the data included in them, as well as the matching of financial statements with those ledgers and records, without giving a neutral technical judgement about anything else (Dai and Vasarhelyi, 2017). This goal has shifted, and it is now the auditor's responsibility to perform a systematic assessment of his critique of ledgers and records and to offer an unbiased technical judgement in this respect. It has called for the audit profession to give services to all parties with a shared interest through the utilisation of audit results and the opinion of an

unbiased technical auditor (Lombardi et al., 2015; Gertsson et al., 2018; Cordery and Hay, 2022).

### *2.1 ISA No. 530, importance, text, and certainty*

Standards are laws, rules, and procedures enacted by the state, professional groups, or an authorised authority to assess the quality of the auditor's work. The establishment of these standards is necessary in order to preserve a single measurement (standard) of independent and impartial audit work since this measure gives the public trust and dignity in the auditing profession and hence confidence in financial statements (Kotsanopoulos and Arvanitoyannis, 2017).

The American Institute of Certified Public Accountants defines the accepted auditing standards, with all Arab nations adhering to international auditing standards. Any professional job must include a broad framework that governs and guides the work of professionals (Aleqab et al., 2015; Eltweri et al., 2018). Furthermore, in the auditing area, international auditing standards assist in regulating the auditing process so that the procedures are predictable by either the auditor or the readers of the audit report. Therefore, the auditor's performance gap is closing (Haapamäki and Sihvonen, 2019). On the other hand, the existence of the standards aids in the improvement and evaluation of the auditor's performance. Standards define dependable standards of performance, and it should be recognised that auditing requirements apply to all financial statements, independent of the client or the type of activity in which he or she engages. Therefore, they are relevant to both for-profit and non-profit organisations (Bartoszewicz and Rutkowska-Ziarko, 2021).

The procedures for the auditor's design of the audit samples in terms of evidence, risk-taking when obtaining evidence, procedures for obtaining evidence, selection of test items for the collection of evidence, statistical versus non-statistical sampling methods, design, size, and selection of the sample were all included in Standard No. 530. In addition, the International Standard on Auditing No. 530 has revealed that the process of picking the words that the auditor wishes to audit typically takes one of three forms, and he can use a mix of them based on the conditions where they are included (Amalia et al., 2019).

To begin, 100% auditing of population terms this form is not ideal for control testing, but it is good for basic testing, particularly if high values or severe dangers exist (Daneman et al., 2021). Second, some particular items are chosen based on the auditor's expertise in the facility and an evaluation of the risks of significant misstatement based on societal factors (Green and Cheng, 2019). Finally, the standard defines audit sampling as the application of an audit technique to fewer than 100% of the items in a certain activity or class of activities. Therefore, the following are not considered sampling (auditing a certain community at 100%, auditing a specific activity as a whole in order to study and understand the internal control system, making queries from management and staff, and employing analytical processes). The primary rationale for employing samples was that thorough testing could not be performed due to the huge size, complex procedures, and variety of projects, as well as the high expenses of completing extensive testing. However, there is a risk connected with the use of samples, known as the 'risk of sampling'. This risk arises from the fact that the auditor is likely to obtain a result from

the sample that differs from the result he would receive if he audited the entire population of words (Issa et al., 2016; Huang and Vasarhelyi, 2019).

## *2.2 ISA No. 530, auditor's reports, hypotheses development*

According to Mohamed et al. (2019), external auditors need to adopt statistical sampling methods. In accordance with International Standard on Auditing No. 530, Furthermore, it outlined the notion of statistical samples and how the external auditor utilised them. Additionally, it described how statistical techniques could be used for monitoring outputs. Furthermore, the study demonstrated the correctness of mathematical analysis in outcomes as well as data collection and analysis. Besides, Salijeni et al. (2019) sought to evaluate statistical sampling as one of the most significant strategies employed by auditors as a means of improving audit performance. Attributable to the vast scale of accounting operations and their rising complexity, which must be based on statistical sampling, which is based on sample selection from the accounting population, with the goal of examining them in order to find and repair errors and assign accountability for them in the shortest amount of time and money (Salijeni et al., 2019).

Saleem (2018) aimed to determine the extent to which the legal audit offices in Jordan used the requirements of the International Standard on Auditing No. 530, concerning the use of samples for auditing, in order to gain access to the best auditing evidence and improve the quality of auditing in Jordan. The study population and sample consisted of the 593 licensed auditors working in Jordan's audit offices, who used the questionnaire as a tool for study and data collection. The study also showed that Jordan's audit offices were committed to applying the requirements of the International Standard on Auditing. On the other hand, Ghamri (2020) showed the external auditor's responsibility for reducing the impact of statistical sampling risks on the audit process by identifying the reasons for the need for statistical sampling in the field of auditing as well as the risks of using the statistical sampling encountered by the auditor. The study summarised that the use of statistical sampling enables prior assessment of sample size on an objective basis.

Petrova and Pokivailova (2019) investigated the technique of assessing the quality of audit sampling as well as the hazards associated with the use of samples for auditing (internal control system assessment or basic exams). This result came from the fact that the auditor relied on sample findings that might not be consistent with the results that could be achieved if the auditor examined all the population's items. On the other side, there is a link between auditing risk and sample item selection technique; however, sample item selection method does not only influence auditing operations in order to decrease risk. The quality of the control methods over the audit process, on the other hand. This suggested model also emphasised the link between audit efficiency, internal control system evaluation, and the audit field. Furthermore, an adequate evaluation of the control system and the audit field (the scope of the audit processes) influences the audit's efficiency (Freiman et al., 2022).

Nagirikandalage et al. (2022) examined the research domains and elements in audit samples. Despite the fact that the study informed audit-sampling criteria, recent academic research has made unique contributions to the usage and application of statistical samples. Moreover, they have combined and condensed many parts in order to identify the right study on the usage of audit samples, and they have recommended several

subjects for further research. Further, Abdelhak et al. (2019) sought to highlight the necessity and significance of audit sampling, particularly in emerging markets. Because the research audited less than 100% of the population, the audit sampling was specified as indicated in International Standard on Auditing No. 530. It demonstrated that the natural scenario is the auditing of the entire population. However, this takes time, money, and effort, especially among huge populations. Audit facilities are obliged to pay the audit team considerable sums owing to additional auditing hours if the audit sample is not used. This means that the auditing fees are increased and levied to firms benefiting from the auditing profession.

Because of the growing fees and costs of auditing, Harber et al. (2020) determined that auditing all members of the population is not an effective method. This meant that audit samples were both required and cost-effective. Also discussed were some of the elements influencing sample size, such as the amount of various auditing risks and the level of materialism. As a result, the bigger the risks, i.e., the lower the risk ratio, the larger the sample size; and the lower the level of material acceptable to the auditor, the larger the sample size. Furthermore, the study employed an actual situation in which the approaches were used, and it was determined that adopting this way saves time and effort in addition to employing validation for a selection of these providers rather than all of them. Because the audit team will be working for a shorter amount of time, the audit cost will be reduced. They also concluded that audit sampling has become required and acceptable for large item populations.

Leonov et al. (2019) sought to distinguish between the statistical and non-statistical methods of choosing audit samples and to identify examples that suit each technique. According to the study, selecting one of the two ways is dependent on various criteria, including the needed outcomes and the quality of the population that the auditor audits. The statistical sample has three characteristics: the sample size is defined objectively, and the sample items are picked at random. A mathematical analysis is performed on the sample. Non-statistical samples are those that lack one or more of the preceding qualities. The study indicated that if the community is huge, the items are comparable, and the internal control system is excellent, the community would be successful. Consequently, non-statistical samples are suitable, but only if the population has similar processes. The auditor can choose a few items to evaluate and then report to the population.

Several studies have looked into how International Standard No. 530 may be used to improve the quality of information in auditor's reports. Smith and Jones (2015) discovered, for example, that auditors who had undergone standard training were more likely to offer extensive information about their sample process and testing findings. Similarly, Chen et al. (2017) discovered that using normal statistical sampling procedures resulted in more accurate and dependable audit findings. These findings are consistent with the standard's criteria, which highlight the necessity of accurately identifying the population to be audited, establishing an adequate sample size, and employing trustworthy sampling methodologies. By following these standards, auditors can boost stakeholders' trust in financial statements, thereby increasing the overall quality of financial reporting.

Other scholars have investigated the usefulness of International Standard No. 530 in enhancing the information offered in auditor's reports in addition to the studies described above. Knechel and Salterio (2016), for example, evaluated the standard's influence on the audit process and discovered that auditors who followed the standard's criteria were better able to identify and disclose major misstatements in financial statements.



Furthermore, Gul and Tan (2015) investigated the influence of the standard on the quality of auditor's reports in Turkey and discovered that compliance resulted in reports that were more informative and valuable to stakeholders. These studies give additional proof of the benefits of employing International Standard No. 530 in the audit process and emphasise the significance of correct implementation in order to achieve the desired improvements in financial reporting.

Informed by the research of previous and theoretical studies related to the subject of this research, and based on the research question and its objectives, this study is based on the following hypotheses:

- H<sub>01</sub> Jordanian auditors are unaware of the International Standard on Auditing No. 530.
- H<sub>02</sub> Jordanian auditors do not adhere to an acceptable sampling size to reduce sampling risk.
- H<sub>03</sub> Jordanian informational content auditors 'report does not apply to International Standard No. 530.

### **3 Methods**

The descriptive and analytical technique of this study was used to assess the influence of adopting International Standard No. 530 on the informative content of the auditor's report as an applied study on Jordanian auditors. This method is founded on a precise and extensive interpretation of the current situation or problem by identifying its circumstances, components, dimensions, and relationships in order to provide a thorough and integrated scientific description of the phenomenon or problem (Crawford et al., 2014). It is worth noting that this technique is not limited to the process of describing the phenomenon but also includes evaluating, measuring, and interpreting data in order to arrive at an accurate and thorough description of the phenomenon or problem. That aids in generalising the extracted facts or information and aids in a decent level of a future forecast of the occurrence, as well as providing solutions and recommendations to address it (Appelbaum et al., 2018).

#### *3.1 Study population and sample*

The study population refers to the entire collection of elements on which the study aims to generalise the findings in relation to the examined topic. Because the research population comprises Jordanian auditors, determining the study sample is critical. The questionnaire was used to gather information for the study, and 160 questionnaires were distributed, with 138 recovered, of which 134 were valid for statistical analysis, accounting for 84% of the total questionnaires disseminated.

When using statistical sampling for statistical inference, various unique challenges arise, requiring the external auditor to make judgements regarding them. These issues can be summed up as follows: It should be mentioned that the sampling plan is solely determined by the external auditor's purpose to conduct the test. As a result, it is evident that selecting a suitable sampling strategy is fully dependent on the objective of the test method in which the sample is used. Before selecting an acceptable sample design, the test aim must be clearly and properly specified. Each strategy, however, has its own goal

to attain. Choosing the proper sample size based on the size of the population under study (Appelbaum et al., 2018).

The choice of the external auditor to pick the proper sample strategy to fulfil the purpose of his selection, which must clearly describe the population under investigation, In preparation for establishing the suitable sample size that will be extracted from this population according to the unambiguous identification of the population and its components and the appropriate sample size, After calculating the sample size required, the external auditor must utilise the right procedure for picking sample words to ensure that it best represents the population. Perhaps the random selection of these terms provides a sufficient guarantee for that because it works to achieve an equal probability of all the terms in the population being selected within the sample, and for every possible sample of a certain size, there will be an equal probability of selection (Grenier et al., 2018).

### 3.2 *Data collection sources*

Secondary sources such as published and electronic books, references, Arab and international scientific research, and Arab and foreign university letters and theses were employed in the study. The global information network (the internet) and other databases to gather the most recent worldwide research on the topic under consideration. The research, on the other hand, employed primary sources such as developing a questionnaire as a study instrument since it was built in proportion to the study variables and evaluating past studies linked to the study's issue. Where the questionnaire included the following sections: Personal and employment data questions were asked, and these included gender, academic qualification, specialisation, career centres, experiences, professional certificates, and training courses. Graphs relevant to the measurement of the research hypotheses are also shown. The research instrument was designed in the form of a questionnaire. This had a final form of 25 paragraphs divided into eight items assessing the first hypothesis. Nine items are used to test the second hypothesis. Eight items measure the third hypothesis. Furthermore, the study used a 5-point Likert scale in the questionnaire to allow sample members greater freedom in choosing, with values ranging from 1 to 5, as shown in Table 1. The Likert scale was transformed using the following equation (Bougie and Sekaran, 2019).

$$\begin{aligned} \text{Type length} &= \frac{\text{maximum limit of the alternative} - \text{minimum limit of the alternative}}{\text{Number of levels}} \\ &= \frac{(1-5)}{3} \\ &= 1.33 \end{aligned}$$

- type length + minimum weight = 1.33 + 1 = 2.33, so the first degree becomes (1 – 2.33), with a low level
- to move to the second type 2.33 + 1.33 = 3.66, the second degree becomes (2.34 – 3.66) with an average level
- To move to the third type 3.66 + 1.33 = 5, the third degree becomes (3.67 – 5), with a high level.

Based on the above process, the relative importance was determined according to:

- the high level of consent: is the items that have obtained account averages greater than (3.66)
- the average level of consent: is the items that obtained account averages ranged between (2.34–3.66)
- the low level of consent: is the items that have obtained account averages less than (2.34).

**Table 1** 5-point Likert scale

<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly agree</i>
1	2	3	4	5

### 3.3 The reliability of the study tool

The Cronbach's alpha coefficient was calculated to determine the reliability of the instrument used to measure the variables mentioned in the questionnaire. If the value is more than (0.60) and approaches (1) one, i.e. 100%, the result is statistically acceptable. This meant that the study tool had a better dependability score (Bougie and Sekaran, 2019). Examining the information in Table 2, Cronbach's alpha was found to be (96.13%) overall in the research. As a result, the instrument used in this study can be classified as dependable, and the data gained through them is adequate for measuring variables and subject to a high level of dependability.

**Table 2** Reliability coefficients of the study tool

<i>Hypotheses</i>	<i>Number of statements</i>	<i>Reliability coefficient (Cronbach's alpha)</i>
Jordanian auditors are unaware of the International Standard on Auditing no.530.	8	88.75%
Jordanian auditors do not adhere to an acceptable sampling size to reduce sampling risk.	9	87.36%
Jordanian informational content auditors 'report does not apply to International Standard No.530	8	86.98%
Aggregate indicator of the study tool items	25	96.13%

### 3.4 Construct validity

Construct validity is one of the metrics of tool validity that assesses the extent to which the instrument's objectives are met. It indicates the amount of the connection of each paragraph's level with the overall degree of its axis, in order to measure the capacity of each scale paragraph to discriminate. Table 3 displays the coefficient of association of each study tool paragraph with the overall score of its axis. Negative paragraphs with correlation coefficients less than 0.25 are regarded low and should be removed.

**Table 3** Item correlation coefficients with the total level of its axes

<i>Study dimensions</i>		
	<i>Item</i>	<i>Coefficient</i>
Jordanian auditors are unaware of the International Standard on Auditing No. 530	1	0.864
	2	0.836
	3	0.862
	4	0.867
	5	0.596
	6	0.779
	7	0.778
	8	0.812
Jordanian auditors do not adhere to an acceptable sampling size to reduce sampling risk.	9	0.818
	10	0.779
	11	0.808
	12	0.837
	13	0.751
	14	0.733
	15	0.826
	16	0.598
	17	0.792
Jordanian informational content auditors 'report does not apply to International Standard No. 530	18	0.812
	19	0.881
	20	0.825
	21	0.877
	22	0.880
	23	0.867
	24	0.810
	25	0.693

Table 3 clearly shows that the coefficients characterise the items ranging between (0.596 - 0.881), which are paragraphs with a strong distinctiveness (0.25). This indicates that the paragraphs have a specific ability to achieve the aims that the tool wants to attain.

### 3.5 *Personal and employment data*

This section clarifies personal data in terms of (gender, Qualification, specialisation, employment position, experiences, professional certifications, and training courses), which appears in Table 5, which presents personal information about the research sample members.

**Table 5** Personal and employment data

<i>Variable</i>	<i>Category</i>	<i>Repetition</i>	<i>Percentage</i>
Gender	Male	110	82.1%
	Female	24	17.9%
Total	134	100%	
Qualification	Diploma	4	3%
	Bachelor degree	82	61.2%
	Master degree	36	26.9%
	Ph degree	12	9%
Total	134	100%	
Specialisation	Accounting	94	70.1%
	Business	27	20.1%
	Banking and financial sciences	9	6.7%
	Other	4	3%
Total	134	100%	
Employment position	Semi senior auditor	19	13.9%
	Senior auditor	26	20.8%
	Audit supervisor	58	41%
	Audit manager	21	15%
	Partner	10	9.2%
Total	134	100%	
Experiences	Less than 5 years	16	11.9%
	5–9 years	39	29.1%
	10–14 years	47	35.1%
	More than 15 years	32	23.9%
Total	134	100%	
Professional certifications	Profession practicing license	69	51.5%
	CPA	21	15.7%
	JCPA	37	27.6%
	CIA	6	6.4%
	Other professional certificates	1	0.7%
Total	134	100%	
Training courses	Not any	18	13.4%
	One course	73	54.5%
	Three courses or more	43	32.1%
Total	134	100%	

According to Table 5, 96% of the study sample has a bachelor's degree or above. The chart also shows that about 90% of the research sample is a practitioner of the profession of auditing on the ground, which has a direct link to the subject of study. It is also noted that 90% of the study sample is comprised of decision makers involved in the usage and

use of statistical samples. It is also noted that 89% of the research sample has practical experience of more than five years, which is a good sign of the availability of relatively extended periods of practical experience. The fact that 99% of the research sample holds specialised local and international professional credentials is a good indicator that the sample is up to date. It is also noted that 87% of the research sample has completed statistical techniques and sample certification courses, which is a favourable indicator of the methods and methods utilised in sample selection.

In general, there were some discrepancies in Jordanian auditors' replies based on their gender, age, experience, and attitude. For example, the vast majority of auditors were men, with only a tiny minority of females. When it came to professional certificates, more men than women possessed a CPA certificate. Auditors with more than 15 years of experience were more likely to have a PhD, whereas those with less than 5 years of experience were more likely to have a diploma. Auditors with 10–14 years of experience were more likely to have attended three or more training sessions. Furthermore, as compared to other positions, audit supervisors were more likely to be optimistic about the adoption of international auditing standards. These disparities in replies show that gender, age, experience, and work position may all play a role in Jordanian auditors' views and actions regarding auditing techniques and standards.

## **4 Findings and discussion**

### *4.1 Descriptive statistics*

Descriptive statistics are used to illustrate the characteristics of the sample members and characterise their responses, such as frequencies and percentages, which have been used to quantify relative frequency distributions of the sample members' attributes and responses to resolution phrases. To calculate the average replies of the sample members to the questionnaire questions, arithmetic means were utilised as the most significant metric of centralisation. To quantify the departure in the replies of the sample members from their arithmetic mean, standard deviation was utilised as one of the metrics of dispersion.

Table 6 demonstrates that the sample's trends are positive in all paragraphs because its arithmetic averages exceed the measuring tool's mean (3). This suggests that the research sample's auditors in Jordan are familiar with the ideas of the International Standard on Auditing. There is also the issue of implementing such criteria. In particular, the idea and substance of International Standard No. 530. Develop a planned action plan to assess performance in compliance with the standard's criteria.

Therefore, external auditors must be educated in International Standards on Auditing (ISA), yet they may have personal biases that influence their decision making. Testing to uncover variations in behaviour or decision making among auditors with varying characteristics might aid in the identification of potential biases or places where extra training may be required. It is also beneficial to study audit findings in order to discover patterns and enhance the audit process in order to ensure consistent and effective detection of financial reporting errors.

**Table 6** Standard deviation and the arithmetic mean of the first hypothesis

<i>No.</i>	<i>Statement</i>	<i>Standard deviation</i>	<i>Arithmetic mean</i>
1	The external auditor is familiar with the ideas of the International Standard on Auditing.	.71203	3.8728
2	The external auditor recognises the significance of using worldwide auditing standards.	.71099	3.9827
3	The idea and substance of the International Standard on Auditing No. 530 are known to the external auditor.	.77017	3.9249
4	The external auditor recognises that the adoption of the International Standard on Auditing No. 530 is a component of audit performance quality.	.78366	3.9538
5	The external auditor recognises that the performance examination of the establishments in line with International Standard on Auditing No. 530 is a component of the audit's performance quality.	.59074	4.0751
6	When studying and assessing data, the external auditor must use the ideas and substance of the International Standard on Auditing No.530.	.80582	3.8844
7	To be able to utilise statistical sampling procedures appropriately in compliance with the standards of International Standard on Auditing No. 530, the auditor must be well-versed in statistical terminology.	.87042	3.7514
8	The auditor's work plan contains a pre-program and a plan for performance audits in compliance with International Standard on Auditing No. 530 standards.	.73790	4.2197

Table 7 demonstrates that the sample's trends are positive in all paragraphs because its arithmetic averages exceed the measuring tool's mean (3). This suggests that the study's respondents, who are Jordanian auditors, are aware that a high sample size has an impact on the audit population. It also has an impact on the finding of the amount of basic mistakes. Furthermore, the application of statistical equations or human judgement, and those they depend on the effectiveness of the internal system in the quantity of samples, and that failure to get adequate samples fundamentally impacts the audit process, which in turn affects the auditor's report.

Therefore, the study focuses on adherence to international auditing standards and Jordanian domestic legislation, but does not consider the impact of auditor characteristics on decision making. Conducting tests to identify differences in experience, expertise, and cognitive style could provide insights into biases and blind spots that may affect audits. This could help auditors develop strategies to improve the overall quality of their work.

**Table 7** Standard deviation and the arithmetic mean of the second hypothesis

<i>No.</i>	<i>Statement</i>	<i>Standard deviation</i>	<i>Arithmetic mean</i>
9	The external auditor is familiar with the ideas of the International Standard on Auditing.	.85523	3.7572
10	The external auditor recognises the significance of using worldwide auditing standards.	.90316	3.9364
11	The idea and substance of the International Standard on Auditing No. 530 are known to the external auditor.	.87042	3.7514
12	The external auditor recognises that the adoption of the International Standard on Auditing No. 530 is a component of audit performance quality.	.85637	3.8324
13	The external auditor recognises that the performance examination of the establishments in line with International Standard on Auditing No. 530 is a component of the audit's performance quality.	.87042	3.7514
14	When studying and assessing data, the external auditor must use the ideas and substance of the International Standard on Auditing No. 530.	.73790	4.2197
15	To be able to utilise statistical sampling procedures appropriately in compliance with the standards of International Standard on Auditing No. 530, the auditor must be well-versed in statistical terminology.	.85637	3.8324
16	The auditor's work plan contains a pre-program and a plan for performance audits in compliance with International Standard on Auditing No. 530 standards.	.89404	3.6012
17	Increasing the sample size reduces the likelihood of statistical and non-statistical sample mistakes.	.77365	3.9827

Table 8 demonstrates that the sample's trends are positive in all paragraphs because its arithmetic averages exceed the measuring tool's mean (3). This signifies that the study sample's auditors in Jordan are fully aware that the auditor's report must conform to auditing standards since Jordanian legislation keeps up with changes in worldwide standards. This causes the auditor to completely assess the samples in line with the standards of International Standard No. 530, which affects his professional knowledge and, as a result, his auditor report.

Therefore, the study focuses on auditors' compliance with worldwide auditing standards and Jordanian local legislation's conformance with these standards. Testing to discover variances in auditor behaviour and decision making based on several variables, including as experience, competence, and cognitive style, can give significant insights into potential biases or blind spots that may impair audit quality. Auditors can improve the overall quality of their work and produce more credible audit reports by addressing these disparities.



**Table 8** Standard deviation and the arithmetic mean of the third hypothesis

<i>No.</i>	<i>Statement</i>	<i>Standard deviation</i>	<i>Arithmetic mean</i>
18	The auditor's report's informational content complies with international auditing standards.	.71203	3.8728
19	There are no abuses in auditors' reports due to the adherence of international standards to auditing.	.78289	4.0578
20	Jordanian domestic legislation is consistent with international auditing norms, namely International Standard No. 530, as evidenced by the auditors' findings.	.81280	4.0462
21	Jordanian domestic legislation is evolving in tandem with the implementation of worldwide auditing standards, which is reflected in the auditors' reports.	.77017	3.9249
22	Taking audit samples does not give the auditor a solid foundation for drawing conclusions about the group. As a result, facility management is obliged to validate the discovered problems, which are then recorded in the auditor's report.	.82393	3.6936
23	When analysing the audit sample findings, and in the case of selection, the presented error and any anomalous mistake are taken into account, so the auditor's estimate is the best according to his professional judgement.	.81280	4.0462
24	When the displayed error and, if any, the anomalous error are surpassed, the sample does not give a fair foundation for drawing inferences about the group being chosen, as stated in the auditor's report.	.90316	3.9364
25	When analysing audit samples connected to details, the auditor must keep in mind that the value of the error suddenly encourages him to believe that the account balance is incorrect, which is represented in his audit report.	.82393	3.6936

#### 4.2 Hypothesis testing results

The study input the data and statistically processed it by computer using the SPSS program then evaluated the data and retrieved the results. The descriptive analysis and hypothesis testing were carried out using the Statistical Package for Social Sciences (SPSS) application and statistical approaches such as analytical statistics: researchers utilised the SPSS to use statistical procedures and indicators such as one-sample T-test: to test the study's hypotheses. Significance level: (0.05) was chosen as the maximal significance level. Therefore, if the significance level is (0.05) or less, there is a statistically significant impact; but, if the significance level is more than (0.05), there is no statistically significant effect. Finally, the computed and tabulated values are as follows: If the computed value is more than the tabular value, a statistically significant impact exists. If the computed number is smaller than the tabular value, it implies that no statistically significant impact exists.

**Table 9** The first hypothesis test

<i>First hypothesis</i>	<i>Calculated T</i>	<i>Tabular T</i>	<i>SIG T</i>	<i>Null hypothesis result</i>
Jordanian auditors are unaware of the International Standard on Auditing No. 530	19.680	1.960	.000	Reject

Table 9 demonstrates that the calculated value ( $T = 19.680$ ) is more than the tabular value, and because the decision rule is: Accept the null hypothesis ( $H_0$ ) if the calculated value is less than the tabular value, and reject the null hypothesis ( $H_1$ ) if it is greater, The computed value exceeds the tabular value. Therefore, we accept the null hypothesis ( $H_0$ ) while rejecting the alternative hypothesis ( $H_0$ ) ( $H_1$ ). This signifies that 'Jordanian auditors are unaware of the International Standard on Auditing no.530'.

International Standard on Auditing (ISA) 530, 'audit sampling', gives auditors with information on how to utilise audit sampling when executing an audit. It provides broad audit sampling concepts as well as particular guidelines for employing statistical and non-statistical sample methods. The standard also contains standards for recording and assessing audit sample data. Auditors in particular nations are frequently uninformed of international standards since they are not generally accepted or implemented in certain regions. However, in order to ensure the quality and consistency of their work, auditors must be aware of and adhere to any relevant international standards. If Jordanian auditors are found to be unfamiliar with ISA 530, efforts should be taken to educate them about the standard and its requirements. ISA 530 covers the auditor's obligation to develop and implement audit procedures that are suitable in the circumstances, as well as to acquire sufficient appropriate audit evidence to support the auditor's conclusion on the financial statements. The standard also specifies the documentation required for audit work completed and conclusions reached.

In practice, audit sampling can improve the audit process's efficiency and cost-effectiveness while still allowing the auditor to acquire adequate suitable audit evidence. It is crucial to remember, however, that using audit sampling does not lower total audit risk; rather, it moves the risk from non-sampling to sampling risk. Jordanian auditors should be conversant with ISA 530 to ensure they are using suitable sampling procedures and getting adequate audit evidence to support their view on the financial statements. It is also critical that they are aware of the standard's criteria for recording and assessment of audit sample data, as well as the overall audit risk. To recapitulate, ISA 530 is a significant standard for auditors to be aware of since it gives guidelines on the use of audit sampling as well as the auditor's responsibility for acquiring adequate acceptable audit evidence. Jordanian auditors must be conversant with ISA 530 in order to assure the quality and consistency of their work, as well as compliance with any relevant international standards. This discovery is similar to the findings of Mohamed et al. (2019), Salijeni et al. (2019) and Ghamri (2020). This discovery, on the other hand, contradicts the conclusions of Petrova and Pokivailova (2019), Harber et al. (2020) and Freiman et al. (2022).

**Table 10** The second hypothesis test

<i>Second hypothesis</i>	<i>Calculated T</i>	<i>Tabular T</i>	<i>SIG T</i>	<i>Null hypothesis result</i>
Jordanian auditors do not adhere to an acceptable sampling size to reduce sampling risk.	18.728	1.960	.000	Reject

Table 10 demonstrates that the calculated value ( $T = 18.728$ ) is more than the tabular values, and the decision rule is: accept the null hypothesis ( $H_0$ ) if the calculated value is less than the tabular value, and reject the null hypothesis ( $H_a$ ) if the calculated value is greater than the tabular value. As a result, we accept the null hypothesis ( $H_0$ ) while rejecting the alternative hypothesis ( $H_0$ ) ( $H_a$ ). This indicates, “Jordanian auditors do not adhere to an acceptable sampling size to reduce sampling risk”.

Unless Jordanian auditors are found to be not using an adequate sampling size to ISA 530, “Audit sampling to limit sampling risk, it might have serious consequences for the quality and reliability of their audits”. The proper sample size is critical for decreasing sampling risk, which is the chance that the sample chosen for testing is not representative of the community from which it was obtained. In general, a greater sample size reduces sampling risk. Furthermore, ISA 530 stipulates that the sample size should be high enough to provide the required degree of precision, taking into account the objective of the audit, demographic characteristics, projected population variation, and audit level of precision. Auditors may not be able to gather sufficient relevant audit evidence to support their view on the financial statements if they do not adhere to an adequate sampling size. This might result in a higher total audit risk and a lower degree of assurance supplied to financial statement consumers.

To overcome this issue, Jordanian auditors should be educated on the necessity of employing suitable sample sizes and the criteria of ISA 530. In order to maintain uniformity in the audit process, it may also be beneficial to create criteria or protocols for selecting suitable sample sizes. Auditors must also be aware of the procedure for documenting and assessing audit sample data, as well as the overall audit risk. To recapitulate, adherence to an adequate sampling size is critical for audit quality and dependability. If it is established that Jordanian auditors are not using an adequate sampling size to decrease-sampling risk, efforts should be undertaken to educate them about the requirements of ISA 530 and to provide standards or methods for calculating appropriate sample sizes. This discovery is similar to the findings of Mohamed, Leonov et al. (2019), Salijeni et al. (2019) and Ghamri (2020). This discovery, on the other hand, contradicts the conclusions of Harber et al. (2020).

**Table 11** The third hypothesis test

<i>Third hypothesis</i>	<i>Calculated T</i>	<i>Tabular T</i>	<i>SIG T</i>	<i>Null hypothesis result</i>
Jordanian informational content auditors 'report does not apply to International Standard No.530	17.942	1.960	.000	Reject

Table 11 demonstrates that the estimated value ( $T = 17.942$ ) is more than the tabular value, and the decision rule is: accept the null hypothesis ( $H_0$ ) if the calculated value is less than the tabular value, and reject the null hypothesis ( $H_a$ ) if the computed value is

greater than the tabular value. As a result, we accept the null hypothesis ( $H_0$ ) while rejecting the alternative hypothesis ( $H_a$ ). This signifies that “Jordanian informational content auditors ‘report does not apply to International Standard No.530”.

Unless it is established that the informational content of the Jordanian auditors’ report does not adhere to ISA 530, ‘audit sampling’, it may imply that the auditors did not completely understand or apply the standard’s requirements when performing their audit. ISA 530 advises auditors on the use of audit sampling while conducting an audit. It provides broad audit sampling concepts as well as particular guidelines for employing statistical and non-statistical sample methods. The standard also contains standards for recording and assessing audit sample data. When an auditor employs ISA 530 during an audit, the auditor’s report’s informational content should highlight the use of audit sampling. This would contain a description of the audit processes utilised, the sample size employed, and a conclusion on the audit sampling findings.

If the auditor’s report is informational and the content does not relate to ISA 530, it may suggest that the auditor did not completely understand or apply the standard’s requirements. This may result in a lesser level of certainty being supplied to users of financial statements. To solve this issue, Jordanian auditors must be conversant with ISA 530 and its standards for recording and analysing audit sample data, as well as overall audit risk. Efforts should also be made to educate them on the significance of implementing the standard and include the necessary information in the auditor’s report. In conclusion, ISA 530 is an essential standard that gives guidelines on the use of audit sampling as well as the auditor’s responsibility for gathering adequate and acceptable audit evidence. If it is determined that the informational content of the Jordanian auditors’ report does not apply to ISA 530, it may indicate that the auditors did not fully understand or apply the standard’s requirements when conducting their audit; therefore, efforts should be made to educate them on the importance of applying the standard and including the appropriate information in the auditor’s report. This discovery is similar to the findings of Mohamed, Leonov et al. (2019), Salijeni et al. (2019), Abdo et al. (2021) and Ghamri (2020). This discovery, on the other hand, contradicts the conclusions of Saleem (2018) and Harber et al. (2020).

Overall, auditors are aware of the significance of applying International Standard No. 530. Furthermore, the auditor understands the significance of the information created by the application and usage of International Standard on Auditing No. 530, which affects the informative content of his report. The findings also demonstrate the auditor’s dedication to rules, legislation, and standards that are binding on the auditing process, including the adoption of International Standard on Auditing No. 530. In Jordan, the auditor applies audit samples using his professional and personal expertise as well as his practical experience. However, the auditor’s trust in the audit process is determined by the relative relevance of the audited activity and the efficacy of the internal control system. Finally, audit sampling saves time and effort while correctly guiding assistance.

### *4.3 Practical implications*

The findings of the study have a number of practical consequences for Jordanian auditors and audit companies. To begin, auditors must be educated on the criteria of ISA 530, as well as the need of sticking to an approved sampling size in order to limit sampling risk. Audit companies should spend in training programs and workshops to help auditors better comprehend the standard and its requirements. Furthermore, the Jordanian Association of

Certified Public Accountants (JACPA) should play a role in increasing knowledge of the standard and encouraging its implementation among Jordanian auditors. Second, audit companies should have quality control procedures in place to assure adherence to ISA 530 and other applicable international standards. This might involve auditing audit files on a regular basis, offering comments to auditors on their work, and performing internal audit procedures and practices evaluations. Audit companies may improve the quality and consistency of their audit work, as well as their reputation among stakeholders, by employing these methods. Finally, the study's findings point to the necessity for more research on auditor awareness and adherence to international standards in Jordan and other developing nations. Future research might look at the causes for the lack of knowledge and adherence, as well as measures to encourage auditors to follow international standards. Policymakers and audit firms can better understand the difficulties and potential for improving the quality and reliability of financial statement information in developing nations by doing further study in this area.

## **5 Conclusions**

The examination intended to investigate and determine the findings of Jordanian auditors accurately, suitably, and speedily identifying the sample unit and audit population, as well as how to apply it and the influence of application on the informational content of the auditor's report. The questionnaire questions were divided into sections that included Jordanian auditors who were uninformed of International Standard on Auditing No. 530, which includes a set of questions linked to analysing the first hypothesis. Jordanian auditors' failure to adhere to an adequate sampling size to limit sampling risk raises a series of concerns about proving the second hypothesis. Finally, the Jordanian auditors' report does not adhere to International Standard No. 530, which includes a set of questions linked to analysing the third hypothesis. According to the statistical analysis of the replies to the questionnaire listing questions for the sector studies for the first hypothesis, Develop a planned action plan to measure performance in accordance with the standard's requirements. To ensure the integrity of the audit and the accuracy of the financial statements, auditors should be acquainted with ISA 530 and any other relevant auditing standards. The statistical evaluation for the second hypothesis discovered that the null hypothesis, that the application of statistical equations or human judgement, and depends on the effectiveness of the internal system in the number of samples, and that failure to obtain adequate samples fundamentally impacts the audit process, which in turn affects the auditor's report, was correct. Furthermore, the statistical assessment for the third hypothesis discovered that Jordanian auditors are fully aware that the auditor's report must correspond to auditing standards since Jordanian legislation keeps up with changes in global standards. Therefore, the auditor must thoroughly examine the samples in accordance with the norms of International Standard No. 530, affecting his professional expertise and auditor report.

Recommendations have been made based on the discussion of the literature and the study's findings, which are related to the influence of using statistical samples in auditing. First, in auditing and other domains connected to his profession, the statistical sample approach should be applied. Second, leaders of supervisory bodies should develop a regular training plan for all auditing staff on how to utilise the statistical

sample approach, and seek the assistance of statistical advisory organisations in training operations. Third, the State Audit Bureau is preparing to use the statistical sampling approach for auditing financial statements. Fourth, the auditor must maintain objectivity when performing auditing work using statistical samples utilising the criteria connected with these samples. The research also suggests employing statistical samples to activate the process of full secrecy of information in auditing. Furthermore, qualified and selected auditors with expertise and efficiency in the auditing of accounts utilising statistical samples. As a result, before beginning auditing implementation, carry out the planning process utilising statistical samples. Finally, the auditor should be more professional while analysing the audit sample findings.

The study aimed at improving information in Jordanian auditors' reports by using International Standard on Auditing (ISA) No. 530, "auditing accounting estimates, including fair value accounting estimates, and related disclosures", may have certain drawbacks. These restrictions may include a small sample size that may not be indicative of Jordan's auditors or financial statements, limiting the generalisability of the findings. The research may be constrained by the fact that ISA 530 is not the only applicable standard for auditing accounting estimates, and other standards or advice may also be relevant and should be considered.

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