

-RESEARCH ARTICLE-

THE IMPACT OF COVID-19 LOCKDOWN AND AUDITORS' MENTAL HEALTH ON THE EXTERNAL AUDIT EFFECTIVENESS IN MULTINATIONAL ORGANIZATIONS IN IRAQ: MODERATING ROLE OF GOVERNMENT SUPPORT

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—Abstract—

The Covid-19 lockdown hinders the effectiveness of external audits due to environmental concerns and a severe lockout that requires global attention. Consequently, this paper investigates the influence of the Covid-19 lockdown and auditors' mental health on the effectiveness of external auditing in a multinational firm in Iraq. In addition, the research explores the moderating influence of government support on the relationship between the Covid-19 lockout, auditors' mental health, and

Citation (APA): Mutashar, S. S., Hussain, K. N., Abdulahad, A. F. (2022). The Impact Of Covid-19 Lockdown and Auditors' Mental Health on the External Audit Effectiveness in Multinational Organizations in Iraq: Moderating Role of Government Support. *International Journal of Economics and Finance Studies*, 14 (04), 135-151. doi:10.34111/ijefs. 20220108

the effectiveness of external auditing in a multinational business in Iraq. Using survey questionnaires, the researchers gathered primary data from the respondents. PLS-SEM was also employed to evaluate the original data in this study. The results demonstrated that the Covid-19 lockdown has a negative correlation with external audit effectiveness in multinational organizations in Iraq, whereas auditors' mental health had a positive correlation. In addition, the results demonstrated that government support moderates the Covid-19 lockdown, auditors' mental health, and the effectiveness of external auditing in the international organization in Iraq. By increasing auditors' mental health and reducing the Covid-19 lockout, the study directs policymakers in formulating external audit effectiveness-related policies.

Keywords: Covid-19 lockdown, auditors' mental health, external audit effectiveness, the multinational organization in Iraq, government support

1. INTRODUCTION

Periodically, companies undertake audits in which external, impartial bodies review and verify the accountancy department's complete books of accounts. The success of the external audit determines the attainment of the company's audit-related objectives. Effective external auditing ensures account accuracy and verifies each transaction individually. Consequently, it might reveal the company's true financial status, and for this reason, it is of crucial importance to the company (Al-ahdal et al., 2022). In a good external audit, auditors provide all relevant facts and independent, unbiased conclusions. Employees and others serving in operational or managerial areas are subject to a moral review. They refrain from engaging in dishonest or shirking actions. Consequently, efficient external auditing increases human resource productivity (Alzeban, 2020). External auditing results of high quality can pave the road for organizations to obtain future funding and loans. The books of accounts, which have undergone external auditing, demonstrate the company's financial worth to financial organizations such as banks. With the audited financial accounts from recent years, the business was able to obtain loan approval and long-term business capital (Iriyadi, 2019). In addition, effective external audits strengthen the company's reputation and develop public confidence. Therefore, when stakeholders observe an external team auditing a company's books of account, they have confidence in its ethical practices, and the company's general reputation improves (Kasper & Alm, 2022). Due to its crucial role in a company's performance, external audit effectiveness must be discussed, and both the company and its stakeholders must be aware of its significance (Kertarajasa et al., 2019). As the success of external audits depends on the efficiency of external auditors, it may be affected by covid-19 restrictions and auditors' mental health. Covid-19 is an infectious disease that emerged for the first time in 2019 and had rapid negative effects on human health as soon as the virus entered the body. It spreads by the touch of sick individuals or through the virus-contaminated air. It is most likely to spread in crowded locations when many people are present. There is a public statement to close institutions and

prohibit public transportation when covid-19 levels are high. The ensuing shutdown led to the closure of business organizations and prevented auditors from conducting direct inquiries into corporate concerns. Consequently, external audit effectiveness may decline (Sarhan et al., 2019). Auditing depends on auditors' vigilance, observation, comprehension, communication, team management, judgment, and decision-making, among other skills. All of these skills are associated with mental capacity or mental health. If the auditors on the external audit team have better mental health, they will have core auditing skills, and the external auditing will be effective (Assad et al., 2020). This study investigates the effectiveness of multinational firms' external audits in Iraq's oil industry. In 2022, Iraq will be an emerging upper-middle economy with a nominal gross domestic output of \$297.341 billion. The oil business, which multinational corporations dominate, is Iraq's most prosperous and progressive industry.

Compared to Russia, China, and the United States, Iraq ranks fifth in the world for crude oil reserves and seventh for crude oil output (Zainalabideen et al., 2022). In the modern history of Iraq, international oil firms contributed 99.7 percent of the country's foreign exchange revenues. The nation can generate a substantial amount of oil with its vast oil reserves. Since the covid-19 epidemic in 2020, the demand for oil products has decreased, and there has been a clear imbalance in oil pricing. And Iraqi oil export costs have reduced by 47% from USD 80.026 billion in 2019 to USD 44.286 billion in 2020, and the oil industry contributed 92% of Iraq's foreign exchange revenues in 2021. (Semenova et al., 2022). Although there is a struggle for recovery, investments and loans to global corporations in the Iraqi oil industry, as well as financial and legal government assistance and marketing for oil products, are all declining. The precise results of the external audit can bring in financial resources, expand the business, and boost profit margins. This paper proposes a method for enhancing external audit effectiveness (Ali et al., 2021). This study aims to explore the effects of covid-19 lockdown and auditors' mental health on the efficacy of external audits. The project also intends to investigate the relationship between covid-19 lockdown, auditors' mental health, and the effectiveness of external auditing. The study is not merely a reiteration of past research but an addition to the existing body of knowledge. Initially, several studies have been published on the implications of covid-19 lockdown and auditors' mental health on the effectiveness of external audits. The association between covid-19 lockdown and auditors' mental health and the effectiveness of external audits, however, has been studied separately by researchers. The current study, which explores the collective and in-depth effects of covid-19 lockdown and auditors' mental health on external audit efficacy, contributes to the body of knowledge. Second, in the extensive literature, only the relationship between government support and the effectiveness of external audits has been addressed. This study expands the existing research on the moderating influence of government assistance on the relationship between covid-19 confinement, auditors' mental health, and external audit effectiveness. Thirdly, the authors shed light on government assistance, the covid-19 lockdown, and the significance of auditors' mental

health in the efficacy of external audits for international oil business firms in Iraq. After the introduction, the following sections are included in the paper: The second section examines the relationship between government support, covid-19 lockdown, auditors' mental health, and the effectiveness of external audits based on the author's past work. The third section gives information regarding the study's data gathering and analysis procedures. The results found in the fourth section are briefly described, and their validity is confirmed by comparing them to similar studies from the past. Implications, findings, and limits are provided in conclusion.

2. LITERATURE REVIEW

In an effective external audit, auditors depict the genuine financial state of a company without interference from any interested parties. The genuine disclosure of a company's operations, monetary worth, and influential power determine public support, government assistance, investment level, and creditor conduct. Although the effectiveness of the external audit ensures improved prospects for the company, it is susceptible to developing country conditions, such as the covid-19 epidemic, the auditor's mental health, and government assistance (Agyei-Mensah, 2019). The relationship between government support, the covid-19 pandemic, auditors' mental health, and the effectiveness of external audits have been the subject of diverse viewpoints in the prior study. Prior studies have expressed various views regarding the relationship between government assistance, covid-19 pandemic, auditors' mental health, and external audit effectiveness. The current study sheds light on these opinions and develops a hypothesis for this relationship. During the prominence of covid-19, when people are threatened with a fatal and protracted illness, the government and the country's regulators declare a lockdown for institutions, businesses, and markets. For whatever cause, a gap comes into physical contact with others. In this circumstance, external auditors cannot review a company's financial records directly. The corporations appoint external auditing teams and hand over their books of accounts, but the lack of direct interaction reduces the effectiveness of the external audit (Boskou et al., 2019). Harjoto et al. (2022) examine the effects of covid-19 lockdown on audit fees and delays, which influence the effectiveness of external auditing. For empirical analysis, the research sample consists of 2,726 U.S. companies, 718 non-U.S. companies from 51 various economies outside the U.S., and 40 special audit companies in 2020. The link was evaluated using multivariate regression analysis. The study hypothesizes that when a covid-19 shutdown happens in a country, audit firms increase their fees to undertake an audit, and their punctuality in addressing legal and health-related matters decreases. As audit fees climb and audits occur, the effectiveness of external audits is diminished. Baatwah et al. (2022) investigate the effects of the covid-19 shutdown on the efficiency of external auditing. Three markers of external audit efficacy include audit effort, auditor performance, and remote audit proficiency. Using online sheets, a questionnaire was created and emailed to 417 auditors at audit firms listed by the Saudi Organization of

Chartered and Professional Accountants (SOCPA) between April and August 2021. 193 auditors' responses were utilized to determine outcomes. The results indicate that covid-19 lockdown harms the effectiveness of external audits, as covid-19 lockdown reduces audit effort, weakens auditor performance, and reduces remote audit competency. Based on the opinions expressed by the authors in the cited literature, the following hypothesis is presented:

H1: Covid-19 lockdown has a negative association with external audit effectiveness.

In an external audit, the auditors are objective individuals with no vested interest in the firm and may have access to information the company provides. To obtain the facts, they must engage in activities such as observation, interaction with organizational staff, asking questions with confidence and a clear head, investigating concealed events, and assessing the accuracy of the books of accounts. Auditors with good mental health are successful in their cognitive efforts while performing their responsibilities for a company and can increase the effectiveness of external audits. Therefore, auditors' mental health is favorably associated with external audit efficiency (Indarti et al., 2021). Broberg et al. (2020) study the effects of auditors' mental health on the effectiveness of external audits. The data was acquired from workers of Swedish auditing firms. IBM SPSS 25 software was utilized for analysis. The authors used descriptive statistics, t-tests, Pearson chi-square tests, Pearson analysis of correlation, and multiple linear regression analyses. The results demonstrated that auditors must carefully examine the books of accounts to determine their accuracy and assess the company's financial standing. In an external auditing team, auditors with good mental health have enhanced focus, concentration, and comprehension of the company's books of accounts, allowing them to carry out audit functions properly. So, the results of the external audit team are favorable. Salehi et al. (2021) studied the impact of auditors' mental health on the effectiveness of external audits in Iran in 2017. Developmental psychological characteristics such as auditor judgment, self-confidence, accountability pressure, self-efficacy, spiritual intelligence, and emotional intelligence are used to evaluate auditors' mental health. In addition to the systematic literature, surveys were constructed using Bar-on (2000), Amram et al. (2007), and Scherer (1982) after a few editions in mind. The descriptive statistics, correlation coefficient, and regression analysis indicate a positive relationship between the mental health of auditors and the success of external audits. Good mental health is characterized by sound judgment, self-assurance, reduced stress, strong self-efficacy, and superior spiritual and emotional intelligence. Therefore, they may provide accurate findings for external audits. The literature cited above simplifies the following hypothesis:

H2: Auditors' mental health positively correlates with external audit effectiveness.

A government concerned with the economy and eradicating crimes perpetrated by corporations or their employees interferes with and supports developing and regulating

special audit teams (Khudhair et al., 2019). Government assistance to audit teams mitigates external auditors' difficulties due to the prevalence and public lockdown in providing audit services to corporations that engage them. When the government supports external auditors, they perform their jobs regularly and with mental tranquility. Therefore, they do an audit effectively. Therefore, when government adopts a supporting stance, covid-19 lockdown difficulties decrease, and enterprises attain external audit efficacy (Lee et al., 2020). Almagtome et al. (2020) examine the relationship between government support, covid-19 lockdown, and the effectiveness of external auditing. The study suggests that when a country's government assumes a supportive stance toward the populace, it is easier to escape the covid-19 conundrum. The government intelligently determines the lockdown period and takes measures to protect the economy from covid-19 lockdown. In addition, government support assists audit businesses in retaining their auditors' team and enhancing their job efficiency. Government assistance mitigates the relationship between covid-19 lockout and external audit effectiveness by mitigating the effects of covid-19 lockdown on external audit effectiveness. Hasan et al., (2020) examine the relationship between government support, covid-19 lockdown, and the success of external audits. The study hypothesizes that if a country's leadership is supportive, health precautions are taken to safeguard its citizens against covid-19 attacks. There is less need to notify a lockdown in this circumstance. In addition, government support assists auditors in comprehending their tasks and achieving external auditing objectives. Therefore, in the existence of government backing and assuming that covid-19 lockdown has no negative effects, enterprises have external audit efficacy. Based on the literature discussed, we can formulate the following hypothesis:

H3: Government support is a significant moderator between covid-19 lockdown and external audit effectiveness.

Chen et al. (2021) conducted a study to determine the connection between government support, air pollution, the reduction of auditors' pessimistic bias, mental health, and external audit efficacy. Between 2013 and 2018, the data for government support, air pollution, reduction in auditors' pessimistic bias, auditors' mental health, and audit quality from China's public enterprises. Using ordinary least squares, the relationships were evaluated. The study suggests that a government that supports environmental projects will do so. The nationwide decrease in air pollution overcomes auditors' negative outlook and enhances their mental health. Consequently, external audits demonstrate great efficacy. Ramadhani et al. (2020) examine the relationship between government support, auditors' mental health as evaluated by role stress and emotional intelligence, and the success of external audits. This is a quantitative study that employed purposive sampling. Using surveys, the data for research factors are collected. In the city of Makassar, data were acquired from independent auditors employed by a Public Accounting Firm (KAP). Using IBM SPSS 20, data analysis covers data quality tests, descriptive statistics, classic assumption tests, and testing of hypotheses. When auditing

firms receive government backing, they have less mental stress and a high emotional intelligence level. Auditor performance thus improves, and external audit effectiveness is increased. Johari et al. (2019) identify the association between government assistance, workload, social pressure, time pressure, auditor mental health, and external audit effectiveness. The research sample comprised 203 government auditors from Malaysia's National Audit Department. Reliability, correlation, and multiple regression analyses were performed to verify the research hypothesis's validity. If the government is helpful, workload, social, and time influence pressure on auditors in public audit firms are reduced, and the auditor's mental health improves. Mentally healthy auditors are capable of producing higher-quality audit reports. Therefore, under a supportive government, auditors have good mental health and are effective in external auditing. Based on the above discussion, the following hypothesis can be formulated:

H4: Government support is a significant moderator between auditors' mental health and external audit effectiveness.

3. RESEARCH METHODS

The article studies the influence of the Covid-19 lockout and auditors' mental health on the external audit effectiveness of a multinational business, as well as the moderating effect of government support on this relationship in Iraq. Using survey questionnaires, the researchers gathered primary data from the respondents. The survey questions are derived from previous research, such as the Covid-19 lockdown measured with five questions extracted from Navarro-Pérez et al. (2022), Auditors' mental health with ten items taken from Hoang et al. (2022), government support with ten items taken from Wong et al. (2022: 2021). The employees of the multinational firm were selected as respondents for the study. The researchers distributed 544 surveys to the respondents, but only 294 legitimate responses were received, representing a response rate of around 54.04 percent. In addition to smart-PLS, PLS-SEM was employed to evaluate the primary data in this study. The smart PLS is an efficient technique for providing accurate estimations with complex models (Hair et al., 2017). The research included two independent factors, including the Covid-19 lockout and the mental health of the auditors. In contrast, the study consists of one moderating variable, such as government assistance, and one dependent variable, such as the efficiency of external audits. Figure 1 has these factors.

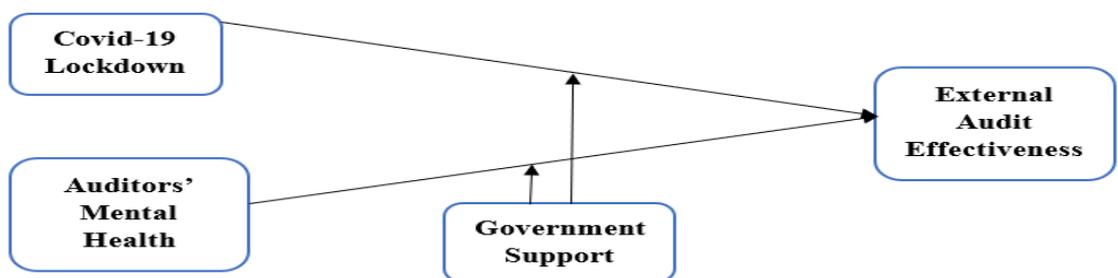


Figure 1. Theoretical Model

4. RESEARCH FINDINGS

The results reveal the correlation between the items, also known as convergent validity. Alpha and composite reliability (CR) values are greater than 0.70, while factor loadings and average variance extracted (AVE) values are greater than 0.50, according to the results. These results revealed a significant association between items. These values can be shown in [Table 1](#).

Table 1. Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Auditors' Mental Health	AMH1	0.857	0.947	0.954	0.675
	AMH10	0.801			
	AMH2	0.825			
	AMH3	0.828			
	AMH4	0.837			
	AMH5	0.837			
	AMH6	0.799			
	AMH7	0.839			
	AMH8	0.751			
	AMH9	0.839			
Covid-19 Lockdown	C19LD1	0.790	0.791	0.855	0.543
	C19LD2	0.630			
	C19LD3	0.757			
	C19LD4	0.723			
	C19LD5	0.772			
External Audit Effectiveness	EAE1	0.758	0.915	0.931	0.630
	EAE2	0.836			
	EAE3	0.648			
	EAE4	0.806			
	EAE5	0.816			
	EAE6	0.815			
	EAE7	0.833			
	EAE8	0.824			
Government Support	GS1	0.831	0.935	0.946	0.663
	GS10	0.578			
	GS2	0.858			
	GS3	0.849			
	GS4	0.812			
	GS5	0.865			
	GS6	0.862			
	GS8	0.854			
	GS9	0.777			

The results demonstrate the association between variables, also known as discriminant validity. For testing the discriminant validity, the Fornell Larcker and cross-loadings were used. Results indicate that the values revealing the linkage with the variable are greater than those showing the linkage with other variables. The results demonstrated discriminant validity. These values can be seen in [Tables 2](#) and [3](#).

Table 2. Fornell Larcker

	AMH	C19LD	EAE	GS
AMH	0.822			
C19LD	0.321	0.737		
EAE	0.500	0.178	0.794	
GS	0.451	0.127	0.424	0.814

Table 3. Cross-Loadings

	AMH	C19LD	EAE	GS
AMH1	0.857	-0.032	0.464	0.375
AMH10	0.801	-0.024	0.305	0.352
AMH2	0.825	0.000	0.460	0.351
AMH3	0.828	0.025	0.459	0.379
AMH4	0.837	-0.020	0.438	0.369
AMH5	0.837	0.002	0.386	0.398
AMH6	0.799	-0.033	0.300	0.358
AMH7	0.839	-0.020	0.434	0.376
AMH8	0.751	-0.091	0.399	0.351
AMH9	0.839	0.006	0.388	0.396
C19LD1	-0.047	0.790	-0.121	-0.130
C19LD2	0.024	0.630	-0.165	-0.059
C19LD3	-0.025	0.757	-0.102	-0.069
C19LD4	0.029	0.723	-0.098	-0.075
C19LD5	-0.059	0.772	-0.137	-0.129
EAE1	0.460	-0.151	0.758	0.368
EAE2	0.430	-0.127	0.836	0.364
EAE3	0.254	-0.125	0.648	0.237
EAE4	0.429	-0.180	0.806	0.342
EAE5	0.377	-0.085	0.816	0.316
EAE6	0.387	-0.150	0.815	0.355
EAE7	0.414	-0.172	0.833	0.358
EAE8	0.373	-0.130	0.824	0.324
GS1	0.336	-0.076	0.342	0.831
GS10	0.263	-0.111	0.261	0.578
GS2	0.385	-0.152	0.350	0.858

Table 3. Continued

GS3	0.357	-0.134	0.333	0.849
GS4	0.385	-0.084	0.305	0.812
GS5	0.390	-0.093	0.320	0.865
GS6	0.411	-0.086	0.381	0.862
GS8	0.410	-0.115	0.423	0.854
GS9	0.341	-0.082	0.356	0.777

The article also employed the Heterotrait-Monotrait (HTMT) ratio to evaluate the discriminant validity. The results indicate that the values are less than 0.85. The results demonstrated discriminant validity. Table 4 contains these values.

Table 4. Heterotrait Monotrait Ratio

	AMH	C19LD	EAE	GS
AMH				
C19LD	0.072			
EAE	0.519	0.197		
GS	0.478	0.151	0.451	

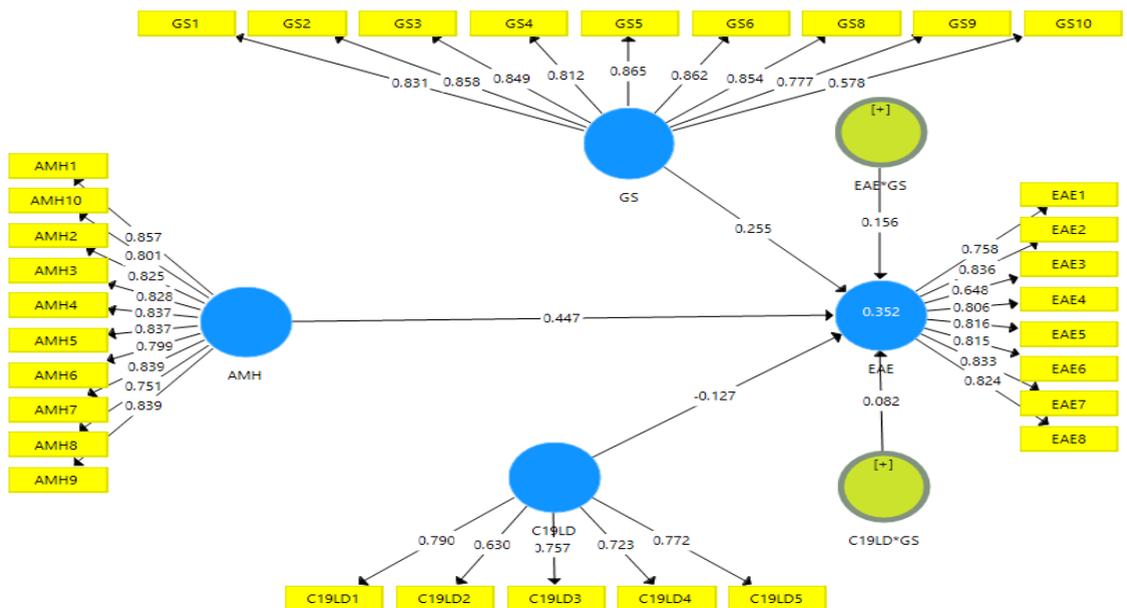


Figure 2. Measurement Model Assessment

The results demonstrated that the Covid-19 lockdown has a negative correlation with the effectiveness of external audits in multinational organizations in Iraq and that auditors' mental health has a positive correlation. We accept hypotheses H1 and H2. The results

also revealed that government support for the Covid-19 lockout, auditors' mental health, and external audit effectiveness in the international organization in Iraq moderates greatly and accepts H3 and H4. These relationships are shown in Table 5.

Table 5. A Path Analysis

Relationships	Beta	Standard Deviation	T Statistics	P Values
AMH -> EAE	0.447	0.065	6.921	0.000
C19LD -> EAE	-0.127	0.046	2.766	0.003
C19LD*GS -> EAE	0.082	0.048	1.701	0.046
EAE*GS -> EAE	0.156	0.051	3.066	0.001
GS -> EAE	0.255	0.057	4.478	0.000

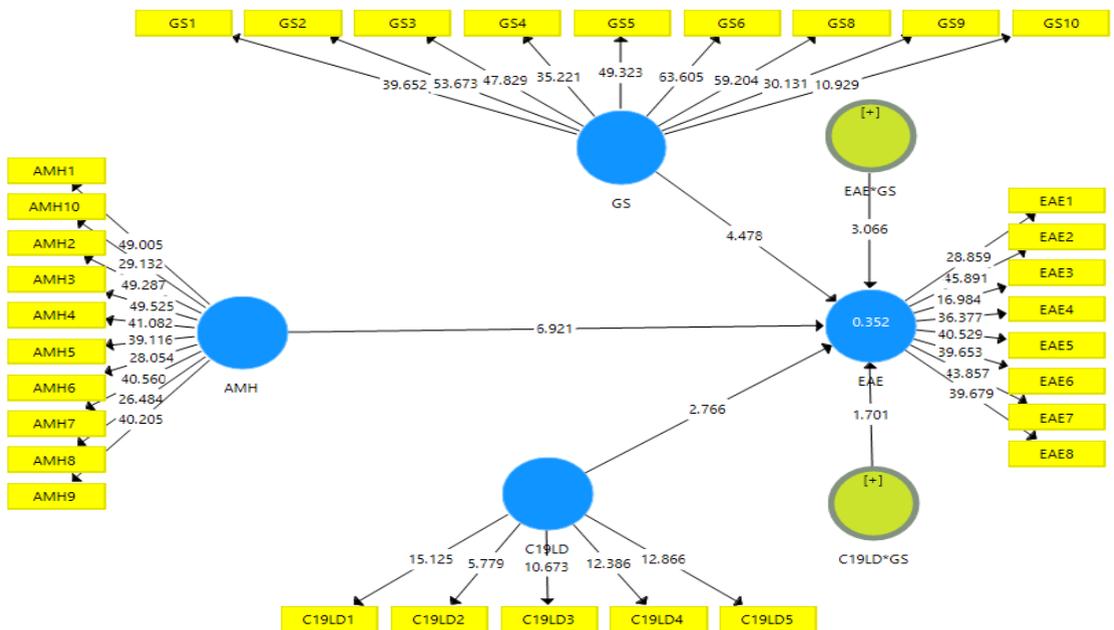


Figure 3. Structural Model Assessment

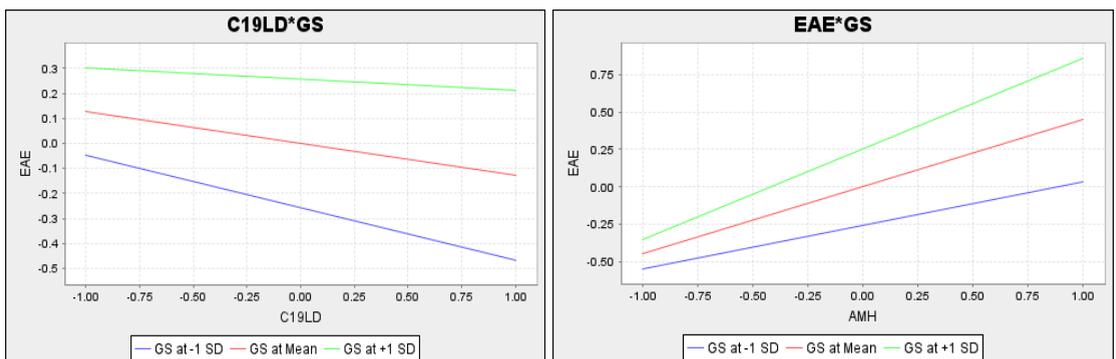


Figure 4. Moderation Analysis

5. DISCUSSIONS

The results indicated a negative correlation between covid-19 lockdown and external audit effectiveness. According to [Kend and Nguyen's \(2022\)](#) research, business organizations remain closed or perform their duties inconsistently during the covid-19 lockdown. These findings are consistent with their results. In this scenario, the books of accounts may not be kept effectively, and the organization's workers may be unable to offer complete information upon scrutiny. Therefore, external auditors may be unable to disclose hidden facts, and the performance of external audits is low. These results are also consistent with a previous study by [Othman \(2021\)](#), which suggests that when an outbreak of covid-19 and a general lockdown for institutions is announced, organizational management is poor and external auditors may not be able to inspect company books of account effectively.

The findings revealed a positive relationship between auditors' mental health and external audit effectiveness. These findings are consistent with the study of [Johari et al. \(2019\)](#), which asserts that auditors must pay close attention to the books of accounts to evaluate their accuracy and the company's financial status. If the external auditors have good mental health, they can audit the company's books of accounts with greater concentration and comprehension [Flayyih and khiari \(2022\)](#). Consequently, external auditing is excellent at delivering correct data. These findings are also consistent with a previous study by [Nwafor et al. \(2021\)](#), which hypothesized that auditors with good mental health possess strong concentration and superior cognitive ability. So that they can investigate, inspect, and verify accounting records and report their findings more efficiently.

Results indicated that government support significantly moderates the relationship between covid-19 lockdown and external audit effectiveness. These results are consistent with [Elaouli et al. \(2022\)](#), which suggest that when a country's leadership is supportive, it is simple for its citizens to emerge from covid-19 adversity. Even during a covid-19 lockdown, the supportive government launches a smart lockdown and attempts to sustain social and economic conditions. In addition, government assistance to businesses ensures an efficient external audit team. Therefore, government support mitigates the effects of covid-19 lockup on the effectiveness of external audits. These findings are consistent with [Sharma et al. \(2002\)](#)'s assertion that government assistance is good for minimizing covid-19 lockup and neutralizing its effects on external audit effectiveness.

The results indicated that government support is a key mediator between the mental health of auditors and the success of external audits. These findings align with the research of [Darehzereshki et al. \(2023\)](#), which suggests that if the government is helpful, it is sensitive to the development of enterprises and ensures the mental health of productive auditors. Therefore, under a supportive government, the mental health of

auditors is excellent and external auditing is effective. These findings are also consistent with [Bonner et al. \(2022\)](#) research, which demonstrates that government support strengthens the correlation between auditors' mental health and external audit efficiency.

6. IMPLICATIONS

With its scholarly contributions, the study provides researchers with instructions on how to conduct future research. This study investigates the effects of covid-19 lockdown and auditors' mental health on the effectiveness of external audits. The analysis of government assistance as a moderator between covid-19 lockdown and auditors' mental health and external audit effectiveness makes a literary distinction. This study examines the impact of government support, covid-19 confinement, and auditors' mental health on the efficacy of external audits conducted by multinational corporations in Iraq.

The research contains numerous important recommendations for national and international businesses to enhance the efficacy of external audits. The report instructs the government and company management that they must lessen the negative effects of the covid-19 lockdown through future management to preserve the effectiveness of the external audit. The study also suggests that auditors' mental health must be in good condition for external audit processes to be effective. The study also indicates that the government must assist businesses and mitigate the negative effects of the covid-19 shutdown on external audit effectiveness. Therefore, with government backing, it is likely to overcome the detrimental effects of the covid-19 shutdown on the efficacy of external audits. In addition, the study indicates that the government must assist firms and auditors in ensuring auditors' mental health and enhancing the effectiveness of external audits. By increasing auditors' mental health and reducing the Covid-19 lockout, the study directs policymakers in formulating external audit effectiveness-related policies. Therefore, in the presence of government assistance, the mental health role of external auditors becomes more effective.

7. CONCLUSION

The purpose of the study was to examine the effects of covid-19 lockdown and auditors' mental health on the effectiveness of external audits, as well as the role of government support in the relationship between covid-19 lockdown, auditors' mental health, and external audit effectiveness. The international organizations in the Iraqi oil business provided information for government assistance, covid-19 lockout, auditors' mental health, and the effectiveness of external audits. The results indicated that covid-19 lockdown and auditors' mental health positively impact the effectiveness of external audits. Results showed that if the government announces a prolonged lockdown within the country due to the covid-19 epidemic, it will be impossible for external auditors to effectively review the company's books of accounts and other items and provide accurate results. In addition, the results suggested that when external auditors have good mental

health, they can concentrate, observe, comprehend, and evaluate the books of accounts. So they can provide accurate and effective audit outcomes. Results indicated that government assistance moderated the relationship between covid-19 lockdown, auditors' mental health, and external audit effectiveness. If the government assists firms and auditors, covid-19 has no effect on external auditors' ability, and they can audit processes properly. In addition, external auditors are supported by the government, enjoy good mental health, and produce effective and high-quality auditing findings.

8. LIMITATIONS

Some modifications must be made to future research to address this study's limitations. Only the effects of covid-19 lockdown and auditors' mental health on the effectiveness of external audits have been investigated in this study. At the same time, many other micro and macroeconomic elements that have influenced the success of external audits are not of concern to the writers of this study. Future scholars must investigate other variables for a comprehensive analysis. In addition, a single mediator has been studied between covid-19 lockdown, auditors' mental health, and external audit effectiveness. In subsequent publications, authors must additionally include mediators.

REFERENCES

- Agyei-Mensah, B. K. (2019). The effect of audit committee effectiveness and audit quality on corporate voluntary disclosure quality. *African Journal of Economic and Management Studies*, 10(1), 17-31. doi: <https://doi.org/10.1108/AJEMS-04-2018-0102>
- Al-ahdal, W. M., & Hashim, H. A. (2021). Impact of audit committee characteristics and external audit quality on firm performance: evidence from India. *Corporate Governance: The International Journal of Business in Society*, 22(2), 424-445. doi: <https://doi.org/10.1108/CG-09-2020-0420>
- Almagtome, A., & Abbas, Z. (2020). Value relevance of financial performance measures: An empirical study. *International Journal of Psychological Rehabilitation*, 24(7), 6777-6791. Retrieved from <https://www.researchgate.net/profile/Akeel-Almagtome/publication/343944422>
- Alzeban, A. (2020). The impact of audit committee, CEO, and external auditor quality on the quality of financial reporting. *Corporate Governance: The International Journal of Business in Society*, 20(2), 263-279. doi: <https://doi.org/10.1108/CG-07-2019-0204>
- Assad, N. F., & Alshurideh, M. T. (2020). Financial reporting quality, audit quality, and investment efficiency: evidence from GCC economies. *WAFEN-UND Kostumkd. J*, 11(3), 194-208. Retrieved from <https://www.researchgate.net/profile/Muhammad-Alshurideh/publication/340862354>

- Baatwah, S. R., & Al-Ansi, A. A. (2022). Dataset for understanding the effort and performance of external auditors during the COVID-19 crisis: A remote audit analysis. *Data in Brief*, 42, 108-125. doi: <https://doi.org/10.1016/j.dib.2022.108119>
- Bonner, S. E., Kadous, K., & Majors, T. M. (2022). A habit strength-based explanation for auditors' use of simple cognitive processes for complex tasks. *The Accounting Review*, 97(3), 107-129. doi: <https://doi.org/10.2308/TAR-2019-0503>
- Boskou, G., Kirkos, E., & Spathis, C. (2019). Classifying internal audit quality using textual analysis: the case of auditor selection. *Managerial Auditing Journal*, 34(8), 924-950. doi: <https://doi.org/10.1108/MAJ-01-2018-1785>
- Broberg, P., Tagesson, T., & Uman, T. (2020). Antecedents of psychological well-being among Swedish audit firm employees. *International Journal of Environmental Research and Public Health*, 17(10), 3346-3359. doi: <https://doi.org/10.3390/ijerph17103346>
- Chen, H., Tan, X., & Cao, Q. (2021). Air pollution, auditors' pessimistic bias and audit quality: evidence from China. *Sustainability Accounting, Management and Policy Journal*, 12(1), 74-104. doi: <https://doi.org/10.1108/SAMPJ-07-2019-0277>
- Darehzereshki, A., Heirany, F., & Taftiyan, A. (2023). Identifying and ranking the main components of environmental auditing to monitor the executive organs of the country. *International Journal of Nonlinear Analysis and Applications*, 6, 46-59. doi: <https://doi.org/10.22075/ijnaa.2022.29368.4137>
- Elaouli, A., & Jarboui, A. (2022). The external auditors' policy after the COVID-19 pandemic and the accounting outlook in Tunisia. *Accounting and Management Information Systems*, 21(1), 77-91. Retrieved from <https://www.cceol.com/search/article-detail?id=1032572>
- Flayyih, H.H., khiari, W. (2022). A COMPARATIVE STUDY TO REVEAL EARNINGS MANAGEMENT IN EMERGING MARKETS: EVIDENCE FROM TUNISIA AND IRAQ. *International Journal of Professional Business Review*, 7(5), 1-18. <https://doi.org/https://doi.org/10.26668/businessreview/2022.v7i5.815>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. doi: <https://doi.org/10.1007/s11747-017-0517-x>
- Harjoto, M. A., & Laksmana, I. (2022). The impact of COVID-19 lockdown on audit fees and audit delay: international evidence. *International Journal of Accounting & Information Management*, 30(4), 526-545. doi: <https://doi.org/10.1108/IJAIM-02-2022-0030>
- Hasan, S., Kassim, A. A. M., & Hamid, M. A. A. (2020). The impact of audit quality, audit committee and financial reporting quality: evidence from Malaysia.

International Journal of Economics and Financial Issues, 10(5), 272-286. doi: <https://doi.org/10.32479/ijefi.10136>

- Hoang, K. T. A., Morris, R. W., Naehrig, D. N., & Glozier, N. (2022). The comparative mental health of Australian doctors before and during COVID-19: A population-based approach. *Australian & New Zealand Journal of Psychiatry*, 66-77. doi: <https://doi.org/10.1177/00048674221106677>
- Indarti, M. G. K., & Widiatmoko, J. (2021). The effects of earnings management and audit quality on cost of equity capital: empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 769-776. doi: <https://doi.org/10.13106/jafeb.2021.vol8.no4.0769>
- Iriyadi, I. (2019). Prevention of Earnings Management through Audit Committee and Audit Quality in the Award-Winning and Non-Winning Companies. *Journal of Accounting Research, Organization and Economics*, 2(2), 155-169. doi: <https://doi.org/10.24815/jaroe.v2i2.14631>
- Johari, R. J., Ridzoan, N. S., & Zarefar, A. (2019). The influence of work overload, time pressure and social influence pressure on auditors' job performance. *International Journal of Financial Research*, 10(3), 88-106. doi: <https://doi.org/10.5430/ijfr.v10n3p88>
- Kasper, M., & Alm, J. (2022). Audits, audit effectiveness, and post-audit tax compliance. *Journal of Economic Behavior & Organization*, 195, 87-102. doi: <https://doi.org/10.1016/j.jebo.2022.01.003>
- Kend, M., & Nguyen, L. A. (2022). Key audit risks and audit procedures during the initial year of the COVID-19 pandemic: an analysis of audit reports 2019-2020. *Managerial Auditing Journal*, 37(7), 798-818. doi: <https://doi.org/10.1108/MAJ-07-2021-3225>
- Kertarajasa, A. Y., Marwa, T., & Wahyudi, T. (2019). The effect of competence, experience, independence, due professional care, and auditor integrity on audit quality with auditor ethics as moderating variable. 6(5), 37-53. Retrieved from <https://www.um.edu.my/library/oar/handle/123456789/38008>
- Khudhair, D., Al-Zubaidi, F., & Raji, A. (2019). The effect of board characteristics and audit committee characteristics on audit quality. *Management Science Letters*, 9(2), 271-282. doi: <http://dx.doi.org/10.5267/j.msl.2018.11.012>
- Lee, K. K., & Levine, C. B. (2020). Audit partner identification and audit quality. *Review of Accounting Studies*, 25, 778-809. doi: <https://doi.org/10.1007/s11142-020-09533-0>
- Navarro-Pérez, C. F., Fernández-Aparicio, Á., González-Jiménez, E., Montero-Alonso, M. Á., & Schmidt-RioValle, J. (2022). Effects of COVID-19 lockdown on the dietary habits and lifestyle in a population in southern Spain: A cross-sectional questionnaire. *European Journal of Clinical Nutrition*, 76(6), 883-890. doi: <https://doi.org/10.1038/s41430-021-01034-w>
- Nwafor, P. U., & Amahalu, N. (2021). Auditors independence and audit quality of quoted deposit money banks in Nigeria. *American Research Journal of*

- Humanities Social Science (ARJHSS)*, 4(09), 77-85. Retrieved from <https://www.arjhss.com/wp-content/uploads/2021/09/J497785.pdf>
- Othman, R. (2021). Managing student and faculty expectations and the unexpected during the COVID-19 lockdown: role transformation. *Accounting Research Journal*, 34(2), 217-228. doi: <https://doi.org/10.1108/ARJ-09-2020-0283>
- Ramadhani, M. W., Yusuf, A. U., & Rizkiyah, R. (2020). The Effects Of Role stress And Emotional Intelligence On Auditor Performance With Psychological Aspects And Well-Being As A Moderating Variable (The Empirical Study At Public Accounting Firm In Makassar City). *Business and Management*, 12(3), 45-62. Retrieved from https://nugschina.org/portal/member_academics/academics_uploads/dfd6823e30e05976dc15a875de2f9fe3.pdf#page=203
- Salehi, M., & Dastanpoor, Z. (2021). The effects of psychological factors on the performance of independent auditors in Iran. *Current Psychology*, 40, 1621-1630. doi: <https://doi.org/10.1007/s12144-018-0084-4>
- Sarhan, A. A., Ntim, C. G., & Al-Najjar, B. (2019). Antecedents of audit quality in MENA countries: The effect of firm-and country-level governance quality. *Journal of International Accounting, Auditing and Taxation*, 35, 85-107. doi: <https://doi.org/10.1016/j.intaccudtax.2019.05.003>
- Semenova, T., & Al-Dirawi, A. (2022). Economic Development of the Iraqi Gas Sector in Conjunction with the Oil Industry. *Energies*, 15(7), 23-39. doi: <https://doi.org/10.3390/en15072306>
- Sharma, N., Sharma, G., Joshi, M., & Sharma, S. (2022). Lessons from leveraging technology in auditing during COVID-19: an emerging economy perspective. *Managerial Auditing Journal*, 37(7), 869-885. doi: <https://doi.org/10.1108/MAJ-07-2021-3267>
- Wong, J. W. C., & Lai, I. K. W. (2022). The mechanism influencing the residents' support of the government policy for accelerating tourism recovery under COVID-19. *Journal of Hospitality and Tourism Management*, 52, 219-227. doi: <https://doi.org/10.1016/j.jhtm.2022.06.018>
- Zainalabideen, A.-H., Mohammed, M. B., Ali, M. H., Ahmed, M. D., Al-Muttar, M. Y. O., & Abd Alhasan, S. A. (2022). Moderating effect of market turbulence between information technology governance and stakeholder management: evidence from Iraqi multinational firms'perspective. *The Journal of Modern Project Management*, 10(2), 120-133. Retrieved from <https://journalmodernpm.com/manuscript/index.php/jmpm/article/view/526>