

The Effect of COVID-19 Pandemic on the Auditing of Financial Statements- An Analytical Study in Kurdistan Region / Iraq

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Abstract:

This research aims to examine the effect of the COVID-19 pandemic on the work of external auditors when conducting audits of financial statements in five main areas (professional judgment and skepticism, audit evidence, accounting estimates, going concern, and subsequent events). To achieve the objectives of the study, a questionnaire consisting of 40 paragraphs was distributed to 85 external auditors in the Kurdistan Region and Iraq. The questionnaire was analyzed using the statistical package for social sciences (SPSS) and the linear regression model, and the researcher reached several results, the most important of which is: the reduction of working hours in the offices due to the quarantine procedures imposed by the government or because the external auditor (or one of the employees in the audit office) was infected with the epidemic; a delay in the audit offices in completing the audit work and issuing the audit report; and a statistically significant impact relationship between COVID-19 and the five areas of the external auditing process.

Keywords: coronavirus, professional skepticism, audit evidence, accounting estimates, going concern and subsequent events.

المخلص:

يهدف هذا البحث إلى دراسة تأثير جائحة COVID-19 على عمل المدققين الخارجيين عند إجراء عمليات تدقيق البيانات المالية في خمسة مجالات رئيسية (الحكم المهني والشك، وأدلة المراجعة، والتقديرات المحاسبية، والاستمرارية، والأحداث اللاحقة). ولتحقيق أهداف الدراسة تم توزيع استبيان مكون من (40) فقرة على (85) مدققاً خارجياً في إقليم كردستان والعراق. تم تحليل الاستبانة باستخدام الحزمة الإحصائية للعلوم الاجتماعية (SPSS) ونموذج الانحدار الخطي، وتوصلت الباحثة إلى عدة نتائج أهمها: تقليص ساعات العمل في المكاتب بسبب إجراءات الحجر الصحي التي فرضتها وزارة التربية والتعليم. الحكومة أو بسبب إصابة المراجع الخارجي (أو أحد موظفي مكتب التدقيق) بالوباء؛ تأخر مكاتب المراجعة في استكمال أعمال المراجعة وإصدار تقرير المراجعة؛ وعلاقة تأثير ذات دلالة إحصائية بين COVID-19 والمجالات الخمسة لعملية التدقيق الخارجي.

الكلمات المفتاحية: فيروس كورونا، الشك المهني، أدلة المراجعة، التقديرات المحاسبية، الاستمرارية والأحداث اللاحقة.

پوخته

نهم توژیژینهوهیه ئامانجی لیکۆلینهوهیه له کاریگهریییهکانی پهتای کۆفید-19 لهسهه کاری وردبینیکهرانی دهرهکی له کاتی ئهنجامدانی وردبینی له بهیاننامه داراییهکان له پینچ بواره سهههکییهکان (حوکمدانی پیشهیی و گومان، بهلگهی وردبینی، خهملاندنی ژمیریاری، کارکردن، و رووداووهکانی دواتر). بۆ گهیشتن به ئامانجهکانی توژیژینهوهکه، پرسیارنامهیهک که پیکهاتیوو له (40) بابتهی بهسهه (85) وردبینی دهرهکی له ههریمی کوردستان و عیراق دابهشکرا. پرسیارنامهکه به بهکارهینانی پاکجی ناماری بۆ زانسته کۆمه لایهتیهکان (SPSS) و مۆدیلی پاشهکشهی هیللی شیکرایهوه و توژیژهرهکه گهیشته چهند ئهنجامیک که گرنگترینان بریتین له: کهمکردنهوهی کاتهکانی دهوام له فهرمانگهکان بههۆی ریکارهکانی کهمنتینه که له لایهن و مزارهتی پهروهردهوه سهپینراوه. حکومهت یان بههۆی نهوهی که وردبینی دهرهکی (یان کارمندیکی فهرمانگهی وردبینی) تووشی پهتاکه بووه؛ دواکهوتنی فهرمانگهکانی وردبینی له تهواوکردنی کاری وردبینی و دهرکردنی راپۆرتی وردبینی؛ و پهیهوهندیهکی کاریگهری ناماری گرنگ له نیوان کۆفید-19 و پینچ دۆمهینی پرۆسهی وردبینی دهرهکی.

کلله وشه: کۆرۆنا، گومانی پیشهیی، بهلگهی وردبینی، خهملاندنی ژمیریاری، کاره بهردهوامهکان و رووداووهکانی دواتر.

1.Introduction

The emergence of the COVID-19 virus in China in late 2019 created new and rapidly changing circumstances that external auditors had not faced before. Restrictions imposed on travel, social distancing, and staying at home affected the work of the external auditors since audits must continue to comply with the required standards, which may require different and enhanced challenges for the external auditors while auditing the financial statements.

2. Research Methodology and Literature Review:

2.1 Research Methodology:

2.1.1 Research problem:

At a time when the Corona epidemic continued to spread at the global level, with the increasing risks and economic, social, and financial repercussions and the significant impacts on the daily activities of individuals, in addition to social bans and curfews, this disruption led to the difficulty of accessing reliable audit evidence in addition to the associated uncertainties. Due to the conditions of the Corona pandemic, which made it more difficult to evaluate accounting estimates and the risk of companies' going concern, These challenges may affect the confidence of investors in the financial performance of companies and can lead to various financial difficulties, and the need for investors and other stakeholders for reliable and transparent information to restore confidence in financial statements is more than ever before, which has increased the interest in external auditing.

The research problem can be expressed by the following questions:

- Has the practice of professional judgment and skepticism increased during the Corona pandemic?
- Have the Corona pandemic conditions affected gathering a reliable and efficient audit evidence in curfew conditions?
- Did the uncertainties associated with COVID-19 conditions make it difficult to evaluate accounting estimates?
- Has the Corona pandemic affected the going concern basis?
- Is the Corona pandemic considered a post-modifiable or non-modifiable event?

2.1.2 Research Importance

The importance of the research stems from the attempt to link the academic efforts with the operational steps in practice by clarifying the importance of the role of external auditors in relation to the economic repercussions. The aim of this research is to find out how the conditions created by COVID-19 affected the work of the external auditors and the problems they face such as: the curfew, difficulty of dealing with advanced communications technologies, reductions of working hours which caused delays in completing the audit work and to show the alternative procedures and plans that the external auditors followed, to indicate the most efficient and effective ones, and to follow them in conditions similar to the COVID-19 pandemic. This is necessary and appropriate because the reliability of audit reports must be maintained at a high level so that stakeholders can make reasonable investment decisions in times of uncertainty based on specific information from the financial statements. Given that this study was conducted at a time when the full effects of the ongoing pandemic were unknown, the results can be used as a guide for future researchers looking to understand how the COVID-19 pandemic affected audit quality post-pandemic.

2.1.3 Research Objectives

This study aims to:

- highlighting the practical difficulties faced by auditors in the Kurdistan Region of Iraq due to the Corona pandemic and its effects on the work of external auditors in specific areas.
- Find out external auditing, its definition and its importance.
- Identify the risks and obstacles facing external auditors as a result of the repercussions of the Corona pandemic.
- Determine how the Corona epidemic has affected auditing the financial statements.
- Highlighting the areas of external audit that were affected by the pandemic.

2.1.4 Research Hypotheses

The main hypothesis of the study can be formulated as follows:

“There is a statistically significant impact of COVID-19 pandemic on the external auditors work in the Kurdistan Region/Iraq while auditing financial statements”.

This hypothesis can be divided into five sub-hypotheses as follows:

H 1: There is a statistically significant impact relationship of COVID-19 pandemic on the professional judgment and skepticism.

H 2: There is a statistically significant impact relationship of COVID-19 pandemic on the audit evidence.

H 3: There is a statistically significant impact relationship of COVID-19 pandemic on the accounting estimates.

H 4: There is a statistically significant impact relationship of COVID-19 pandemic on the going concern.

H 5: There is a statistically significant impact relationship of COVID-19 pandemic on the subsequent events.

2.1.5 Research Method

A descriptive analytical approach was used based on the following sources to accomplish the research goals:

1. Primary sources (practical part): by distributing a questionnaire and examining the responses to determine whether the hypothesis is valid. The statistical program (SPSS) was adopted to analyze the questionnaire data by using a linear regression model.
2. Secondary sources (theoretical part): referencing related studies, books, theses, dissertations, periodicals, the publications of international accounting associations and organizations, as well as instructions issued by the competent authorities and websites related to the subject of the study.

2.2 Literature Review:

Among the most important research conducted on the subject of the study:

-(Mansour, 2021) **Auditing profession in light of new Corona Virus impact on the Palestinian economy.** The most important objectives that the researcher sought to achieve:

1. Clarification of the most important developments that occurred in the auditing profession in light of the sudden crisis of the Corona virus, which affected all aspects of life, especially human health at the forefront, followed by the economies of the whole world.
2. Explain the auditor's work mechanism and prepare his report according to global developments.

The most important conclusions reached by the researcher:

- a. The sudden decline in economic activities and pressure on the financial resources of the Palestinian Authority have exposed its revenue resources to high risks due to their decline and the increase in public expenditures.
- b. The effects of the emerging Corona virus pandemic prompted public opinion to reconsider the auditor's report during crises as well as on subsequent events, with the possibility of adding an emphasizing paragraph to the auditor's report.
- c. The auditor will continue to work remotely in light of the current work environment that requires physical distance in order to support the economic sectors professionally.

-(Aljablee, 2020): **The impact of the Corona pandemic (COVID-19) on the preparation and auditing of the financial statements.** The most important goal the researcher wanted to achieve:

1. Introducing the Corona pandemic and the most important economic effects that it has caused and is expected to cause in the future.
2. Statement of the impact of the pandemic on accounting practices for the preparation of financial reports and the most important areas of the accounting response to the effects of its spread.
3. A statement of the impact of the pandemic on the professional practices of reviewing financial reports on the entity's ability to continue.

Among the most important conclusions reached by the researcher:

- a. The repercussions of the Corona pandemic have a great impact on the global economy and on the performance of companies, and this impact has implications for the financial performance of business establishments at the present time.
- b. The need for management to reflect the expected historical, current, and future information in the financial reports prepared on the basis of the going concern assumption.
- c. Considering the events resulting from the repercussions of the Corona pandemic within the financial reports prepared on 12/31/2019 as non-modifiable events in accordance with the requirements of the International Accounting Standard (IAS10).

- (Al-Aamaedeh & Alhosban, 2021) **the impact of coronavirus (covid -19) on external audit from the viewpoint of external auditors.** The most important goal they wanted to achieve is:

1. Identify and assess the risks and obstacles that external auditors face while dealing with corona delinquency, and determine how to respond to those risks in light of corona delinquency.
2. identifying the consequences of Corona delinquency in the form of a method to gather audit evidence in light of Corona delinquency, one may determine the function of the auditor in dealing with audit evidence in light of Corona delinquency.
3. recognizing the challenges the external auditor may encounter in resolving problems that have an impact on the external audit work environment in light of the Corona delinquency.

Among the most significant findings the researcher came to were:

- a. With the rise of Corona delinquency, new duties and opportunities for auditors have emerged, including the need to assure the dependability of computer networks and provide methods for client communication.
- b. Many individuals are working from home to stop the new Coronavirus from spreading (COVID-19). The same is valid for external auditors.
- c. Since it depends on monitoring customer requirements remotely or performing accounting and auditing operations from various locations where customers are located, cloud accounting is one of the crucial things that must be adhered to during the impact of Corona pandemic.

What distinguishes this study from previous studies is that previous studies tended to focus on external auditing in general, and instead focused on the effects of the COVID-19 pandemic on the economy and financial statements. While this study focuses on the issues that external auditors had to deal with during the COVID-19 pandemic in five main areas (judgment of practice and professional skepticism, audit evidence, accounting estimates, continuity, and subsequent events).

3. External Auditing during covid-19 pandemic

3.1 Definition and importance of External Auditing

The definitions of external auditing have changed with the different bodies and parties issued by them. Despite the formal difference, they serve the same goal. The following are the most important definitions:

External auditing is "the audit model that a third party follows to check that the financial statements are presented correctly, according to global experiences. The distinctiveness of this audit stems from the process's objectivity, which ensures that money is spent in compliance with the laws, and policies of the organization. The most typical type of external audit is a financial statement review, which assesses the accuracy of a society's financial reports using accepted accounting principles. An external audit is frequently regarded as a yearly need"(Satka, 2017).

It was also defined as "the process of examining the financial statements and accounting records carried out by an independent auditor with the aim of giving a neutral technical opinion on the extent of the fairness of the financial statements and the extent of compliance with accounting standards in general or international financial reporting standards" (Ahmed et al., 2018).

From the above definitions, the external auditing can be defined as: An organized process for reviewing the financial statement of a company wherein independent auditors have the task of carefully checking the validity of the company's financial statements in order to find out if there is any error in the records due to fraud, error or embezzlement and then report it to the stakeholders in the company.

The importance of the external audit can be mentioned in the following points:

- a. The profession of external auditing performs a unique function. While managers create financial statements and design systems of internal control, the objective of an external auditing is to provide opinions about the reliability of the financial statements and, as part of an integrated audit, to provide opinions about the effectiveness of internal control systems. It can be valuable only if the public believes in the objectivity and accuracy of the opinions provided by the external auditors (Johnstone et al., 2013).
- b. The use of a good external auditing is a tool that allows to reduce administrative opportunism, reduce agency conflicts between the various actors in the company and protect the interests of shareholders by ensuring the relevance and reliability of financial statements. Therefore, audit quality should increase when information asymmetry between shareholders and manager's increases (Asma, 2016).
- c. Verify the correct presentation of the financial statements. This type of audit has the uniqueness of the integrity of the process and attempts to provide evidence that the money is being spent in accordance with the law, regulatory procedures, and company policies. An external auditing is often seen as an annual obligation (Satka, 2017).

3.2 External Auditors' Risks Due to Corona-19 pandemic

The COVID-19 crisis is a once-in-a-generation systemic shock to the global economy, and the growth of transmission is accelerating. It is possible that nothing will ever be the same again. There has even been talk of a "pre-COVID-19" and "post-COVID-19 world" (ACCA, 2020). On December 31, 2019, China notified the World Health Organization (WHO) of cases of unidentified pneumonia in Wuhan, Hubei Province. It was called Coronavirus Disease 2019 (COVID-19). Within two weeks, the disease spread from Hubei Province to other provinces in China (Tao et al., 2021). On January 7, the Chinese Center for Disease Control and Prevention (CDC) identified the new coronavirus from a patient's throat swab sample and named 2019-nCoV by the World Health Organization (Chen et al., 2020).

Despite increased complexities, auditors should remain focused on high-quality audits that full fill objectivity standards. As a result, the following are the most significant risks that auditors face as a result of Corona Covid-19 pandemic (Murphy, 2020), (Al-Amaedeh & Alhosban, 2021):

- a. Risks associated with the nature of the relationship with new and existing clients: In order to assess risk, auditors must first acknowledge the client's industry, processes, and capital structure. There are various risk assessments in industry sectors such as real estate and restaurant that face a really high risk as a result of the pandemic.
- b. The risks related to the field of remote auditing: The nature of remote auditing has contributed to the inclusion of challenges in the audit process, which is direct contact with auditors and accountants, in addition to a struggle to meet their owners to obtain information that enhances the audit process.
- c. Internal control risks: Changes in operational processes and office closings as a result of the epidemic have a significant impact on controls and risk assessments.
- d. Risks associated with changes in the nature of the organization's operating practices: Regardless of the location or size of the office, remote work has led to changes in how auditors work.
- e. Risks in the changes taking place in issues facing accounting: There are risks such as late payment due to Corona, which affected accounting practices, such as risks of continuity process, accounting estimates, risks of theft and embezzlement, and government aid.

3.3 The Impact of the COVID-19 Pandemic on the Auditing of Financial Statements

The Financial Reporting Council (FRC) issued a Specific Notice in March 2020 regarding the impacts of the COVID-19 pandemic on audit quality, which serves as a guide for auditors regarding issues to consider regarding the impact of social distancing measures on audit quality (FRS, 2020). A quality audit in light of the coronavirus pandemic may significantly affect auditors' ability to discern material errors and if a company does not truly guarantee the highest quality of audit methodology, it is expected to reduce shareholders' sense of confidence in reported earnings numbers, increasing investment risk and the book value of the company's shares (Gerged et al., 2020).

Clients and their auditors work together to respond to the changes occurring as a result of the COVID-19 pandemic (The Independent Variable (considerations faced external auditors during COVID-19 pandemic), and then the external auditors should pay attention to (The Dependent Variable (the auditing process within five areas).

- a. They will need to exercise professional skepticism and apply professional judgment when it comes to the possibility of material misstatements as a result of these circumstances.
- b. They may need to develop alternative procedures to collect appropriate and sufficient audit evidence to support their audit opinion.
- c. Paying attention to the issue of accounting estimates as a result of cases of uncertainty, as many items of the financial statements cannot be measured accurately and can only be estimated.
- d. Disclosure of going concern and subsequent events as requiring special attention due to the impact of COVID-19.

4. Material and Method

4.1 Research Community and Sample

The research community consists of the external auditors, practicing the Profession of Controlling and Auditing Accounts in the Kurdistan Region / Iraq, either in the form of auditing companies or auditing offices, whose number is (87) auditors, according to the bulletin issued by the Scientific Society of Certified Accountants/Erbil, for the year 2022. A random sample of (85) auditors was selected from the research community.

4.2 Research instrument

A questionnaire was given to (85) external auditors working in the Kurdistan Region / Iraq. in order to accomplish the study's goals. After removing incorrect forms or those that were not received by the researcher, the number of valid questionnaires was (75), The two axes of the questionnaire were reviewed by three external auditors and six academics to ensure clarity, linguistic integrity, and suitability of the content for the intended purpose, they are presented in the appendix. After receiving the responses from the respondents, the quality of the questionnaire was tested using reliability and validity tests to prove the reliability of the results. The questionnaire contains a set of phrases, the answers to which are graded containing a series of sentences, the responses to which are scored from (strongly disagree) to (strongly agree), on a five-point scale. According to the Likert scale, the responses are given weights ranging from (1) to (5), respectively.

The study was extracted and analyzed using the (SPSS) statistical program by linear regression model and the appropriate statistical tools in order to reach valuable indications and indicators that support the subject of the research.

4.3 Reliability and Validity Tests

In this study, the internal consistency of the model was examined using Cronbach's alpha test. It is a measure of how well a measurement tool performs its function and indicates whether the measurement tool measures the behavior or quality to be measured in other words, reliability is the

ability of agencies to achieve comparable results when used at different times (Sürücü, & Maslakçi, 2020).

Braim (2020) The importance of conducting internal consistency tests to determine whether the constructs can support high reliability was emphasized. and claims that the model constructs must have a minimum value of 0.70 in order to produce the desired internal consistency that can support high reliability. As noted in table (1) below.

Table (1) The results of the reliability test

Statement	Questions No.	Reliability
first axis	10	0.808
second axis	30	0.722

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

While the validity test aims to measure the stability of the results of the survey list, that is, it gives the same results if it is redistributed to the same sample under the same conditions so that it is less than (0.05) (Al-Samadouni, & Abdel Sayaed, 2021).

By finding the correlation coefficient between the degree of each question and the total score of the section and the substantiality of the correlation coefficient, where the correlation test between the questions and the total answers showed high and substantial correlation coefficients so that the total stability of the items was (0.881), and this is good.

5.Results and Discussion

5.1 Statistical Description of the Research Sample

As exhibited in Table (2) the most of the study sample obtained the certificate from the Arab Institute for Accounting and Auditing with a percentage of (46.7%) and the Higher Institute of Certified Public Accountants in the Kurdistan Region with a percentage of (33.3%).

As for the class of the participants (78.7%) were from the second class, while (21.3%) were from the first class. As for the years of practical experience, most of them range between (5-10) at a rate of (45.3%), and this is a positive indicator that gives some credibility to rely on the results and recommendations of the study and may give a positive indication of the correctness of the answer and that the questionnaire's paragraphs were clear.

Table (2) Personal Information

The certification body:	Frequency	Percentage
Higher Institute of Accounting and Financial Studies	10	13.3
Higher Institute of Certified Public Accountants in Kurdistan Region	25	33.3
Arab Institute for Accounting and Auditing	35	46.7
Higher Diploma in Accounts Control/University of Baghdad	5	6.7
Total	75	100.0
Class:		
First	16	21.3
Second	59	78.7
Total	75	100.0
Work experience (year):		
Less than 5	13	17.3
5- 10	34	45.3
11-15	12	16.0
16- 20	8	10.7
21 and more	8	10.7
Total	75	100.0

Source: prepared by researcher based on result of SPSS program

5.2 Descriptive Analysis

The questionnaire contains two axes, the first is the independent variable (COVID-19 pandemic challenges), the second axis is the dependent variable (the auditing process within five areas: professional judgment and Skepticism, audit evidence, accounting estimates, going concern and subsequent events).

5.2.1 The Independent Variable (COVID-19 pandemic challenges)

As shown in Table (3) below, there is a slight difference in the percentages of the study sample's opinions in choosing the COVID-19 pandemic challenges when conducting the audit of financial statements. The majority of opinions agreed on the tenth paragraph (The delay of the audit offices in completing the audit work and issuing the audit report due to the reduction of working hours in the offices or because the external auditor -or one of the employees in the audit office- was infected with the epidemic) at mean of (4.12) with a standard deviation (S.D.) of (1.026). Followed by the third paragraph (The need to provide a safe and reliable electronic communication environment between the external auditor and the client due to the difficulty of movement due to quarantine procedures) with a mean (3.80), standard deviation (1.000), followed by the seventh paragraph (some clients face risks to their continuity due to Activity stopped as a result of the imposed curfew) with a mean of (3.72) and a standard deviation of (1.047). The majority of the study sample took a general tendency to agree with all of the following statements.

Table (3)

COVID-19 pandemic challenges when conducting the audit of financial statements

Variables	Mean	S.D.	Seq.
1. The curfew made it difficult for the external auditor to participate in courses and training programs that would develop his continuing professional accounting education.	3.65	1.097	6
2.The ethical requirements of the profession (which were set in circumstances different from those of the pandemic) have become more necessary due to the exceptional circumstances that the pandemic has created.	3.61	1.077	8
3.The need to provide a secure and reliable electronic communication environment between the external auditor and the client due to the difficulty of movement due to quarantine procedures.	3.80	1.000	2
4.The difficulty of some external auditors in dealing with electronic evidence imposed by the conditions of the pandemic, due to the lack of experience with modern software and how to use advanced communication technologies.	3.57	1.080	10
5.The need to follow up on all recent standards and guidelines issued by international and local organizations related to the profession regarding the work of external auditors in the conditions of the pandemic.	3.64	1.135	7
6.The emergence of problems related to the provision of infrastructure and operational requirements necessary for remote communication between audit offices and clients.	3.60	1.115	9
7.Some customers face risks to their continuity due to the cessation of activity as a result of the curfew that has been imposed.	3.72	1.047	3
8.Difficulty in assessing audit risk due to the precarious situation created by the pandemic.	3.65	1.033	5
9.Reducing working hours in companies as a result of the pandemic has led to some delays in issuing financial statements.	3.68	1.164	4
10.The delay of the audit offices in completing the audit work and issuing the audit report due to the reduction of working hours in the offices or because the external auditor (or one of the employees in the audit office) was infected with the epidemic.	4.12	1.026	1

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

5.2.2 The Dependent Variable (the auditing of financial statements within five areas)

5.2.2.1 Professional Judgment and Skepticism

As shown in Table (4) below, the mean percentage ranges between (3-4), the sixth paragraph (The external auditor is required to comply with the Five Core Principles of Professional Ethics - Integrity, Objectivity, Professional Competence and Due Professional care, Confidentiality, and Professional Conduct) to identify, assess and address threats to compliance with the Core Principles - to identify,

assess and address threats to compliance with the Core Principles.) got the approval of the majority with an mean of (4.08) and a standard deviation of (0.912), followed by the fifth paragraph (The external auditor must enrich himself by engaging in formal and informal continuing professional education programs, especially during the pandemic, to face obstacles and reach a sound judgment and opinion) at mean((3.97), standard deviation (0.839).

Table (4) Results of professional judgment and Skepticism

variable	Mean	S.D.	Seq
1.The professional skepticism of the external auditor should increase by broadening the range of judgments to be made about the reliability of electronically submitted evidence that reflects the modern business environment.	3.89	0.709	3
2. It is more necessary for the external auditor to maintain the tendency of professional suspicion when carrying out the audit process, because the chances of material manipulation of the financial statements are much higher than in the past years.	3.75	1.067	4
3. It is highly desirable for the external auditor to be more aware of documentation according to IAS 230, because in the current environment documentation of professional judgments taken serves to explain the auditor's conclusions and enhance the quality of judgment.	3.68	1.176	6
4. The external auditor must use the means of obtaining the necessary evidence to obtain convincing evidence that is sufficient and efficient during the pandemic and the quarantine imposed by the government, which has led to a weaker control environment.	3.71	1.124	5
5.The external auditor must enrich himself by engaging in formal and informal continuing professional education programs, especially during the pandemic, to face obstacles and reach a sound judgment and opinion.	3.97	0.839	2
6.The external auditor is required to comply with the Five Core Principles of Professional Ethics (Integrity, Objectivity, Professional Competence and Due Professional care, Confidentiality, and Professional Conduct) to identify, assess and address threats to compliance with the Core Principles.	4.08	0.912	1

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

5.2.2.2 Audit Evidence

As for the result to audit evidence, the third paragraph (When collecting audit evidence, the external auditor needs to use basic tests -confirmations and inquiries- from third parties, because there was also more audit evidence obtained electronically, and it may not be possible to obtain evidence from previous audit sources, or These sources may not be reliable) at mean (4.01) and standard deviation (0.951) obtained the highest level of agreement. Followed by the second paragraph (When the original physical documents cannot be obtained, the external auditor should verify the general

controls over the applications through which the electronic evidence was produced) at mean (3.96) and standard deviation (0.795) as shown in table (5) below.

Table (5) Results of audit evidences:

Variable	Mean	S.D.	Seq
1.In the event that the original physical documents cannot be accessed, the external auditor must find the audit procedures or basic tests necessary to assess the credibility of the evidence collected electronically.	3.65	1.020	5
2.When the original physical documents cannot be obtained, the external auditor should verify the general controls over the applications through which the electronic evidence was produced.	3.96	0.795	2
3.When collecting audit evidence, the external auditor needs to use basic tests (confirmations and inquiries) from third parties, because there was also more audit evidence obtained electronically, and it may not be possible to obtain evidence from previous audit sources, or These sources it may not be reliable.	4.01	0.951	1
4.The external auditor needs to initiate confirmation communications with banks, customers, vendors, and attorneys with a secure email from the client to the external auditor.	3.77	1.085	3
5.Due to insufficient evidence and documentation, some audit offices had to postpone the inventory process after the closure restrictions were lifted.	3.51	1.143	6
6.When the external auditor is unable to gather sufficient and appropriate evidence, the auditor's opinion needs to be restricted.	3.76	0.984	4

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

5.2.2.3 Accounting Estimates

With regard to the third area (audit of accounting estimates), as shown in Table (6), the fourth paragraph (It is necessary for the external auditor to exercise more professional skepticism when looking at management's judgments regarding accounting estimates) with a mean (4.01) and standard deviation (1.033) obtained the highest level of agreement. Followed by the fifth paragraph (The objective of the external auditor should be to obtain sufficient appropriate audit evidence about whether the accounting estimates and related disclosures in the financial statements are reasonable in the context of the applicable financial reporting framework) with a mean (3.88) and standard deviation (1.127).

Table (6) Results of accounting estimates

Variable	Mean	S.D.	Seq
1.The external auditor should be aware of the new requirements for auditing accounting estimates that come into effect for an audit of accounts for financial years ending on or after December 15, 2020 and that are contained in the revised ISA 540.	3.77	1.034	3
2.The external auditor must pay attention to the risks due to the many problems and judgments that must be taken in the circumstances of the pandemic, when verifying the accounting estimates.	3.55	0.963	6
3. The external auditor should make early contact with clients to find out how they deal with issues related to making accounting estimates, as well as ensure that clients are aware of the level of documentation that they must submit to him.	3.72	1.034	5
4.It is necessary for the external auditor to exercise greater professional skepticism when looking at management's judgments regarding accounting estimates.	4.01	1.033	1
5.The objective of the external auditor should be to obtain sufficient and appropriate audit evidence about whether the accounting estimates and related disclosures in the financial statements are reasonable in the context of the applicable financial reporting framework.	3.88	1.127	2
6.If, due to the uncertain economic environment, an additional audit expert is hired to assess the accounting estimates, and that expert may include additional caveats in the assessment of the estimates, the external auditor needs to consider the effect of these warnings on the scope of the estimates and/or the adequacy of audit evidence.	3.76	1.051	4

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

5.2.2.4 Going Concern

With regard to the fourth area, the fourth paragraph (The external auditor should review the audit risk assessment as well as the main risks of the entity - such as the liquidity position and recoverability of debts - to ensure the entity's ability to continue its activity in the pandemic conditions) at mean (3.87) and standard deviation (1.082), obtained the highest level of agreement, followed by the second paragraph (The external auditor shall gather sufficient acceptable audit evidence to assess whether management's use of the going concern assumption in the preparation of the financial statements is reasonable in the circumstances) at mean of (3.83) standard deviation (0.964) as shown in the table below.

Table (7) Results of going concern

Variable	Mean	S.D.	Seq
1.The external auditor is responsible for evaluating and concluding the appropriateness of management's use of going concern assumption in preparing financial statements under pandemic conditions.	3.69	1.090	4
2.The external auditor shall gather sufficient acceptable audit evidence to assess whether management's use of the going concern assumption in the preparation of the financial statements is reasonable in the circumstances.	3.83	0.964	2
3.The external auditor shall gather sufficient acceptable audit evidence to assess whether there is a material uncertainty related to continuing concern about the entity's ability to continue as a going concern in pandemic conditions.	3.59	1.079	5
4.The external auditor should review the audit risk assessment as well as the main risks of the entity (such as the liquidity position and recoverability of debts) to ensure the entity's ability to continue its activity in the pandemic conditions.	3.87	1.082	1
5.The auditor must determine whether management's plans are achievable, and whether the results of their implementation are likely to improve the situation.	3.69	1.026	3
6.The auditor should determine whether any new facts or information have become available since management's initial assessment.	3.55	0.977	6

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

5.2.2.5 Subsequent Event

Finally, the area (subsequent Events), the results of the fifth paragraph (The external auditor must examine or verify the appropriateness of the disclosure of subsequent events in the financial statements because there are events that do not have a direct impact on the financial statements) at a mean (3.83) standard deviation (0.964), obtained the highest level of agreement, followed by the fourth paragraph (The external auditor is required to perform procedures designed to obtain sufficient and appropriate audit evidence that all events requiring adjustment or disclosure of the financial statements, which occur between the date of the financial statements and the external auditor's report, have been appropriately identified and included in the financial statements), at a mean (3.83) and deviation Standard (0.906), as shown in table (8) below.

Table (8) Results of subsequent event:

Variable	Mean	S.D.	Seq
1.The external auditor shall perform procedures designed to obtain sufficient and appropriate audit evidence that all events requiring adjustment or disclosure of the financial statements, which occurred between the date of the financial statements and the external auditor's report, have been appropriately identified and reflected in the financial statements in accordance with the applicable financial reporting framework.	3.80	0.915	3
2.The external auditor should work with management and those charged with governance to ensure that subsequent events under the pandemic are accurately identified and reflected in the financial statements.	3.73	0.991	4
3.The external auditor is not obligated to perform any audit procedures in relation to the financial statements after the date of the audit report after becoming aware of events that would require amendments to his report.	3.04	1.320	6
4.The external auditor is required to perform procedures designed to obtain sufficient and appropriate audit evidence that all events requiring adjustment or disclosure of the financial statements, which occur between the date of the financial statements and the external auditor's report, have been appropriately identified and included in the financial statements.	3.83	0.906	2
5.The external auditor must examine or verify the appropriateness of the disclosure of subsequent events in the financial statements because there are events that do not have a direct impact on the financial statements.	3.83	0.964	1
6.The external auditor must reserve his opinion if subsequent events are not disclosed in the financial statements because there are events that have a direct impact on the financial statements.	3.52	1.190	5

Source: prepared by the researcher using the SPSS program's statistical analysis findings.

5.3 Test of the Study Hypotheses

The study main hypothesis was: **“There is a statistically significant impact relationship of COVID-19 pandemic on the external auditors in the Kurdistan Region/Iraq while auditing financial statements”**.

We can observe from Table (9) that the independent variable (COVID-19 pandemic) is significant because its p-value is 0.000 and less than 0.05. which means that the hypothesis was proven.

Table (9) test of hypothesis one

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.394	1	3.394	23.775	.000
Residual	10.423	73	0.143		
Total	13.817	74			

Source: result of SPSS program

The finding implies that if the independent variable increases by one unit, then the dependent variable (auditing financial statements within five areas) will increase by (0.369) units on mean. Furthermore, the R² value of (0.496) implies that the independent variable explains (49.6%) of the total variation in the dependent variable as shown in in table (10).

Table (10) Impact relationship of COVID-19 pandemic on certain areas of the auditing process

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.456	0.284		8.651	.000
COVID-19 pandemic	0.369	0.076	0.496	4.876	.000

Source: result of SPSS program

This main hypothesis can be divided to Sub- hypotheses as follows:

H.1: There is a statistically significant impact relationship of COVID-19 pandemic on the professional judgment and skepticism.

Table (11) below shows the results of an ANOVA analysis of the significance of the regression test. We note that the value of (sig. = 0.000) is less than (0.05), and thus the first sub-hypothesis was accepted.

Table (11) test of sub-hypothesis (1)

ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	7.652	1	7.652	32.389	.000
Residual	17.246	73	.236		
Total	24.898	74			

Source: result of SPSS program

while Table (12) shows the standard and non-standard regression coefficients and the standard error (T). According to the results, if the independent variable (COVID-19 pandemic) increases by one unit, the dependent variable (professional judgment and skepticism) will increase by (0.584)units on mean, as indicated by the) R²=.554.) This indicates that the independent variable explains (55%) of the total variance in the dependent variable.

Table (12) The impact of COVID-19 pandemic on professional judgment and skepticism

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.459	.399		3.658	.000
COVID-19 pandemic	.584	.103	.554	5.691	.000

Source: result of SPSS program

H.2: There is a statistically significant impact relationship of COVID-19 pandemic on the audit evidence.

The outcomes of an ANOVA study of the regression test's significance are displayed in the table (13) below. Since (sig. = 0.000) is less than (0.05), the second sub-hypothesis was accepted.

Table (13) test of sub-hypothesis (2)

ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.701	1	3.701	12.748	.001
Residual	21.196	73	.290		
Total	24.898	74			

Source: result of SPSS program

as can be seen from the value, shown in Table (14). The findings indicate that, on mean, the dependent variable (audit evidence) will increase by (0.413) units on mean, if the independent variable (COVID-19 pandemic) increases by one unit, as shown by ($R^2 = .386$). This proves (38%) of the total variation in the dependent variable is explained by the independent variable.

Table (14) impact of COVID-19 pandemic on audit evidence

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.150	.440		4.885	.000
COVID-19 pandemic	.413	.116	.386	3.570	.001

Source: result of SPSS program

H.3: There is a statistically significant impact relationship of COVID-19 pandemic on the accounting estimates.

Due to the value of (sig. = .000), which is less than (0.05) as indicated in the table (15) below, the third sub-hypothesis was accepted.

Table (15) test of sub-hypothesis (3)

ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.935	1	3.935	13.704	.000
Residual	20.963	73	.287		
Total	24.898	74			

Source: result of SPSS program

According to Table (16) findings, the dependent variable (accounting estimates) will increase by (0.366) units on mean, if the independent variable (COVID-19 pandemic) increases by one unit, as indicated by ($R^2 = .398$). This demonstrates that the independent variable explains (39%) of the total variation in the dependent variable (accounting estimates).

Table (16) impact of the COVID-19 pandemic on accounting estimates

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	2.321	.379		6.125	.000
COVID-19 pandemic	.366	.099	.398	3.702	.000

Source: result of SPSS program

H.4: There is a statistically significant impact relationship of COVID-19 pandemic on the going concern.

The fourth sub-hypothesis was accepted as a result of the value of ($\text{sig} = .000$), which is less than (0.05), as shown in table (17) below.

Table (17) test of sub-hypotheses (4)

ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	4.487	1	4.487	16.048	.000
Residual	20.411	73	.280		
Total	24.898	74			

Source: result of SPSS program

According to Table (18) findings, the dependent variable (going concern) will increase by (0.411) units on mean, if the independent variable (COVID-19 pandemic) increases by one unit, as indicated by ($R^2 = 0.425$). This demonstrates that the independent variable explains (42%) of the total variation in the dependent variable (going concern).

Table (18) impact of COVID-19 pandemic on going concern

coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.184	.385		5.678	.000
COVID-19 pandemic	.411	.103	.425	4.006	.000

Source: result of SPSS program

H.5: There is a statistically significant impact relationship of COVID-19 pandemic on the subsequent events.

As shown in the table (19) below, the fifth sub-hypothesis was accepted because the identical value of (sig =.000) is less than (0.05).

Table (19) test of sub-hypothesis (5)

ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.295	1	3.295	11.133	.001
Residual	21.603	73	.296		
Total	24.898	74			

Source: result of SPSS program

According to Table (20) findings, the dependent variable (subsequent events) will increase by (0.361) units on mean, if the independent variable (COVID-19 pandemic) increases by one unit, as indicated by ($R^2 = 0.364$). This demonstrates that the independent variable explains (36%) of the total variation in the dependent variable (subsequent events).

Table (20) impact of COVID-19 pandemic on subsequent events

coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.396	.398		6.026	.000
COVID-19 pandemic	.361	.108	.364	3.337	.001

Source: result of SPSS program

6. Conclusions and Recommendations

6.1 Conclusions: The most important conclusions reached by the researcher:

1. The curfew due to COVID-19 pandemic made it difficult for the external auditor to conduct field audits, in addition to the delay in obtaining the necessary information and data to complete the external audit plan and issue audit reports due to the reduction of working hours in the offices or due to the infection of the external auditor (or an employee of the audit office) with the epidemic.
2. Given the many new and distinct audit difficulties that have arisen as a result of the COVID-19 pandemic, an auditor with professional judgment and skepticism is required. To provide a high-quality audit, auditors must take their responsibilities seriously and with care, follow local laws, and adhere to international and professional standards.
3. Due to the lack of reliable and sufficient evidence, some audit firms have had to use alternative methods to obtain objective evidence, or to postpone the entire audit process if possible, or to issue a scoping type of auditor's report.
4. The high level of uncertainty surrounding the entity's future performance and the factors affecting estimation made valuation more difficult. So the entities were asked to base their estimates on the best available information and to provide the required disclosures or transparency.
5. The current and expected effects of the outbreak of the Coronavirus on the activities of the entity are included in the assessment of the appropriateness of using the going concern assumption. There may be doubts about the continuity of some entities, and the management is required to assess their ability to continue operating.
6. Depending on the concept of subsequent events in accordance with (IAS 10) and based on the timing of this event, the impact of the virus (COVID-19) is a type (II) event, which is a subsequent event that is not expected to affect the amounts recognized in the financial statements prepared at the end of 2019 (it is not recognized as a later event). As for customer audits at the end of the year that falls in 2020 and beyond, they are called events of the first type, and events related to the epidemic may require adjustments to the financial statements or circumstances that arose at the date of the financial statements.
7. According to the opinions of external auditors in the Kurdistan region / Iraq, one of the most important challenges faced the external auditors was: The delay of the audit offices in completing the audit work and issuing the audit report due to the reduction of working hours in the offices or because the external auditor (or one of the employees in the audit office) was infected with the epidemic, at mean of (4.12) and a standard deviation of (1.026), followed by: the need to provide a safe and reliable electronic communication environment between the external auditor and the client due to the difficulty of movement due to quarantine procedures, with an arithmetic average of (3.80) and a standard deviation of (1.000).
8. Regarding the five areas – chosen in this study- within the process of auditing financial statements, the results showed that the most important paragraph of each area was as follows:
 - a. Professional judgment and skepticism: the majority of the study sample agreed with the paragraph: The external auditor is required to comply with the Five Core Principles of Professional Ethics (Integrity, Objectivity, Professional Competence and Due Professional

- care, Confidentiality, and Professional Conduct) to identify, assess and address threats to compliance with the Core Principles, with a mean of (4.08) and a standard deviation of (0.912).
- b. Audit evidence: the majority of the study sample agreed with the paragraph: When collecting audit evidence, the external auditor needs to use basic tests (confirmations and inquiries) from third parties, because there was also more audit evidence obtained electronically, and it may not be possible to obtain evidence from previous audit sources, or These sources it may not be reliable, at a mean (4.01) and the standard deviation of (0.951).
 - c. Accounting estimates: the majority of the study sample agreed with the paragraph: It is necessary for the external auditor to exercise greater professional skepticism when looking at management's judgments regarding accounting estimates, at mean (4.01) and standard deviation (1.033).
 - d. Going concern: the majority of the study sample agreed with the paragraph: The external auditor should review the audit risk assessment as well as the main risks of the entity (such as the liquidity position and recoverability of debts) to ensure the entity's ability to continue its activity in the pandemic conditions, at a mean (3.87) and standard deviation (1.082).
 - e. Subsequent event: the majority of the study sample agreed with the paragraph: The external auditor must examine or verify the appropriateness of the disclosure of subsequent events in the financial statements because there are events that do not have a direct impact on the financial statements, at a mean (3.83) and standard deviation (0.964).
9. Based on the results of multiple regression, the results showed that the Covid-10 pandemic had a statically significant impact relationship on the auditing process, in certain area. The result of the model indicates that Covid-10 pandemic explains (49.6%) of the total variance in the five area of the auditing process.
10. Covid-10 pandemic have a statically significant relationship on the audit process in five areas - professional judgment and skepticism, audit evidence, accounting estimates, going concern, and subsequent events- of the audit process. These pandemic explains (55%) of the changes in the exercise of professional judgment and skepticism, (38%) of the changes in the collection of audit evidence, (39%) of the changes in the use of accounting estimates, (42%) of the changes in the use of the going concern, and (36%) of the changes in subsequent events.

6.2 Recommendations: Depending on the study's findings, the following suggestions can be made during COVID-19 pandemic and any similar circumstances:

1. Auditors are being asked to develop digital skills and make the most of the advantages of cloud computing, such as the ability to work remotely if they are forced to. Technology is changing the way in which companies keep their records, therefore increasing the use of advanced techniques and tools of the auditors.
2. Entities need to maintain risk and crisis management systems and be ready to act when necessary. Strong crisis management helps entities handle all risks, such as the Corona epidemic.
3. External auditors need to be trained and provided with the necessary skills and knowledge to meet the needs of stakeholders and achieve the objectives related to the external audit process. There is a need for integration and cooperation between practitioners of the auditing profession and

academics, scientists, and researchers in this field in all circumstances, especially in light of the Corona pandemic or any other similar circumstances.

4. The commitment of external auditors to exercise more judgment and professional skepticism, to focus on the public interest and the moral responsibilities entrusted to them, to continue to fully apply the principles contained in the auditing standards, and to keep abreast of recent instructions and clarifications issued by international organizations and bodies in the circumstances of the Corona epidemic.
5. International and local organizations and bodies should follow up with external auditors when they use traditional or alternative methods and means as a result of the conditions of the Corona pandemic when collecting evidence. Evaluate and issue new instructions and standards for the most effective and efficient methods.
6. The need to set clear rules for applying the principles and practices of auditing during the Corona virus pandemic or any similar circumstances through local, national, and international agencies and authorities. The auditor's report must disclose the effects of the COVID-19 pandemic, especially if its impact is evident on the going concern assumption of the entities or there is doubt about its continuity.
7. Preparing schedules by international organizations and bodies to distinguish between modification events and non-modification events, when performing work to respond to the auditor's assessment of risks related to subsequent events, including reasons related to the impact of the COVID-19 pandemic. And to benefit from them for other similar circumstances.

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Appendix

List of the names of the questionnaire arbitrators

Seq.	Name	Title	Work places
1	Dr. Ziad Hashem El Sakka	professor	Al Mosul University
2	Dr. Moundal Abdul Jabbar	Assistant Professor	Cihan University - Sulaymaniyah
3	Dr. Silwan Hafez Hamid	Assistant Professor	Mustansiriya University
4	Dr. Shalir Eabdalrahman Rashid	Assistant Professor	Duhok University
5	Nassim Youssef Hanna	Assistant Professor	Salahaddin University
6	Dr. Adnan Nader Hamad	Assistant Professor	Salahaddin University
7	Raed Jassim Hamid	Chartered accountant and auditor	Private audit office
8	Aras Muhammad Saeed	Chartered accountant and auditor	Private audit office
9	Dr. Khaled Yassin Al-Qaisi	Chartered accountant	KHCPA Auditing and Consulting Company