ECONOMIC ANNALS-XXI
ISSN 1728-6239 (Online)
ISSN 1728-6220 (Print)
https://doi.org/10.21003/ea
http://www.soskin.info/ea/

Volume 187 Issue (1-2)'2021

Citation information:
Al-Taee, S. H. H. (2021). Effects of the remote auditing in Iraq during COVD-19.
Economic Annals-XXI, 187(1-2), 197-205. doi: https://doi.org/10.21003/ea.V187-19

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Effects of the remote auditing in Iraq during COVD-19

Abstract. This paper intends to investigate implications of COVID-19 to the Iraqi market environment's remote external auditing strategy. The results of this paper were achieved using a desk research designed to examine the potential effect of COVID-19 crisis on three significant audit quality determinants during the pandemic. These techniques include risk management and risk assessment. A descriptive survey of 25 auditing firms and 127 auditing bureaus has been conducted.
There is a consensus and acceptance to introduce remote auditing by external auditors due to the assumption that the consequences of the COVID-19 pandemic will be the greatest challenge for auditors. Furthermore, under normal circumstances as well as during the pandemic phase, the remote auditing method can be introduced. External auditors can incorporate a remote auditing approach that can be customized to suit the unique needs of their clients.
Keywords: Auditing Approach; External Auditors; COVID-19; Remote Auditing; Iraqi Business
JEL Classification: E24
Acknowledgements and Funding: The author received no direct funding for this research.
Contribution: The author contributed personally to this work.
Data Availability Statement: The author confirms that the data is available from the author upon request.
DOI: https://doi.org/10.21003/ea.V187-19

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Дистанційний аудит в Іраку під час COVD-19
Анотація. У цій статті вивчено наслідки COVID-19 для стратегії віддаленого зовнішнього аудиту іракського ринкового середовища. Було проведено описове дослідження 25 аудиторських фірм і 127 аудиторських бюро. Отримані результати свідчать, що існує консенсус і згода на введення віддаленого аудиту зовнішніми аудиторами виходячи з того, що наслідки пандемії COVID-19 стали найбільшою проблемою для аудиторів. Окрім того, при нормальних обставинах, а також під час фази пандемії, впровадження методу дистанційного аудиту видається можливим. Зовнішні аудитори можуть використовувати підхід віддаленого аудиту, налаштованого відповідно до унікальних потреб клієнтів.
Ключові слова: аудит; зовнішній аудитор; віддалений аудит; COVID-19; іракський бізнес.

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Дистанционный аудит в Ираке во время COVD-19
Аннотация. В этой статье изучены последствия COVID-19 для стратегии удаленного внешнего аудита иракской рыночной среды. Было проведено описательное исследование 25 аудиторских

фирм и 127 аудиторских бюро. Полученные результаты свидетельствуют, что существует консенсус и согласие на введение удаленного аудита внешними аудиторами исходя из того, что последствия пандемии COVID-19 стали самой большой проблемой для аудиторов. Кроме того, при нормальных обстоятельствах, а также во время фазы пандемии, внедрение метода дистанционного аудита представляется возможным. Внешние аудиторы могут использовать подход удаленного аудита, настроенного в соответствии с уникальными потребностями клиентов.
Ключевые слова: аудит; внешний аудитор; удаленный аудит; COVID-19; иракский бизнес.

1. Introduction

This outbreak of the Coronavirus Disease of 2019 (COVID-19) is a major cause for concern because of its effects on public health, the economy, and society. the spread of the COVID-19 pandemic has already had substantial effects on global economics and the financial sector (Goodell, 2020). Turbulence in the global economy along with investor uncertainty has the potential to create a deteriorating climate for businesses, and which thus result in various financial distress. Firms that do not maintain a top standard of audit procedures risk losing shareholders' confidence in published earnings figures, thus growing investment risk and equity capital expense (Gerged et al., 2020). Since investors' confidence has diminished, companies' earnings appear to fluctuate, and these fluctuations decrease over time as the economy goes through a period of turmoil. The consequences of the COVID-19 outbreak are being heavily assessed by different firms around the world such as the UK and India, as their fiscal year-end approaches (Hoekman, 2018). Audit committees, in view of the problems they face in the real world, can find that many businesses either go bankrupt or start manipulating their earnings reports (Aslam et al., 2014). A notice issued by the Financial Reporting Council (FRC) in March 2020 provides guidance to auditors on evaluating the effect of social distancing initiatives on audit quality given the value of auditing for improving investors' decision-making and maintaining the credibility of financial markets. The current state of the economy is making it difficult for audit companies and their customers. As the economy shifts, clients' liquidity, risk, and profitability are all under pressure, which will result in lower audit fees (Bhattacharya et al., 2011; Dai and Yaswng, 2015).

In Australia (Coval and Moskowitz, 2001) found that audit fees rose during the economic crisis. This idea is offered by the writers, who contend that because of an increase in client business risk, there is also a rise in audit effort. COVID-19 crisis has caused the publication of the WGA to be postponed by 15.7 months. Delays such as these make the WGA less useful and allow the government to concentrate on maintaining numbers in the government's official statistical accounting number, released monthly by the Office for National Statistics (ONS). These beneficial technological advancements have been compromised by short-term political opportunism when it comes to manipulating financial details. The more fiscal transparency, the greater public confidence in government because it is justified and because the statistics don't include departures that form public perceptions of fiscal data (Hoekman and Shepherd, 2017; Kachitvichyanukul, 2012). Including the public-private partnership treatment before IFRS that was presented as off-balance sheet in public financial reports, and the continued IFRS treatment of public-private partnerships after IFRS, even if it lowers the net debt ratio and transfers operations outside of the general government boundary (e.g. Network Rail until September 2014 and that part of student loans estimated not to be recoverable until a December 2018 decision by the ONS). Using private finance for public spending when not value for money exacerbated public skepticism.

Additionally, these developments have occurred in a political environment that has been dominated by the austerity measures that followed the 2008 global financial crisis and, subsequently, Brexit (Ku et al., 2010). In the aftermath of the 2010 election, when no party retained a majority, the Conservative-Liberal Democrat Alliance was able to place the blame for the fiscal deficits during its tenure in office between 1997 and 2010 on the perceived profligacy of the 1997-2010 Labour Government. In favor of a fiscally retrenching approach, it reported «expansive fiscal consolidation» (Menon and Williams, 2001).

Before the COVID-19 pandemic hit, the Treasury had commissioned (Onakoya et al., 2012) a report on the «public benefit» principle, and was contemplating how to enforce it prior to the case. Although the small amount of recent studies carried out have demonstrated the spectacular socioeconomic and fiscal benefits of the COVID-19 pandemic, to date, there are no studies on the potential audit quality impacts of the COVID-19 outbreak. This research, therefore, aims

to examine the potential effects of the COVID-19 outbreak on audit efficiency. Specifically, we are evaluating the effect of this pandemic on five areas of audit efficiency, and they are: audit costs, evaluation of the probability of the company surviving as a going concern, auditor human resources, audit procedures, and auditor salary. our paper offers a comprehensive picture of the potential effects of social distancing on audit quality for future researchers, investors, and auditors As far as the current literature is concerned, our research contributes to it by categorizing the relationship between COVID-19 and audit efficiency. Future studies may analyze the degree to which future audit practice correlates to COVID-19 quality in the future.

The research problem is represented by the new variables facing most auditors today in the audit environment, which require the use of modern audit tools and approaches, and these approaches are based on (strategy, technological tools, international and local standards, support for local and professional organizations). Another factor of the problem is that the technological tools require the auditor to have professional skills and abilities in how to deal with technology and information technology under situation of COVID-19, while the final factor in the problem is the lack of follow-up by most external auditors in audit companies and offices and lack of familiarity with international updates. In addition to relying on local standards and rules that suffer from a weakness in responding to the rapid changes in the environment of the audit work. As well as, bodies that regulating the audit profession refer only to developments published by international organizations and have not issued instructions to auditors or audit companies to adhere to it.

2. Research Methodology

2.1. The Proposed Model

The questionnaire was designed in a manner consistent with the topic of the research and its objectives by reviewing the literature and previous studies related to the topic of the research. The questionnaire consisted of four fields in addition to a fifth one that compares the possibility of applying the approach more broadly in the auditing companies or offices.

The first field: it covers the personal and demographic variables of the research sample, including age, number of years of experience, specialization, professional qualification, number of employees in the auditing companies and offices, the professional age of the auditing companies and offices, the office's relationship with international or local offices.

The second field: it has the variables related to the importance of designing and implementing an appropriate and flexible auditing strategy considering COVID-19, and it consists of ten questions.

The third field: it contains the variables related to the factors that affect the use of the technological tools and advanced techniques, and it covers ten questions.

The fourth field: it consists of the variables related to the international auditing and assurance standards that regulate the profession, and it contains then questions.

The fifth field: it deals with a comparison between the total variables of the above fields and the possibility of applying the remote auditing approach in each of the auditing firms or offices.

2.2. Model Description

The model used to study community and sample consists of 215 chartered accountants and account auditors who are working according to the bulletin issued by the Iraqi Association of Certified Public Accountants for the year 2019. The sample size was determined through Stephen Thompson's equation as follows:

$$N = N * P(1 - P)[N - 1 * (Q2 / Z2)] + P(1 - P), \quad (1)$$

where:
N: Community size;
Z: The standard score corresponding to the significance level is 95.0 and is equal to 1.96;
Q: The error rate is 0.05;
P: Providing the characteristic and neutrality of 0.050.

The number of distributed questionnaires was 175, and the number of respondents of the questionnaire reached 164. For the research and analysis purposes, 152 questionnaires were used. 14 questionnaires were excluded because of the inaccuracy in the answer, and a random

method was used to choose the individual respondents who make up the research's sample as shown in Table 1.

Table 1:
The community and sample size according to the above equation

Items	Community's size	Sample's size
Auditing firms	25	27
Auditing offices	188	127
Total	215	152

Source: Compiled by the authors

2.3. The statistical methods

The descriptive statistical methods such as arithmetic mean, standard deviation, frequent distributions and percentages are used by adopting SPSS program in order to obtain the results. A criterion for answering the questions has been set by which the respondent can answer the questions, and as shown in Table 2.

The questionnaire was organized according to Likert Five Point Scale and the weights were given from 1-5. The scale was adopted in testing the research hypotheses, whereas the answer to the questionnaire was through Google forms. Analyzing the characteristics of the research's samples.

Table 2:
The approved response criterion

Arithmetic mean value	Interpretation
1.00 - 1.80	Completely disagree
1.81 - 2.60	Disagree
2.61 - 3.40	Neutral
3.41 - 4.20	Agree
4.21 – 5.00	Completely agree

Source: Compiled by the authors

3. Results and Discussion

3.1. Questionnaire Analysis

The questionnaire consists of two main parts. The first part includes the demographic information for the research sample and has seven variables illustrated in Table 3.

The second part of the questionnaire includes a set of questions related to the independent variables for the research based on the previous professional studies, researches and publications that reached to 3 and each variable consists of 10 questions, and the following is an analysis of the sample demography:

3.1.1. Age

It is noticed from the table 3 that the age of employees in the auditing companies and offices is more than 46 year old that constituted the highest percentage reached to 93.5%. The lowest percentage of workers whose age ranged from less than 25 year old, was 26%. The diversity in the age according to Table 3 and its proportions contribute to accept the modern auditing approach that requires a professional experience.

3.1.2. Years of Experience

The percentage of the experience year of more than 16 years was the highest rate and amounted to 37.5%, while the lowest percentage for experience years was less than 5 years and reached to 13.5%; whilst the 5-10 and 11-16 years were 25% and 24% respectively. This helps in understanding and answering the questions of the second part of the questionnaire.

3.1.3. Scientific specialization

The accounting specialization gets the highest percentage reached to 81.6%, while the other specialties recorded the lowest percentage, which is 2.6% as presented in Table 3. This is due to the nature of the work of the auditing firms that are based and rely mainly on the majority of employees from the accounting specialization.

Table 3:
Description of research's sample

Item	Statement	Repetition
Age	Less than 25	4
	25-35	36
	36-46	52
	More than 46	60
Years of Experience	Less than five years	20
	5-10	38
	11-16	37
	More than 6 years	57
Scientific specialization	Accounting	124
	Management	10
	IT	14
	Other	4
	Total	152
Professional and legal qualification	Accountant	53
	Auditor	65
	M.A.	23
	PhD	11
	Total	152
Number of employees in auditing companies and offices	Less than10	69
	11-15	71
	16-20	2
	21-30	1
	More than 30	9
Age of professional life of audit offices and companies	Less than 5	26
	5-10	32
	11-15	45
	More than 15	49
	Total	152
Age of professional life of audit offices and companies	Available	73
	Not available	79

Source: Compiled by the authors

3.1.4. Professional and legal qualification

It is noted from Table 3 that the auditor's percentage was 42.8%. This is due to the reason for the nature and quality of the work that requires the presence of statutory accountants, who form the highest percentage, while the lowest percentage was the academic qualification of the doctorate, which amounted to 7.2%. The auditor and MA qualifications were 43% and 15%. This is because the nature of the work of companies and offices depends on the practical professional aspects.

3.1.5. Number of Employees

The work of the auditing companies and offices is based on employees, and the highest percentage of employees in the auditing firms was 11-15 where amounted to 47%, while the offices of the account auditors employ less than 10 employees. Their rate reached to 45% and this is due to the nature and size of the work where the work of the auditing firms is broader than the work of auditing offices.

3.1.6. Age of professional life of audit offices and companies

Fifteen years of practicing the profession was the highest percentage in the auditing companies and offices and its rate was 32.2%, while the companies and offices which have 10-15 years of practicing the profession come in the second rank and this is due to the demand on the profession especially after the changes that have happened in Iraq after 2003.

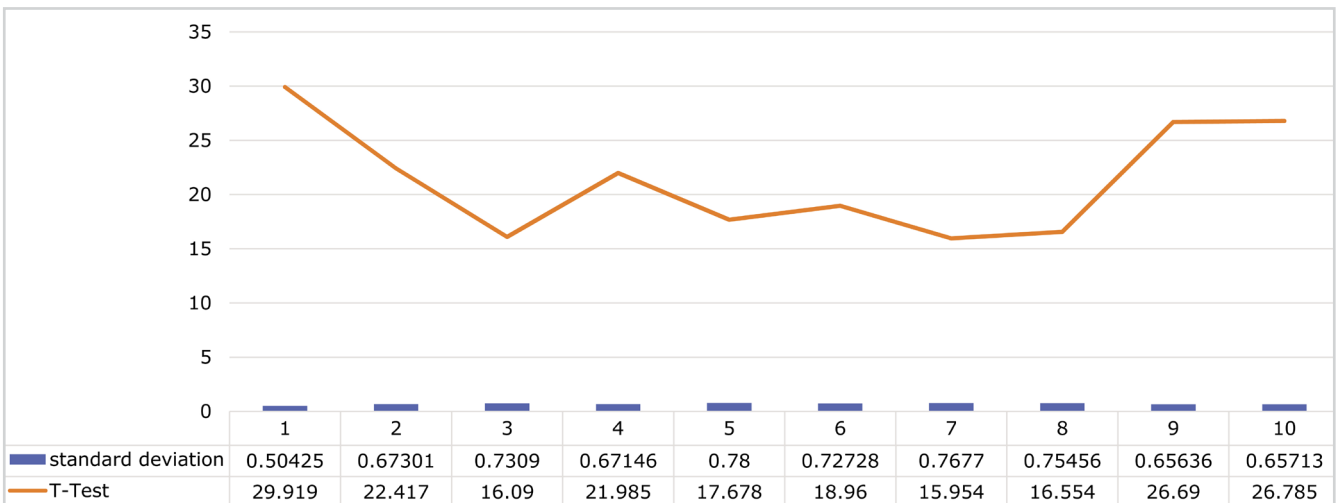
3.1.7. The relationship of the company with local and international offices

As for the existence of the relationship with local or international auditing companies or offices, it is clear from the table that there is not a relationship, for its rate was 52% and the percentage rest represents the local auditing companies that exchange relations in the field of the profession with international companies.

3.2. Implementation of the first hypothesis

The remote auditing approach adopts the design and implementation of an updated and flexible strategy that takes the changes and developments of events in situation of COVID-19.

The first hypothesis was tested by relying on questions 1-10 of the second section of the questionnaire. The importance of the questions relates to the design and adoption of a flexible audit strategy that takes into account the state of uncertainty and certainty. Figure 1 shows an analysis of the responses of the respondents of the research sample about 10 questions that were included in the questionnaire related to designing and implementing an updated and flexible strategy.



	1	2	3	4	5	6	7	8	9	10
standard deviation	0.50425	0.67301	0.7309	0.67146	0.78	0.72728	0.7677	0.75456	0.65636	0.65713
T-Test	29.919	22.417	16.09	21.985	17.678	18.96	15.954	16.554	26.69	26.785

Figure 1:
Relationship between T-test values with standard deviation for the first hypothesis
Source: Compiled by the author

The viewpoint of the participating group in the answer to question 10 had a significant degree of influence, as the response rate reached 89%, which was the highest percentage of all the group's answers that measure the importance of designing and implementing an updated and flexible strategy. Likewise, there is complete agreement among the members of the research sample through the arithmetic mean 4.4276 falling within the period 4.21-5.00 and to homogeneity in the answers that indicates the standard deviation of 0.65713. As well as, the minimum arithmetic mean of 3.9539 related to question 3 its content sometimes requires reconsideration of the terms of correlation between the auditor and the client which is difficult or not possible to carry out the audit. As it formed a significant percentage of 79% by the sample members and Homogeneity of answers at standard deviation 73095. The researchers see the rest of the questions related to designing and implementing a flexible audit strategy considering COVID-19 that has an impact from the viewpoint of the research sample.

The total arithmetic mean for all the questions was 4.4276, indicating complete agreement among the sample members about the questions of the axis and the homogeneity of the answers at a standard deviation of 0.34319. The T-test was used assuming that the hypothetical arithmetic mean is equal to 3 which means the arithmetic mean of Curt's five-point scale. It was found that all the arithmetic means passed the test that means it is greater than the assumed arithmetic mean in terms of the T-test which is statistically significant at the level of significance 0.01 as shown in Table 4.

Table 4:
The main results of the first hypothesis

	N	Mean	SD	Test-t	Percentage
Strategy	152	4.4276	3.4319	41.998	89%

Source: Compiled by the authors

3.3. Implementation of the second hypothesis

The remote audit approach adopts the application of advanced technology and techniques in light of COVID-19. The second hypothesis was tested based on questions 11-20 of the second section of the questionnaire. These questions relate to the importance of applying advanced technology and techniques in light of COVID-19.

The viewpoint of the participating group in answering question 11 had a significant degree of influence, as the response rate reached 87%. These questions formed the highest percentage among the answers to all the group's questions that measure the importance of applying advanced technology and techniques in the specific circumstances of COVID-19. There is complete agreement among the subjects of the research sample through the arithmetic mean 4.3355 within the period 4.21-5.00 and homogeneity in the answers that indicates the standard deviation 0.66947.

Results have been proven that the minimum arithmetic mean is 3.9145 for question 18, the content of which is the possibility of seeking help from specialists or experts through interviews, and it is not necessary for them to carry out the entire process where a percentage of 79% was formed by the sample, and the answers were homogeneous at the standard deviation of 90579. As for the rest of the answers to the previous paragraphs taken together, the researchers believe that the rest of the questions related to the importance of applying advanced technology and techniques in the specific conditions of COVID-19. The total arithmetic mean for all the questions was 4.1612 indicating agreement among the sample members about the axis questions and the homogeneity of the answers at a standard deviation of 418309, and it is constituted 83%. The T-test was used assuming that the hypothetical arithmetic mean equals 3 that means the arithmetic mean of Curt's five-point scale. It was found that all the arithmetic means passed the test it is greater than the assumed arithmetic mean in terms of a test 3.4 implementation of the third hypothesis as shown in Table 5.

Table 5:
The main results of the second hypothesis

	N	Mean	SD	Test-t	Percentage
Strategy	152	4.1612	4.1830	34.224	83%

Source: Compiled by the authors

3.4. Implementation of the third hypothesis

The remote auditing approach uses the application of the updated publications and directions of the international auditing standards considering COVID-19 variables. The third hypothesis was tested by relying on questions 21-30 from the second section of the questionnaire, which relate to the importance of applying the modern publications and guidelines of the international auditing standards under situation of COVID-19 variables, as well as applying of the modern publications and guidelines of the international auditing standards under COVID-19 variables.

The participated category in answering the question 23 had a significant degree of influence, where the response rate reached 89% thus, it forms the highest percentage. Also, included in the answers to all the group's questions that measure the importance of local work team to make a thoughtful scientific plan that defines the priorities faced the profession and provide the suggestions and projects to develop the profession in light of COVID-19. Furthermore, there is a complete agreement among the research sample members throughout the arithmetic mean 4.4671 that located within the period 4.21-5.00 with standard deviation of 0.50057. The minimum arithmetic mean is 3.9934 related to the question 29, which content means that the work team makes a contingency plan that is viable. The importance percentage was 80% among the sample members and the homogeneity of answers was at the standard deviation of 0.77628.

For the rest of the answers to the previous paragraphs taken together, the researcher sees that the rest of the questions related to the importance of applying the international auditing and assurance standards. These answers that regulate the profession under COVID-19 have an impact from the viewpoint of the research sample. The total mean of all questions was 4.2533 where it indicates to a complete agreement among the sample's members with a standard deviation of 0.40590.

The T-Test has been used by assuming that the hypothetical arithmetic mean is equal to 3 the arithmetic mean of Likert's five-point scale. It was found that all the arithmetic means passed the test that means that it is greater than the hypothesized arithmetic mean in terms of the T-test, which is statistically significant at the level of 0.01, thus, the third research's hypothesis is accepted as shown in Table 6.

Table 6:
The main results of the third hypothesis

	N	Mean	SD	Test-t	Percentage
Strategy	152	4.2533	40.950	38.067	85%

Source: Compiled by the authors

3.5. Implementation of the fourth hypothesis

It seems to be that the auditing firms want to apply the remote auditing approach more than the auditing offices. Thus, the fourth hypothesis test deals with applying the remote auditing approach and compares it in the application between the auditing companies and auditing offices. Table 7 shows the results of the research three fields test where the first field regarding the design and implementation of an updated and flexible strategy.

Table 6 shows that the first field gets the response rate of the companies of 84% and indicates to an agreement between the sample members and to homogeneity of the answers at a standard deviation of 46141, while the offices get the percentage of 83% at an arithmetic mean of 4.1638 and indicates an agreement between the sample's members to homogeneity of the answers at a standard deviation of 31690, while the second field-advanced technologies and technologies, the percentage of the auditing firms was 83% at an arithmetic mean of 4.1600 which shows an agreement between the sample members and homogeneity of the answers at a standard deviation of 43012, while the offices got a percentage of 83% and the agreement of the sample members at an arithmetic mean was 4.1614 with the homogeneity of the answers at the standard deviation was 41767.

For the third field regarding the application of the international auditing and assurance standards, the percentage of the total questions of the field for the auditing firms was 86% with a complete agreement among the sample members at an arithmetic mean of 4.300 for the questions in the field with homogeneity of the answers at the standard deviation of 43108, while the response rate for the total questionnaire of the field by the offices was 85% and to a complete agreement between the sample members at an arithmetic mean of 4.2441 with the homogeneity of the answers through the standard deviation of 40191. In general, there is an agreement between the auditing firms and the offices concerning the application of the remote auditing approach.

Table 7:
The results of the main factor of the fourth hypothesis

	Audit Firms (N=25)			Auditing Offices (N=127)		
Field	**Mean**	**SD**	**Percentage**	**Mean**	**SD**	**Percentage**
Standard	4.300	43.108	86%	4.2441	40.191	85%
Strategies	4.196	46.141	84%	4.1638	31.690	83%
Technologies	4.160	43.120	83%	4.1614	41.767	83%
Total	4.22	44.08	84%	4.19	37.88	84%

Source: Compiled by the authors

4. Conclusion

After analyzing the local environment that represented by the auditing firms and offices, there is a general acceptance and agreement of applying the modern auditing approach represented by the remote auditing with its three fields (strategy, modern technologies, and advanced technology). The possibility of adopting a remote audit approach under the normal circumstances exists in a supportive manner with a regular auditing. In addition, there is a need to specify the used aspects in accordance with the issued specifics and conditions of the professional bodies that the auditor should follow. The professional bodies' weak role to organize the profession and their lack of interest to issue instructions and guidelines that direct the auditors' work and help them in order to make professional judgments has been mentioned in light of the epidemiological situation in which the country lives. The professional authorities should determine the negative effects resulting from the epidemic which are reflected on the profession in particular and on the Iraqi economy in general.

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Received 8.10.2020
Received in revised form 18.11.2020
Accepted 22.11.2020
Available online 28.02.2021