JIEMS

Journal of Industrial Engineering and Management Studies

journal homepage: www.jiems.icms.ac.ir



The effect of COVID-19 on audit quality during social distancing

Parichehr Zamanifard¹, Ahmad Goudarzi *1

¹ Department of Accounting Branch, Islamic Azad University E-Campus, Tehran, Iran.

Received: Jun 2022-06/ Revised: Jul 2022-30/ Accepted: Aug 2022-20

Abstract

The high rate of outbreaks of the Coronavirus Disease 2019 (QUID-19) is a warning about health, economic, and social issues that are affecting the whole world. The COVID-19 pandemic has had many financial and economic implications worldwide. These economic turbulences, along with market uncertainty, can affect investors' confidence in firms' financial performance and, consequently, may lead to various financial crises. Audit quality can affect the auditors' ability to detect material misstatements. This study is conducted to investigate the effect of COVID-19 on audit quality during social distancing in companies listed on the Tehran Stock Exchange. This is an applied study in terms of purpose and a descriptive-comparative one in terms of method. In the study, one main hypothesis and five sub-hypotheses were developed, and the Kruskal-Wallis test with SPSS software was used. The statistical population included companies listed on the Tehran Stock Exchange from 2017 to 2020. The findings suggest that COVID-19 affects audit quality during social distancing in companies listed on the Tehran Stock Exchange.

Keywords: COVID-19; audit quality; social distancing.

Paper Type: Original Research

1. Introduction

The economy is highly affected by external events. One of the most important aspects of any country's economy is the capital market, which is shaped by the entry of public companies that audit their financial statements following the rules of the stock market. The global financial crisis and other turbulent events in the international economy, such as COVID-19, which have taken place over the past decade, have led to criticism from leading auditing associations about the importance of credible, high-quality financial reporting. This study investigates the effect of 1COVID-9 on audit quality during social distancing. The COVID-19 pandemic started in 2019 and has spread all over the world. The disease has already severely affected all global markets. Global indicators have changed dramatically for all countries. Some have benefited from this situation and some have suffered. The virus has caused many social, economic, and health problems in Iran. However, its effects and consequences have not been scientifically evaluated in the country so far. Accordingly, this is the first study to evaluate the effect of the COVID-19 pandemic and its limitations. Considering the high economic and financial effects of the COVID-19 pandemic on various face-to-face occupations such as auditing, the application of the results of this study can increase audit quality in various activities and prevent auditors from commenting incorrectly.

Some activities that have changed due to the COVID-19 pandemic during social distancing are discussed below:

For example, banks have drastically increased their virtual activities (Azarinia, 2020).

Pharmaceutical companies have increased their production (Tayebi, 2021).

Internet companies have greatly increased their virtual activities. So, their revenue has increased.

Construction companies have experienced construction slowness (Nasim Online Authors Group, 2021).

Hotels have suffered from a lack of income due to reduced distances (Sijanivandi et al., 2020).

The COVID-19 pandemic started in China in 2019 and has spread around the world. It has already affected all global markets. Global indices have declined sharply (Smales, 2021). The virus has caused many social, econom-

^{*}Corresponding Author: parichehr_zamanifard@yahoo.com



ic, and health problems and has had many economic and financial consequences for various professions, including auditing. This virus will cause a major crisis and high costs for companies because it affects the investor's confidence in the possibility of the negative performance of companies (Albitar et al., 2021). Audit quality is likely to decline as a result of COVID-19, leading to auditors' erroneous comments (Lenz & Hahn, 2015). Decreasing investors' confidence in high-quality auditing of firms' financial statements reduces firms' confidence in reported earnings and increases investment risk and cost of capital of the company (Gerged et al., 2020).

According to previous studies, various variables that are measures of audit quality may have been affected by COVID-19 (Albitar et al., 2021). COVID-19 has strongly affected various industries in Iran. Banks, Internet service providers, and pharmaceutical companies are experiencing rising profits, companies in need of physical presence are experiencing declining profits, and auditors are being restricted in reviewing corporate financial statements. All of these can affect audit quality. So, the main problem of this study is to investigate the effect of COVID-19 on audit quality during social distancing.

2. Importance and Necessity of the Study

COVID-19 has led to many economic and social problems since 2019 and has greatly affected various professions, including auditing, which requires the presence of auditors in companies. The disease, which threatens the economics of countries in addition to human health, has led to an unprecedented economic collapse since World War II. Production at factories in many parts of the world has reached a point of stagnation, and some wholesale companies have closed. Formerly considered a public health threat, COVID-19 has become a global economic threat. Although the economic damage caused by the COVID-19 pandemic cannot be precisely determined, there is a consensus among economists that the disease will have severe negative effects on the global economy and other financial phenomena (Albitar et al., 2021).

The Organization for Economic Co-operation and Development (OECD) has warned that some of the world's major economies will stagnate in the coming months and that the economic damage caused by COVID-19 will take years to be compensated. According to some economists, the economic shock of the recent epidemic will be greater than the 2008 global crisis. Even if the global recession does not occur, some of the world's economies will either not grow at all or will have negative economic growth. The same is true of some large economies. So, not only do we see a low growth rate this year, but it will take time to improve economic growth in the future (Menati, 2020). Studies indicate that audit quality criteria are affected by COVID-19. Therefore, this issue should be investigated in the Iranian capital market.

3. Literature Review

Albitar et al. (2021) conducted a study titled Auditing in Times of Social Distancing: The Effect of COVID-19 on Auditing Quality. They found that covid-19 affects audit fees, the going concern assumption, audit human capital, audit procedures, and audit staff salaries.

In a study titled Investor Attention and Global Market Returns during the COVID-19 Crisis, Smales (2021) found that the COVID-19 crisis negatively affected the capital market and bonds.

In a study titled Loan Loss Provisions and Audit Quality: Evidence from MENA Islamic and Conventional Banks, Salem et al. (2021) used data from 2006 to 2018 for 16 countries in the Middle East. The hypotheses were as follows: Islamic banks are much more likely to have an audit quality than their counterparts; audit firm size negatively affects earnings management in both types of banks; there is a negative relationship between the cooperation of two audit firms and earnings management in both Islamic and conventional banks; there is a negative relationship between the independence of the audit committee and earnings management in both types of banks; audit committee size negatively affects earnings management in both types of banks; there is a negative relationship between the members of the audit committee and earnings management in both types of banks; there is a negative relationship between gender diversity and earnings management in both types of banks. The hypotheses were not rejected by the findings.

Goli et al. (2020) conducted a study titled Investigating the Role of Auditors' Social and Professional Liability Insurance on Ethical Reputation Risk and Audit Quality using Delphi. According to the results of the first hypothesis test, independent auditors consider social and professional liability insurance to be effective in reducing their reputation risk. Besides, there is a significant positive relationship between social and professional liability insurance and reducing auditors' ethical reputation risk. The results of the second hypothesis test suggested that social and professional liability insurance leads to a decrease in audit quality.

Eimani Jajarmi (2020) conducted a study titled Social Consequences of the Outbreak of Coronavirus in Iranian society. According to the results, this crisis has had the greatest consequences for areas such as family, education, and labor relations and some social groups such as women, children, small business owners, and immigrants. Finally, solutions such as adopting a social cohesion approach in parallel with the social distancing policy were proposed.

Menati (2020) conducted a study titled Investigating the Effects of Coronavirus 19 on the Global Economy. In this study, the effects of the virus epidemic on important sectors of the global economy such as the financial market, labor market, energy market, and tourism industry were discussed by reviewing statistics published from repu-

table global sources about the current state of the COVID-19 epidemic. Finally, the economic policies of different countries in the face of the COVID-19 epidemic were briefly reviewed to identify different economic solutions to manage the effects of this crisis, and it was stated that each country has a different solution.

Pezeshk and Pourzamani (2019) conducted a study titled Audi Seasonality, Information Disclosure Quality, and Audit Quality. The results indicated that there is a significant negative relationship between information disclosure quality and the audit fee and also between information disclosure quality and the audit fee in the busy season. However, there was no significant relationship between these two variables in the off-season.

4. Methodology

The study is conducted with a quantitative method because the comparative study of audit quality data in two different periods can be statistically analyzed. This is an applied study in terms of purpose because it is applied to listed companies and is a descriptive cross-sectional and comparative study in terms of nature because it compares the relationship between several variables in two different periods. Moreover, the present study falls into the category of positive studies based on statistical inference and is retrospective in terms of time. Most financial studies based on financial statements are performed by the library research method because the analysis is based on data concerning previous events. Accordingly, the method used in this study to collect literature and analyze data is the library research method, and the study tool is the complete set of financial statements of companies listed on the Tehran Stock Exchange on the Codal website and the Rahvard Noivn software. Scope of study includes companies listed on the Tehran Stock Exchange that are active in the banking, pharmaceutical, Internet, construction, and hotel industries. The data from 2017 to 2020 are used to investigate the effect of COVID-19 on the audit quality of companies listed on the Tehran Stock Exchange during social distancing. By definition, a statistical sample consists of a portion of the members of the statistical population that statistical data are collected accordingly and then analyzed. The statistical population of the present study consists of companies listed on the Tehran Stock Exchange in the banking, pharmaceutical, Internet, construction, and hotel industries, and its time range is from 2017 to 2020. So, the study uses the whole population in each industry after deleting inconsistent data (cases that do not lead to March 20). Data are collected using the Rahavard Novin software, which is approved by the Tehran Stock Exchange. The total number of companies is 120 as follows:

- The Internet industry, including 16 companies in 4 periods (64 companies-year)
- The banking industry, including 16 companies in 4 periods (64 companies-years)
- The pharmaceutical industry, including 45 companies in 4 periods (180 companies-years)
- The construction industry, including 38 companies in 4 periods (152 companies-year)
- The hotel industry, including 5 companies in 4 periods (20 companies-year)

The data are compared in different periods.

The years 2019 and 2020 should be compared with the years 2017 and 2018.

Audit quality is measured using the following three criteria that can be extracted from financial statements:

- Earnings management
- Restatement of financial statements
- Audit time

Each is described below:

5. Earnings Management

There is a direct relationship between audit quality and financial reporting quality, i.e., one of the most important criteria of audit quality is financial reporting quality calculated based on the company's earnings management. Audit quality limits managers' opportunistic behaviors concerning earnings manipulation and reporting. Since the data for 2019 and 2020 should be compared with the data for 2017 and 2018 to examine the effect of social distancing on audit quality, the correlation model between accruals and operating cash flow is used. This index was presented by Lewes et al. (2003):

Earning Management= p (TACC & CFO)

Where the negative correlation between total accruals (TACC) and operating cash flow (CFO) indicates earnings management. Accruals are derived from the difference between earnings and operating cash flow. According to this method, accruals are of high quality and are not been manipulated when they quickly become cash. Accruals quickly become cash if there is a positive correlation between accruals and operating cash flow. So, a decrease in correlation and a move towards negative values indicate a deviation from accruals. There is an inverse relationship between correlation values and earnings management, i.e., low correlation indicates higher earnings management. So, the higher the coefficients in the final column, the more earnings management is applied (Banimahd et al., 2016).

6. Restatement of Financial Statements

One of the criteria based on the volume of material misstatements in the accounting system of the client company is the amount of restatement of financial statements. Restated accruals are identified to correct material misstatements in the Company's accounting system. Citing Lenox and Pitman (2010), Banimahd et al. (2015) argue that this criterion depicts a fact of audit quality and that its strength is to provide strong evidence of low audit quality. A virtual variable is used to measure this variable.

Audit Time

An audit at the appropriate time indicates audit quality. Thus, a two-valued variable is used.

7. Data Normality Test

The normal distribution of variables is checked using the Kolmogorov-Smirnov (K-S) test. The null hypothesis in this test is that the variables are normally distributed. If the significance level of the test is greater than 0.05, the null hypothesis is confirmed and it is concluded that the variable is normally distributed.

Table 1. The results of the Kolmogorov-Smirnov test to check the normal distribution of data

Variable		The Kolmogorov-Smirnov statistic value	Significance level	
Familian	Before COVID-19	0.451	0.000	
Earnings management	After COVID-19	0.368	0.000	
Restatement of financial	Before COVID-19	0.369	0.000	
statements	After COVID-19	0.512	0.000	
Audit time	Before COVID-19	0.373	0.000	
Audit time	After COVID-19	0.451	0.000	

According to Table 1, the null hypothesis that the variables are normally distributed is rejected and all variables follow the abnormal distribution because the significance level of all variables is less than 0.05 at the 95% confidence level. Hypotheses are, therefore, tested using nonparametric methods.

Testing Hypotheses

The Wilcoxon test is used to investigate the effect of COVID-19 on the audit quality and compare sample companies. This test is used because the model data are not normally distributed.

The Main Hypothesis: COVID-19 has a significant effect on the audit quality of companies listed on the Tehran Stock Exchange.

Table 2. The Wilcoxon test results

Description	Earnings management (before COVID-19-after COVID-19)	Restatement of financial state- ments (before COVID-19-after COVID-19)	Audit time (before COVID-19- after COVID-19)
Z-value	-2.15	-7.13	-3.45
Significance level	0.031	0.000	0.001

Given the significance level of less than 0.05 of the Wilcoxon tests at the 95% confidence level, it can be argued that COVID-19 affects audit quality and that there is a significant difference between audit quality indicators such as earnings management, the restatement of financial statements, and audit time before and after COVID-19.

Table 3. Ranking the effect of COVID-19 on the components of audit quality

Components	Mena rank	Total rankings
Earnings management (before COVID-19-after COVID-19)	9.21	129
carnings management (before comp-13-after comp-13)	13.50	81
Postatoment of financial statements (hefers COVID 10 ofter COVID 10)	8.5	34
Restatement of financial statements (before COVID-19-after COVID-19)	8.8	102
Auditation (Inform COVID 40 often COVID 40)	9	54
Audit time (before COVID-19-after COVID-19)	9.4	99

According to the above table and the mean rank obtained for audit quality indicators, it can be argued that there is a difference between the mean rank obtained before and after COVID-19. So, it can be said that there is a significant difference in earnings management, the restatement of financial statements, and audit time due to the outbreak of COVID-19.

Sub-hypothesis 1: COVID-19 has a significant effect on the audit quality of banks listed on the Tehran Stock Exchange.

Table 4. The Wilcoxon test results

Description	Earnings management (before COVID-19-after COVID-19)	Restatement of financial state- ments (before COVID-19-after COVID-19)	Audit time (before COVID-19- after COVID-19)
Z-value	-2	-1.55	-2.66
Significance level	0.046	0.24	0.008

Given the significance level of less than 0.05 of the Wilcoxon test at the 95% confidence level for earnings management and audit time in banks listed on the Tehran Stock Exchange, it can be argued that COVID-19 affects earnings management and audit time in these companies and that there is a significant difference between earnings management and audit time in banks listed on the Tehran Stock Exchange before and after COVID-19. However, as can be seen in the table above, there is no significant difference between the restatement of financial statements in banks before and after COVID-19.

Table 5. Ranking the effect of COVID-19 on the components of audit quality

Components	Mena rank	Total rankings
Earnings management (before COVID-19-after COVID-19)	8.50	120
Earnings management (before COVID-15-after COVID-15)	8.70	34
Restatement of financial statements (before COVID-19-after COVID-19)	6.5	26
restatement of financial statements (before COVID-13-after COVID-13)	6.5	52
Auditations (Instance COVIID 40 office COVIID 40)	9	27
Audit time (before COVID-19-after COVID-19)	9.3	126

According to the above table and the mean rank obtained for audit quality indicators, it can be argued that there is a difference between the mean rank obtained for earnings management and audit time before and after

COVID-19. So, it can be said that there is a significant difference in earnings management and audit time in banks due to the outbreak of COVID-19.

Sub-hypothesis 2: COVID-19 has a significant effect on the audit quality of pharmaceutical companies listed on the Tehran Stock Exchange.

Table 6. The Wilcoxon test results

Description	Earnings management (before COVID-19-after COVID-19)	Restatement of financial state- ments (before COVID-19-after COVID-19)	Audit time (before COVID-19- after COVID-19)
Z-value	-0.85	-5.09	-1.02
Significance level	0.39	0.000	0.30

Given the significance level of less than 0.05 of the Wilcoxon test at the 95% confidence level for the restatement of financial statements in pharmaceutical companies listed on the Tehran Stock Exchange, it can be argued that COVID-19 affects the restatement of financial statements in these companies and that there is a significant difference between the restatement of financial statements in banks listed on the Tehran Stock Exchange before and after COVID-19. However, as can be seen in the table above, there is no significant difference between earnings management and audit time in pharmaceutical companies before and after COVID-19.

Table 7. Ranking the effect of COVID-19 on the components of audit quality

Components	Mena rank	Total rankings
Earnings management (before COVID-19-after COVID-19)	19	306
carnings management (before COVID-13-after COVID-13)	19	222
Restatement of financial statements (before COVID-19-after COVID-19)	15.3	57
Restatement of financial statements (before COVID-15-after COVID-15)	18.5	646
Audit time /hefere COVID 10 ofter COVID 10)	24	480
Audit time (before COVID-19-after COVID-19)	24	648

According to the above table and the mean rank obtained for audit quality indicators, it can be argued that there is a difference between the mean rank obtained for the restatement of financial statements before and after COVID-19. So, it can be said that there is a significant difference in the restatement of financial statements of pharmaceutical companies due to the outbreak of COVID-19.

Sub-hypothesis 3: COVID-19 has a significant effect on the audit quality of Internet companies listed on the Tehran Stock Exchange.

Table 8. The Wilcoxon test results

Description	Earnings management (before COVID-19-after COVID-19)	Restatement of financial state- ments (before COVID-19-after COVID-19)	Audit time (before COVID-19- after COVID-19)
Z-value	-0.93	-2	-1.21
Significance level	0.34	0.046	0.22

Given the significance level of less than 0.05 of the Wilcoxon test at the 95% confidence level for the restatement of financial statements in Internet companies listed on the Tehran Stock Exchange, it can be argued that COVID-

19 affects the restatement of financial statements in these companies and that there is a significant difference between the restatement of financial statements in Internet companies listed on the Tehran Stock Exchange before and after COVID-19. However, as can be seen in the table above, there is no significant difference between earnings management and audit time in Internet companies before and after COVID-19.

Table 9. Ranking the effect of COVID-19 on the components of audit quality

Components	Mena rank	Total rankings
Fouriers management /hafara COVID 10 after COVID 10)	9.21	129
Earnings management (before COVID-19-after COVID-19)	9.21	81
Restatement of financial statements (before COVID-19-after COVID-19)	8.5	34
restatement of infancial statements (before COVID-13-after COVID-13)	8.8	102
Audit Aires / hafava COVID 40 after COVID 40)	9	54
Audit time (before COVID-19-after COVID-19)	9	99

According to the above table and the mean rank obtained for audit quality indicators, it can be argued that there is a difference between the mean rank obtained for the restatement of financial statements before and after COVID-19. So, it can be said that there is a significant difference in the restatement of financial statements of Internet companies due to the outbreak of COVID-19.

Sub-hypothesis 4: COVID-19 has a significant effect on the audit quality of construction companies listed on the Tehran Stock Exchange.

Table 10. The Wilcoxon test results

Description	Earnings management (before COVID-19-after COVID-19)	Restatement of financial state- ments (before COVID-19-after COVID-19)	Audit time (before COVID-19- after COVID-19)
Z-value	-1.38	-4.74	-2.41
Significance level	0.16	0.000	0.016

Given the significance level of less than 0.05 of the Wilcoxon test at the 95% confidence level for the restatement of financial statements and audit time in construction companies listed on the Tehran Stock Exchange, it can be argued that COVID-19 affects the restatement of financial statements and audit time in these companies and that there is a significant difference between the restatement of financial statements and audit time in construction companies listed on the Tehran Stock Exchange before and after COVID-19. However, as can be seen in the table above, there is no significant difference between earnings management in construction companies before and after COVID-19.

Table 11. Ranking the effect of COVID-19 on the components of audit quality

Components	Mena rank	Total rankings
Earnings management (before COVID-19-after COVID-19)	21.9	657
Lamings management (before COVID-13-after COVID-13)	21.9	424
Restatement of financial statements (before COVID-19-after COVID-19)	15.15	31
restatement of financial statements (perofe covid-15-after covid-15)	15.58	434
Audit time (before COVID-19-after COVID-19)	15	120
Audit time (before COVID-19-after COVID-19)	15.4	315

According to the above table and the mean rank obtained for audit quality indicators, it can be argued that there is a difference between the mean rank obtained for the restatement of financial statements and audit time before and after COVID-19. So, it can be said that there is a significant difference in the restatement of financial statements and audit time of construction companies due to the outbreak of COVID-19.

Sub-hypothesis 5: COVID-19 has a significant effect on the audit quality of hotels listed on the Tehran Stock Exchange.

Table 12. The Wilcoxon test results

Description	Earnings management (before COVID-19-after COVID-19)	Restatement of financial state- ments (before COVID-19-after COVID-19)	Audit time (before COVID-19- after COVID-19)
Z-value	-0.81	-1	-0.44
Significance level	0.41	0.31	0.65

Given that significance level of none of the components of audit quality in hotels is less than 0.05 of the Wilcoxon test at the 95% confidence level, it can be argued that COVID-19 has no significant effect on earnings management, the restatement of financial statements, and audit time in hotels listed on the Tehran Stock Exchange and that there is no significant difference between audit quality in these companies before and after COVID-19.

Table 13. Ranking the effect of COVID-19 on the components of audit quality

Components	Mena rank	Total rankings
Earnings management (before COVID-19-after COVID-19)	3.5	7
	3.5	14
Restatement of financial statements (before COVID-19-after COVID-19)	2.5	2.5
	2.5	7.5
Audit time (before COVID-19-after COVID-19)	3	6
	3	9

According to the above table and the mean rank obtained for audit quality indicators, it can be argued that there is no difference between the mean rank obtained for the components of audit quality in hotels listed on the Tehran Stock Exchange before and after COVID-19.

8. Discussion and Conclusions

The COVID-19 pandemic started in Wuhan, China 2019 and has spread all over the world. The disease has already severely affected all global markets. Global indicators have changed dramatically for all countries. Some have benefited from this situation and some have suffered. The virus has caused many social, economic, and health problems in Iran. The virus has high economic and financial implications for various face-to-face occupations such as auditing. Audit quality is likely to decline as a result of COVID-19, leading to auditors' erroneous comments. The overall purpose of this study is to investigate the effect of COVID-19 on the audit quality of companies listed on the Tehran Stock Exchange. The results are as follows:

The main hypothesis that COVID-19 has a significant effect on the audit quality of companies listed on the Tehran Stock Exchange is confirmed. COVID-19 affects audit quality, and there is a significant difference between the indicators of audit quality including earnings management, the restatement of financial statements, and audit time before and after COVID-19.

9. Sub-Hypotheses

The first sub-hypothesis that COVID-19 has a significant effect on the audit quality of banks listed on the Tehran Stock Exchange is confirmed. COVID-19 affects earnings management and audit time in these companies, and there is a significant difference between earnings management and audit time in banks listed on the Tehran Stock Exchange before and after COVID-19. However, there is no significant difference between the restatement of financial statements in banks before and after COVID-19 because banks' operations have changed since the beginning of the COVID-19. So, banks are recommended to pay attention to this issue and take new measures to prevent the reduction of their activities during pandemics.

The second sub-hypothesis that COVID-19 has a significant effect on the audit quality of pharmaceutical companies listed on the Tehran Stock Exchange is confirmed. COVID-19 affects the restatement of the financial statements in these companies. There is no significant difference between earnings management and audit time in pharmaceutical companies before and after COVID-19. Pharmaceutical companies have increased their production due to the outbreak of the disease, leading to their increased revenue and, consequently, the need for the restatement of their financial statements. Therefore, pharmaceutical companies are recommended to pay attention to this issue and make the necessary planning at the same time as the outbreak of epidemics to prevent the restatement of financial statements by reducing the consequences of changes.

The third sub-hypothesis that COVID-19 has a significant effect on the audit quality of Internet companies listed on the Tehran Stock Exchange is confirmed. COVID-19 affects the restatement of the financial statements of these companies. There is no significant difference between earnings management and audit time in Internet companies before and after COVID-19. The revenue of Internet companies has increased dramatically during this period as people have turned to virtual activities. So, Internet companies are recommended to take effective measures such as advertising to create and increase customer trust to improve their activities.

The fourth sub-hypothesis that COVID-19 has a significant effect on the audit quality of construction companies listed on the Tehran Stock Exchange is confirmed. However, there is no significant difference between earnings management in construction companies before and after COVID-19. These changes are due to the effects of this crisis on reduced activity. So, construction companies are recommended to prevent damage to the company and reduce audit quality in this industry by observing health protocols.

The fifth sub-hypothesis that COVID-19 has a significant effect on the audit quality of hotels listed on the Tehran Stock Exchange is confirmed. Auditors do not need to do much scrutiny in their job as a result of the decline in hotel activities. Therefore, hotels are recommended to prevent the decline in their revenues during the outbreak of epidemics by building customer trust through the observation of health standards.

Since the COVID-19 crisis has emerged in the last two years, few studies have been conducted in this regard. Only the results of studies by Albitar et al. (2021), Smales (2021), and Eimani Jajarmi (2020) are somewhat in line with the results of the present study.

In addition to the hypothesis-based recommendations, managers are recommended to increase their alternatives to deal with the COVID-19 crisis by establishing a strong risk management committee to reduce the effect of potential events when confronting them. Furthermore, auditors are recommended to examine the techniques and methods used during social distancing. This should be done cautiously in different industries, and the conditions of each industry should be given special attention according to the conditions of social distancing. Auditors should also adapt their procedures to some extent to the conditions of social distancing so that it does not negatively affect the firms' audit quality. Given the recent developments in the auditing profession, the establishment of auditing firms in Iran and auditing firms that are members of the Iranian Association of Certified Public Accountants, expanding financial markets, and increasing the need for valid financial data, it is also recommended that the elements affecting audit quality be identified both in terms of actual audit quality (detection and reporting of financial report distortions) and the perception of audit quality (users' confidence in financial statements). Future researchers are recommended to conduct the following studies to complete the literature and compare the results with the results of the present study:

Investigating the effect of COVID-19 on financial reporting quality during social distancing

Investigating the effect of COVID-19 on earnings quality during social distancing

Investigating the effect of COVID-19 on accounting conservatism during social distancing

Investigating the effect of COVID-19 on cash holdings during social distancing

References

- Azarinia, E., (2019), The new direction of the banking industry, Donya Eghtesad Newspaper, Newspaper number: 4911, News number: 3663394, public date: 1399/03/26, In Persian.
- Eimani Jajarmi, H., (2019). Social consequences of the outbreak of coronavirus in Iranian society, Place of publication: Social Impact Assessment Quarterly, Volume: 1, Issue: 2. In Persian.
- Banimahd, B., Arabi, M., Hasanpour, SH., (2016). Experimental research and methodology in accounting. Tehran. Termeh Publisher. In Persian.
- Pezeshk, Y., Pourzamani, Z., (2019), Audit Seasonality, Information Disclosure Quality, and Audit Quality. Journal of Accounting and Auditing knowledge, Number: 8. In Persian.
- Sijanivandi, sh., Mansouri, K., Emami, E., (2020), The impact of the Coronavirus crisis on the tourism and hotel industry and providing solutions, National Conference on Business Management in Crisis and Uncertainty, The University of Kordestan. In Persian.
- Tayebi, M., (2021), The dual effect of corona in the pharmaceutical industry, Donya Eghtesad Newspaper, News number: 3762495, public date: 1400/02/18. In Persian.
- Nasim Online Authors Group, (2021), The Impact of Corona on Construction Jobs, News number: 2373204, Public date: 1400/03/23. In Persian.
- Goli, A., Khozin, A., Ashrafi, M., Naderian, A., (2020), Investigating the role of auditors' social and professional liability insurance on ethical reputation risk and audit quality using Delphi, Journal of the Institute of Humanities and Cultural Studies, Number: 10. In Persian.
- Menati, H., (2020), Investigating the effects of Coronavirus 19 on the global economy, Social Impact Assessment Quarterly, Volume 1, Number 2. In Persian.
- Albitar, K., Gerged, A.M., Kikhia, H. and Hussainey, K. (2021), "Auditing in times of social distancing: the effect of COVID-19 on auditing quality", International Journal of Accounting & Information Management, Vol. 29 No. 1, pp. 169-178.
- Gerged, A.M., Mahamat, B.B. and Elmghaamez, I.K. (2020), "Did corporate governance compliance have an impact on auditor selection and quality? Evidence from FTSE 350", International Journal of Disclosure and Governance, Vol. 17 Nos 2/3, pp. 15-60.
- Lenz, R. and Hahn, U. (2015), "A synthesis of empirical internal audit effectiveness literature pointing to new research opportunities", Managerial Auditing Journal, Vol. 30 No. 1, pp. 5-33.
- Salem, R., Usman, M., Ezeani, E., (2021), Loan loss provisions and audit quality: Evidence from MENA Islamic and conventional banks, The Quarterly Review of Economics and Finance, Volume 79, Pages 345-359.
- Smales, L.A., (2021), Investor attention and global market returns during the COVID-19 crisis, International Review of Financial Analysis, in press.
- Parichehr Zamanifard (2021). The Effect of COVID-19 on Audit Quality during Social Distancing, Supervisor: Dr. Ahmad Goudarzi, Assistant Professor and Faculty Member of Islamic Azad University E-Campus.

This article can be cited: Zamanifard, P., Goudarzi, A., (2022). The Effect of COVID-19 on Audit Quality during Social Distancing. Journal of Industrial Engineering and Management Studies, Vol.9, No. 2, pp. 170-180.

