

Article

A Comparative Analysis of Reputation in Enlisted Firms on the Iraq Stock Exchange

Hind Shafeeq Nimr Al-Maliki

Department of Economics and Administrative Sciences, University of Basrah, Basrah GRCR+5JJ, Iraq;
hindalmalekee@gmail.com

Abstract: This paper aims to assess the impact of ISIS's presence in Iraq on the reputation of listed firms on the Iraq Stock Exchange. This paper's method is descriptive–correlational, and the selected sample includes 35 listed firms on the Iraq Stock Exchange during 2014–2019. This study measures the reputation of listed firms on the Iraq Stock Exchange. The presence of ISIS in Iraq is analyzed using a regression model and a dummy variable. Research hypotheses were tested using a multivariate regression model based on panel data. The obtained results show a significant relationship between the presence of ISIS in Iraq and the reputation of listed firms on the Iraq Stock Exchange, which means the presence of ISIS in Iraq has declined listed firms' reputation on the Iraq Stock Exchange. Since the present study is a pioneer in examining this issue in an emerging economy, especially ISIS's existence, the current study results may give academia and practitioners a profound insight.

Keywords: firm reputation; ISIS; Iraq economy; logistic regression



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1. Introduction

During the past few decades, the business world has witnessed the emergence of some paradigms, such as customer centrality, business dominance, and the decline of engineering orientation and technical dominance. As an effective policy, mass production is not applicable in industries because lean production is paid great attention. Nevertheless, managers will likely improve the firms' reputation (Mousavi et al. 2022) by improving investment efficiency, particularly in competitive markets (Salehi et al. 2020a). Although reputation has been well-documented, academic studies in this regard, especially in the business domain, are not updated (de la Fuente Sabate and de Quevedo Puente 2003; Black et al. 2000; Capraro and Srivastava 1997; Chung et al. 1999). Thus, as an empirical investigation, the current paper attempts to fill such a critical academic gap by providing fresh and updated findings, particularly in the Iraq business environment having discriminated settings with that of conducted studies dealing with the business atmosphere of developed countries.

The topic of corporate reputation is interesting among academics and practitioners (Zimon et al. 2022). Within the past few decades, an increase in significance and the value of gaining access to and holding the firm's good reputation led to a reputation system (Lee et al. 2018). Despite the growth of the number of studies on firm reputation, there is no consensus on a comprehensive definition of firm reputation. In their study, Ming et al. (2019) express that the lack of a comprehensive definition of reputation is the multidisciplinary nature of related studies that causes the topic to be assessed from different views. Each field of study, such as economics, accounting, sociology, and strategy, has a certain definition of reputation. There is also no definition of reputation, even in marketing (Zahedi et al. 2022a). Corporate reputation can considerably affect the dominant competitive setting of the market. The word "reputation" was first limited to brand, firm identity, and other visual design elements. However, it gradually encompassed communications and all behavior types related to the external setting and the market (Dalwai and Salehi 2021). Depending

on different approaches, a firm reputation can be elucidated as an evaluation performed by different beneficiaries from corporate capabilities for casting supervision (Fombrun and Van Riel 2004). Fombrun, the founder of corporate reputation studies, states that a firm reputation shows the overall attraction of all its components, including staff, customers, investors, reporters, and public people (Zahedi et al. 2022b). Thus, a firm reputation unifies people's mental images and indicates firm status against rivals.

On the other hand, since the emergence of ISIS in 2014, Mosul, Iraq, and Syria have been caught in a whirlwind that might not be pulled out for years or even decades. Throughout the region, the recruitment of ISIS has caused other "eccentricity" and "sub-national" forces to be released in the Middle East. The fragments of the advent of ISIS were peculiar to Iraq and Syria. They affected a broad spectrum of countries and regions from the Middle East to North Africa, the Mediterranean, and Europe. Within the past decade, the cost of facing terrorism in Iraq has been prohibitive. According to International Business Times, Iraq suffered financial losses of about USD 31.4 billion during 2004–2016, based on a quote from the Iraqi Ministry of Planning. The report says that the Iraqi Ministry of Defense has suffered the most, so this government section is damaged by 15 trillion and 35 billion Iraqi Dinar—about 1.4 billion. The business firms of this country have also generated high political costs and suffered exorbitant losses. This severely influenced the profitability of listed Stock Exchange firms, which has led to the bankruptcy and liquidation of such firms. Moreover, such insecurities have caused foreign investors to be unwilling to invest in this country, which benefits from oil and petrochemical resources. With the decline in foreign investors' attention level and the drop in local investment power, most firms can no longer reimburse their liabilities. Production growth decreased significantly in this country, leading to uncertainties for business firms.

As mentioned earlier, the case of ISIS, as a discriminating factor of Iraq's business specifications, might be considered a detrimental factor in any financial market. In this sense, earlier findings have mostly covered the interaction of business reputation with investment performance (Chung et al. 1999), overstatement of financial performance (Capraro and Srivastava 1997), the market valuation (Black et al. 2000), security analyst earnings forecast (Cordeiro and Sambharya 1997) and firm financial performance (Deephouse 1997). Additionally, more recent studies have revealed the interaction of business reputation with crisis management during the COVID-19 pandemic in Indonesia (Dwiedienawati et al. 2021); banks' reputation during the crisis in Lebanon (El-Chaarani and El-Abiad 2020); sustainability, innovation, perceived performance, service quality, work environment and good governance in Spain (Martín-Miguel et al. 2020); and corporate social responsibility (Dell'Atti et al. 2017). Therefore, the current paper might be considered a pioneer attempt to fulfill the impact of the political and terrorist-pertained crisis on the business reputation, aiming to assess the effect of ISIS's presence in Iraq on Iraqi firms' reputations.

2. Theoretical Principles and Literature Review

2.1. Corporate Reputation

Corporate reputation is defined as a strategic property, so executive managers should be aware of the effect of their decisions on corporate reputation. Corporate reputation can be defined from different aspects, such as beneficiaries' perception of the firm's long-term socio-economic and organizational potential. According to Hall and Lee (2014), corporate reputation is defined as a perceptual view of the previous activities and future outlook to describe all aspects of critical components compared to rivals.

It is argued that highly reputed firms benefit from various advantages, including more loyal customers, better staff, consistent income, and/or performance quality. In most cases, a firm's external features may determine the so-called performance, so firm managers can enter the urbanization programs more explicitly and carry out their duties to enhance the firm reputation. Such activities create a mental effect that forms a reputation (Salehi et al. 2020b).

Gotsi and Wilson (2001) consider corporate reputation for evaluating shareholders based on the following criteria: shareholders' experience and different types of communications and symbols about the firm compared to other rivals. They also add that large firms' reputation is a general structure that shows shareholders' collective perception of firm performance. Corporate reputation can be obtained from a general perception of the firm's previous behavior and subsequent conclusions. A firm reputation is a significant criterion for success, an essential strategy and valuable property. Market specialists state that a firm's reputation is a legal property for which all businesses strive. Corporate reputation is a vital issue that affects individuals' financial and non-financial perceptions.

Organizations have a different reputation from beneficiary groups (Gan 2019). Stakeholders have different evaluation tools for judging the organizational reputation that relies on the specific expectations of their role. For example, consumers may expect a firm to present a special service or goods, and investors expect a higher return for their capital. While the environmental groups' expectation is protecting the environment, organizations enjoy different reputations concerning their beneficiary groups. Moreover, the expectations of beneficiaries from the organizational operation are dynamic, so they are likely to be changed as time goes by. Furthermore, individuals' expectations also rise when an organization's reputation increases. Hence, well-known organizations may absorb more supervision than organizations with a lower reputation (García-Sánchez et al. 2019).

2.2. The Impact of ISIS on Iraq's Economy and Industry

The rise of ISIS may seem like an emerging phenomenon in terms of its speed of action and the spread of the group's territorial conquests in the contemporary era (Salehi et al. 2021a). However, its roots can be traced both theologically and ideologically in the history of Islam. One of the critical issues that Muslims have faced since the inception of Islam is the phenomenon of "takfir." The history of Islam is replete with tragic events that, due to improper takfirs and the creation of a poisonous atmosphere, have prevented progress and freedom of creative and innovative ideas and have caused many Islamic societies to stagnate; this ominous phenomenon has turned our age into an age of sad and painful events. The conventional definition of security, which included defense, military, and armaments, now focuses on areas that can be a solid basis for economic activity, production, and increased income and resources. The Takfiris have destroyed much of Islamic countries' equipment and infrastructure by waging a civil war of attrition. Undoubtedly, the destruction of state infrastructure is one of the Zionists' macro-level strategies and their Western supporters; this strategy aims to destroy Islamic countries' economic and human capital. In September 2014, the United Nations estimated that reconstruction in Syria, Iraq, and Gaza would require USD 750 billion. The UN Economic and Social Commission spokesman said the war in Syria had posed severe problems for the country's housing, education, and industrial facilities; in Iraq, hundreds of buildings in the north and east were severely damaged during clashes with ISIS. The report uses remote sensing data and commercial satellite imagery to provide a unique perspective on ISIS-controlled areas' internal situation. This report reveals an inconceivable picture of these areas' economic and social life: a life full of electricity loss, huge waves of homeless people, shortage of agricultural production, and increased violence. While ISIS in Raqqa and Mosul, as its strategic capitals, has helped maintain stable local business activities by building strong government structures, in other areas, it has either neglected vital resources or, instead of ruling over citizens, punished them. The most crucial findings of this report are as follows:

1. Military pressure on ISIS-controlled areas reduces economic activity and prevents the group from forming a government based on its stated goals. On the one hand, military pressure significantly reduces economic power in ISIS-controlled territories and, on the other hand, limits the group's ability to profit through taxes and gain public legitimacy.

2. Local economies in ISIS-controlled areas failed because either taxes were too high or social laws were too restrictive. Thus, the combination of poor local economies with ISIS's tough military efforts to control the situation has weakened the group.
3. ISIS showed successful oversight of local economies, but these signs were accompanied by incompetence and negligence. ISIS has prioritized electricity supply to key hospitals and factories in several cities, even in massive power shortages.
4. Electricity shortages were a significant problem for economic activity in ISIS-controlled areas. Electricity shortages in ISIS-controlled areas have increased significantly compared to the pre-ISIS era, so its effects will continue in the post-liberation period.
5. Financial markets will not return to normal conditions immediately after the liberation of cities. Due to the war and people's flight from the cities.
6. Administrative capacity in the liberated areas is likely to be maintained. Liberation forces will likely encounter local doctors, engineers, and staff who volunteered to work for ISIL or were recruited by ISIS to carry out various affairs.

2.3. Theoretical Issues and Hypothesis Development

Reviewing the research conducted in finance and accounting, it can be seen that despite the development of research in various fields, very few studies have discussed the company's reputation. In the meantime, there is a scarcity of studies on the link between companies' reputations and economic events in the macro sphere, such as discussing the presence of ISIS in Iraq. However, there are many limitations to writing this research background, and the number of related articles is minimal.

One of the studies conducted on corporate reputation was by [Hall and Lee \(2014\)](#), who examined the effect of corporate reputation on companies' financial performance at the international level. They used Fortune magazine's annual published list to quantify the company's reputation. They also used return on assets, return on equity, and profit margins to measure financial performance. The study results show the positive effect of corporate reputation and financial performance.

[Blajer-Golebiewska \(2014\)](#) also examined the relationship between corporate reputation and the economic performance of Polish companies. In Blajer-Golebiewska's study, social responsibility was the criterion for measuring reputation. The results of their research indicated a weak and significant relationship between these two variables. [Iwu-Egwuonwu \(2010\)](#) examined whether poor performance led to damage to reputation and concluded that the weaker the companies' financial performance, the lower the companies' reputation.

[García-Sánchez et al. \(2019\)](#) examined reputation factors in higher education management in another study. They cited financial performance, social responsibility, emotional attractiveness, and clear organizational vision as the primary pillars of organizational reputation. They also considered the quality of products and services and the work environment as secondary factors of organizational reputation. [Gan \(2019\)](#) also examined the relationship between corporate reputation and financial performance using a system of simultaneous equations. Their findings show a positive correlation between corporate reputation and financial performance. These findings can be useful for investors, business managers, and other users to explain how corporate reputation and financial performance are related.

[Eren \(2021\)](#) shows trust and corporate reputation significantly affect customer satisfaction with chatbot use. Moreover, [Dwiedienawati et al. \(2021\)](#) show that transformational leadership, crisis management team, quality of communication and frugal innovation type positively influenced the effectiveness of COVID-19 crisis management, which will lead to corporate reputation.

[Maryam et al. \(2022\)](#), examining the determinants of attitude and adoption intention of Islamic banking among potential customers in Pakistan, reveal that attitude may remarkably mediate the relation of cost benefits, reputation and support for business and the adoption intentions of Islamic banking.

Pollák et al. (2021) propose the continuous monitoring of corporate reputation as an important factor in the valuation process, and taking into account all reputation-relevant determinants such as Google as well as major social networks, namely Facebook, Twitter, YouTube, and LinkedIn, shows that the parent companies' reputation differs to that of their brands. Manuela et al. (2021) indicate a positive impact of trust on the intention to use e-commerce, on buy frequency and repurchase intention. Waluyo et al. (2022) document that the website, social media, and the role of alumni together have a significant effect on the reputation of academic institutions.

Hidayah et al. (2021) report that environmental and shareholder pressures affect the quality of the sustainability report and organizational reputation.

Hoang et al. (2022) imply multiple ways in which both cognitive and emotional variables should be considered to build a bank's reputation. Building customer trust and providing risk management solutions are the keys.

What can be seen in all of the above research is that they have all argued for a relationship between different variables, including corporate financial performance, corporate social responsibility, social media, e-commercial, etc., and corporate reputation. It is important to note that since the presence of ISIS in Iraq due to the collapse of many infrastructures and facilities related to the major industries of Iraq, Iraqi manufacturing and service companies have declined sharply to the point that a large number of companies listed on the Iraqi Stock Exchange went bankrupt or were fired due to inferior performance. Thus, it is visible that ISIS's presence has weakened the Iraqi Stock Exchange companies' performance. This research examines whether the reduction in the level of performance caused by the presence of ISIS in Iraq has affected the reputation of the country's stock exchange companies. Therefore, with this hypothesis, this research is explained as follows:

Hypothesis 1 (H1). *The presence of ISIS significantly impacts firms' reputation on listed firms on Iraq Stock Exchange.*

3. Research Methodology

The present paper is among practical studies employing correlation using multivariate regression for its procedures. The duration of the study was from 2012 to 2018, which placed the study among longitudinal ones. Information analysis has been carried out based on pooled or panel data in EViews Software.

The statistical population of this paper includes all listed firms on the Iraq Stock Exchange for 7 years from 2012 to 2014, the years before the advent of ISIS in Iraq and 2015–2018 as the years after the presence of ISIS in Iraq, with the following limitations:

- The firm should have no change in its fiscal year from 2012 to 2018;
- The firm should have no halt in its activity on the Iraq Stock Exchange;
- The firm should present all related data to the variables of this paper completely during 2012–2018;
- The firm should not be affiliated with the production and service industries to unify reporting and increase comparability.

After analyzing the listed firms on the Iraq Stock Exchange during the study period and imposing the abovesaid terms, 35 firms were selected as the study's sample. It is assumed that the selected firms are a random sample from a specific period, so the results are generalizable to similar Stock Exchange Markets. The required data for statistical analysis were obtained from the official website of the Iraq Stock Exchange¹. The data were collected through the officially prepared Excel files and scanning of the disclosed financial statements.

3.1. Data Analysis Method and Hypothesis Testing

In this paper, the multivariate regression model is used to assess the research parameters as follows:

$$\begin{aligned} \text{Financial_Resilience}_{t,i} = & a_0 + a_1 \text{ISIS}_{t,i} + a_2 \text{Firm Size}_{t,i} + a_3 \text{Sales Volatility}_{t,i} + a_4 \text{Cash Flow} \\ & \text{Volatility}_{t,i} + a_5 \text{OperCycle}_{t,i} + a_6 \text{Big Auditor}_{t,i} + a_7 \text{Loss}_{t,i} + a_8 \Delta \text{Sales Growth}_{t,i} + a_9 \text{ROA}_{t,i} \\ & + \Sigma \text{Year} + \Sigma \text{Industry} + \varepsilon_{t,i} \end{aligned}$$

where:

3.1.1. Dependent Variable: Corporate Reputation (Financial Resilience)

Measuring each variable can be based on different criteria. One of the sensible ways in different countries to measure corporate reputation is using the list of nominated elite firms provided annually by journals and authentic periodicals of countries. For example, the FORTUNE journals, MACL in Turkey, and MECRO in Spain will be used in America. Such lists in other countries, including Iraq, are proportionate to their requirements. In this paper, the criteria for identifying firms with a reputation are the lists of elite firms provided by the Iraq Stock Exchange.

3.1.2. Independent Variable: The Presence of ISIS in Iraq (ISIS)

It is a dummy variable, and for years after the presence of ISIS in Iraq (2014 onward), it would be 1 and 0 for years before the presence of this group in Iraq.

3.1.3. Control Variables

The control variables are as follows:

Firm size: natural logarithm of the firm's market value at the end of the current year.

Sales volatility: standard deviation of sales to total assets within the past three years.

Cash flow volatility: standard deviation of operational cash flow to total assets.

Operation cycle: natural logarithm for the duration of time for purchasing raw materials to reach cash from a manufactured product's sales.

Loss: if the firm reports a loss in the current year, 1; otherwise, 0.

Type of auditor (NationalAuditor): if a firm auditor is the Audit Organization of Iraq, 1; otherwise, 0.

Sales growth changes (Δ SalesGrowth): sales growth of the current year minus that of the previous year.

Rate of return on assets (ROA): operational earnings divided by the firm's total assets.

4. The Research Findings

4.1. The Descriptive Statistics

Table 1 displays the descriptive statistics of the main variables of the study. Regarding the small difference between the values of the median and mean, it can be concluded that the research variables follow a normal distribution. As can be seen, the mean for the variable of corporate reputation is 0.363 showing that more than 36% of the sample year companies were among those active business firms on an elite annual list presented by the Iraq Stock Exchange. As for the variable of ISIS presence in Iraq, since 7 years under study were related to this group's presence, this variable's mean is 0.571.

Table 1. The Descriptive statistics of research variables.

Variable	Mean	Median	Standard Deviation	Minimum	Maximum
Financial_Resilience	0.363	0.000	0.482	0.000	1.000
ISIS	0.571	1.000	0.495	0.000	1.000
Firm Size	9.684	9.708	0.578	8.358	11.421
Sales Volatility	0.115	0.074	0.121	0.0001	0.741
Cash Flow Volatility	0.351	0.081	1.641	0.0001	3.891
Operating Cycle	116.58	107.34	69.597	20.097	297.78
ΔSales Growth	0.336	0.021	1.940	−0.979	21.618
ROA	0.003	0.013	0.187	−0.683	0.470
Loss	0.408	0.000	0.492	0.000	1.000
National Auditor	0.073	0.000	0.261	0.000	1.000

4.2. Testing the Research Hypothesis

Since the study’s dependent variable is a two-dimensional and dummy variable, a logistic regression should be used to fit that. Within a Logit model (with binary dependent variable), the logarithm of excellence will be modeled as the model’s output based on a combination of independent variables. Thus, common regressions cannot be used in these patterns to predict the dependent variable’s occurrence. In this type of regression, excellence, a proportion of success to failure, is used. It is noteworthy that the prerequisites, including variance homogeneity for dependent and independent variables, normal distribution of the dependent variable, residuals, and/or measurement error in the Logit model, will not be considered for performing linear regression.

Since the study model is pooled, it is necessary to determine the appropriate estimation for using the AIC criteria. For this purpose, the Logit pattern return loss will be estimated using the four methods of simple OLS, time-series OLS (only by considering the time factor), the panel with fixed effects, and the panel with variable effects. Their AIC criteria will be compared. The model with the smaller AIC will be used as the more appropriate and final model. The results of fitting the four variables and AIC values are as follows:

As shown in Table 2 and the so-called models’ AIC values, we can conclude that the panel model, with fixed effects, is the most appropriate model-fitting method due to having the lowest value.

Table 2. The results of AIC statistics for the research model.

Identification Criteria	Simple OLS Model	OLS Model by Applying Time Factor	Adjusted Panel Model with Fixed Effects	Adjusted Panel Model with Variable Effects
AIC coefficient	294.240	301.850	263.170	279.570

Table 3 depicts the results of hypothesis testing. Chi-square statistics of the Hosmer–Lemeshow test and their significance with the value of 6.010 and 0.008 indicate the goodness and appropriate fitting of the model. On the other hand, McFadden’s coefficient is 0.519 shows that about 52% of changes related to the dependent variable can be elucidated by the introduced independent and control variables.

Table 3. The results of a statistical test of research hypotheses.

Variable	Coefficient	Test Statistic	Probability
β_0	0.802	4.568	0.000
ISIS	−0.007	−2.924	0.006
Firm Size	−0.046	−2.490	0.013
Sales Volatility	−0.059	−0.649	0.516
Cash Flow Volatility	−0.003	−0.483	0.629
Operating Cycle	0.0003	2.070	0.039
Δ Sales Growth	0.180	2.224	0.027
ROA	−0.716	−16.838	0.000
Loss	0.004	0.594	0.552
National Auditor	0.143	2.696	0.007
Industry		Controlled	
McFadden’s coefficient of determination (McF.R2)	0.519	Chi-square of Hosmer-Lemeshow	
		6.010 ($p = 0.008$)	

For the research hypothesis testing, given the test statistic of the variable of ISIS presence in Iraq and its probability in the model with the respective values of −2.924 and 0.006, we can declare that the variable is significant in the model, so there is a significant relationship between ISIS presence in Iraq and corporate reputation. On the other hand, since the coefficient of the said variable is negative in the mode, the relationship is inverse, which means the presence of ISIS in Iraq has declined listed Iraqi firms’ reputations. Prior investigations have proposed several factors by which the social and economic crisis may explain the firm’s reputation. For instance, Eren (2021) believes customer satisfaction might be an effective factor. The undermined quality of products produced during the ISIS crisis might be important in reducing the firms’ reputation. Supportively, transformational leadership, crisis management team, quality of communication and frugal innovation type might be considered as detailed factors determining the firms’ reputation (Dwiedienawati et al. 2021). Concerning the impact of social attitudes during crisis periods on the firm’s reputation, the findings of Maryam et al. (2022) may explain the relationship between these two variables. Moreover, since the ISIS crisis has destroyed most of the communicational infrastructures of Iraq, we expect that lacking sufficient e-commerce and the use of social media and internet-based communications might have a significant impact on the organizational reputation of Iraqi’s listed companies (Pollák et al. 2021; Manuela et al. 2021; Waluyo et al. 2022). More importantly, the impact of financial performance on a firm’s reputation might be considered one of the essential factors elaborating on the impact of ISIS on firms’ reputation (Hidayah et al. 2021). However, Salehi et al. (2019) find that a financial crisis is not likely to impact audit quality as a market environment proxy.

4.3. The Additional and Confirmatory Test in Line with Hypothesis Testing

As mentioned previously, a negative and significant relationship is evident between the presence of ISIS in Iraq and corporate reputation. In other words, after the presence of ISIS in Iraq, corporate reputation has gradually crashed among the listed firms on the Iraq Stock Exchange. The criterion for hypothesis testing was the multivariate linear regression that was indicative of a relationship with a negative and significant direction. To confirm such results, the comparison of obtained means in two dependent societies will be used to differentiate corporate reputation in Iraq before and after the advent of ISIS. So, research hypotheses were tested as follows:

Hypothesis 2 (H2). *The corporate reputation of listed firms on the Iraq Stock Exchange after the presence of ISIS is less than that before the presence of ISIS.*

Since the result of the administered statistical tests indicates the abnormality of corporate reputation, the Wilcoxon nonparametric test will be used to compare two dependent

societies (corporate reputation before and after the presence of ISIS), the results of which are shown in Table 4.

Table 4. The results of the hypothesis.

Type of Test	Z Statistic	Probability
Wilcoxon one-sided asymptotic test	5.307	0.000

According to the test and the value of Z probability statistic equal to 0.000 and significant at an error level of smaller than 0.01, we can declare statistically with 0.99 confidence that corporate reputation has experienced a significant decline after the presence of ISIS in Iraq.

5. Discussion and Conclusions

Reputation is a concept that is closely related to the firm's credibility; in other words, companies gain credibility through their behavior, laying the foundation for a strong reputation. If the stakeholders do not believe in that company's merits, the company will never find a strong reputation. Marketers believe that the critical element that significantly impacts customers' purchasing decisions is their understanding of the company's role in society and how they treat its shareholders and stakeholders. In the meantime, the relationship between the reputation and financial performance of the company is quite evident. Thus, any factor that can damage the company's financial performance will undoubtedly affect the company's reputation (Hidayah et al. 2021). The presence of ISIS in Iraq was a factor in weakening many companies' performance in this country, so this study tried to examine whether this reduction in the level of performance caused by the presence of ISIS in Iraq could have affected stock companies' reputations in this country.

This study indicates a significant relationship between the presence of ISIS in Iraq and the reputation of companies listed on the Iraqi Stock Exchange. With the presence of ISIS in Iraq, the reputation of Iraqi stock exchange companies has decreased. These results confirm the concepts obtained in the studies conducted by Fombrun and Van Riel (2004); Hall and Lee (2014); Blajer-Golebiewska (2014); Iwu-Egwuonwu (2010); and Caliskan et al. (2011).

It should be stated that companies' high and favorable financial performance leads to a positive and ideal image in the minds of stakeholders and makes investors believe that this company is profitable, thus increasing its reputation. However, at the time of ISIS's Iraq invasion and the destruction of many of its related industries and facilities in Iraq, Iraqi stock exchange companies' performance declined sharply, and their position declined sharply compared to before. On the other hand, from investors' and suppliers' perspectives, Iraq's domestic and foreign investment security decreased sharply after this event. As a result, trust for investment in companies that were no longer performing well and were largely on the verge of bankruptcy and decline was greatly reduced. As a result of all these issues, the listed firms' credibility and reputation on the Iraq Stock Exchange companies have decreased significantly. The presence of ISIS has immensely damaged Iraqi companies' reputations.

The outcome of the current paper may propose several contributions for market analyzers, managers and policymakers. Market analyzers are aware that the ISIS crisis has a significant impact on the profitability and resilience of the companies; therefore, in order to obtain the real reputation or profitability of companies, the comparative analysis between the periods before (starting from 2014 and its former years) and after (starting from 2014 and its later years) ISIS's crisis may provide them with in-depth insight, resulting in efficient decision making. For managers, the findings propose that eliminating and compensating for the potential consequences of ISIS, such as backwards social media and e-commerce, reduced customer satisfaction, and declined product innovation and quality, may effectively improve the firms' reputation and profitability. For policymakers, the findings suggest that the provision of financial support and social or public facilities, such as robust and high-

quality internet services, may significantly improve firms' reputation through expanding e-commerce globally, all of which in turn may improve the macroeconomic indices consisting of employment rate (Salehi et al. 2021b) and GDP growth dispersion (Daemigah 2020).

Finally, it is suggested that future research extend the results of this study and investigate other dimensions of ISIS's presence in Iraq, including the impact on corporate financial resilience and their ability to cope with financial crises and the impact of this attack on future growth.

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Note

¹ Available online: <https://arab-exchanges.org/member/iraq-stock-exchange-isx/> (accessed on 20 April 2022).

References

- Black, Ervin L., Thomas A. Carnes, and Vernon J. Richardson. 2000. The market valuation of corporate reputation. *Corporate Reputation Review* 3: 21–31. [CrossRef]
- Blajer-Golebiewska, Anna. 2014. Corporate reputation and economic performance: The evidence from Poland. *Economics & Sociology* 7: 194–207. [CrossRef]
- Caliskan, E., B. Icke, and Yusuf Ayturk. 2011. Corporate reputation and financial performance: Evidence from Turkey. *Research Journal of International Studies* 18: 61–72.
- Capraro, Anthony J., and Rajendra K. Srivastava. 1997. Has the influence of financial performance on reputation measures been overstated? *Corporate Reputation Review* 1: 86–92. [CrossRef]
- Chung, Sam Y., Thomas Schneeweis, and Kristina Eneroth. 1999. *Corporate Reputation and Investment Performance: The UK and US Expertise*. Working Paper. New York: SSRN. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=167629 (accessed on 20 April 2022).
- Cordeiro, James J., and Rakesh B. Sambharya. 1997. Do corporate reputations influence security analyst earnings forecast? An empirical study. *Corporate Reputation Review* 1: 94–97. [CrossRef]
- Daemigah, Ali. 2020. Does Financial Statements Information Contribute to Macroeconomic Indicators? *Iranian Journal of Accounting, Auditing and Finance* 4: 61–79. [CrossRef]
- Dalwai, Tamanna, and Mahdi Salehi. 2021. Business strategy, intellectual capital, firm performance, and bankruptcy risk: Evidence from Oman's non-financial sector companies. *Asian Review of Accounting* 29: 474–504. [CrossRef]
- Deephouse, David L. 1997. The effect of financial and media reputations on performance. *Corporate Reputation Review* 1: 68–71. [CrossRef]
- de la Fuente Sabate, Juan Manuel, and Esther de Quevedo Puente. 2003. Empirical analysis of the relationship between corporate reputation and financial performance: A survey of the literature. *Corporate Reputation Review* 6: 161–77. [CrossRef]
- Dell'Atti, Stefano, Annarita Trotta, Antonia Patrizia Iannuzzi, and Federica Demaria. 2017. Corporate Social Responsibility Engagement as a Determinant of Bank Reputation: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management* 24: 589–605. [CrossRef]
- Dwiedienawati, Diena, David Tjahjana, M. Faisal, Dyah Gandasari, and Sri Bramatoro Abdinagoro. 2021. Determinants of perceived effectiveness in crisis management and company reputation during the COVID-19 pandemic. *Cogent Business & Management* 8: 1912523. [CrossRef]
- El-Chaarani, Hani, and Zouhour El-Abiad. 2020. Determinants of Banks Reputation During Crises. *Journal of Internet Banking and Commerce* 25: 39–46. [CrossRef]
- Eren, Berrin Arzu. 2021. Determinants of customer satisfaction in chatbot use: Evidence from a banking application in Turkey. *International Journal of Bank Marketing* 39: 294–311. [CrossRef]
- Fombrun, Charles, and Cees Van Riel. 2004. *Fame & Fortune: How Successful Companies Build Winning Reputations*. Upper Saddle River: FT Press.
- Gan, Huiqi. 2019. Does CEO managerial ability matter? Evidence from corporate investment efficiency. *Review of Quantitative Finance and Accounting* 52: 1085–18. [CrossRef]
- García-Sánchez, Isabel-María, Nazim Hussain, and Jennifer Martínez-Ferrero. 2019. An empirical analysis of the complementarities and substitutions between effects of CEO ability and corporate governance on socially responsible performance. *Journal of Cleaner Production* 215: 1288–300. [CrossRef]
- Gotsi, Manto, and Alan M. Wilson. 2001. Corporate reputation: Seeking a definition. *Corporate Communications: An International Journal* 6: 24–30. [CrossRef]

- Hall, Ernest H., and Jooh Lee. 2014. Assessing the impact of firm reputation on performance: An international point of view. *International Business Research* 7: 1–13. [\[CrossRef\]](#)
- Hidayah, Nurul, Lucky Nugroho, and Hendy Prihanto. 2021. The determinant factors of sustainability report quality and corporate performance: An empirical study. *International Journal of Finance, Insurance and Risk Management* 11: 24–37.
- Hoang, Dung Phuong, Ngoc Thang Doan, and Thi Hong Hai Nguyen. 2022. An expanded model of bank reputation in the context of the COVID-19 crisis: A vietnamese contribution. *SN Business & Economics* 2: 62. [\[CrossRef\]](#)
- Iwu-Egwuonwu, Ronald Chibuike. 2010. Corporate Reputation and Firm Performance: Empirical Literature Evidence. *International Journal of Business and Management* 6: 197–206. [\[CrossRef\]](#)
- Lee, Chien-Chiang, Chih-Wei Wang, Wan-Chien Chiu, and Te-Sheng Tien. 2018. Managerial ability and corporate investment opportunity. *International Review of Financial Analysis* 57: 65–76. [\[CrossRef\]](#)
- Manuela, Aparicio, Carlos J. Costa, and Rafael Moises. 2021. Gamification and reputation: Key determinants of e-commerce usage and repurchase intention. *Heliyon* 7: e06383. [\[CrossRef\]](#)
- Martín-Miguel, Juan, Camio Prado-Román, Gabriel Cachón-Rodríguez, and Lilliana L. Avendaño-Miranda. 2020. Determinants of Reputation at Private Graduate Online Schools. *Sustainability* 12: 9659. [\[CrossRef\]](#)
- Maryam, Sayeda Zeenat, Ashfaq Ahmad, Nauman Aslam, and Sadia Farooq. 2022. Reputation and cost benefits for attitude and adoption intention among potential customers using theory of planned behavior: An empirical evidence from Pakistan. *Journal of Islamic Marketing* 13: 2090–107. [\[CrossRef\]](#)
- Ming, Xiao, Bushra Sarwar, and Rehana Naheed. 2019. Managerial ability and dividend payout policy during global financial crisis: Evidence from emerging market of China. Paper presented at the 2019 3rd International Conference on Management Engineering, Software Engineering and Service Sciences, Wuhan, China, January 12–14; pp. 174–78. [\[CrossRef\]](#)
- Mousavi, Maryam, Grzegorz Zimon, Mahdi Salehi, and Nina Stepnicka. 2022. The Effect of Corporate Governance Structure on Fraud and Money Laundering. *Risks* 10: 176. [\[CrossRef\]](#)
- Pollák, František, Peter Dorčák, and Peter Markovič. 2021. Corporate Reputation of Family-Owned Businesses: Parent Companies vs. Their Brands. *Information* 12: 89. [\[CrossRef\]](#)
- Salehi, Mahdi, Farzaneh Komeili, and Ali Daemi Gah. 2019. The impact of financial crisis on audit quality and audit fee stickiness: Evidence from Iran. *Journal of Financial Reporting and Accounting* 17: 201–21. [\[CrossRef\]](#)
- Salehi, Mahdi, Ali Daemi, and Farzana Akbari. 2020a. The effect of managerial ability on product market competition and corporate investment decisions: Evidence from Iran. *Journal of Islamic Accounting and Business Research* 11: 49–69. [\[CrossRef\]](#)
- Salehi, Mahdi, Mahsa Hoshmand, and Hossein Rezaei Ranjbar. 2020b. The effect of earnings management on the reputation of family and non-family firms. *Journal of Family Business Management* 10: 128–43. [\[CrossRef\]](#)
- Salehi, Mahdi, Ali Daemi Gah, Farzana Akbari, and Nader Naghshbandi. 2021a. Does accounting details play an allocative role in predicting macroeconomic indicators? Evidence of Bayesian and classical econometrics in Iran. *International Journal of Organizational Analysis* 29: 194–219. [\[CrossRef\]](#)
- Salehi, Mahdi, Ali Zuhair Maalah, and Hamideh Nazaridavaji. 2021b. The ISIS Impacts on the Political Connections, Board Interlock, and Quality of Financial Reporting. *Contemporary Review of the Middle East* 8: 460–76. [\[CrossRef\]](#)
- Waluyo, Tri, Abd Rahman Kadir, Nuraeni Kadir, and Andi Aswan. 2022. The Determinants of Reputation of Institution and Its Implications for the College Decision in Private-Owned Higher Educational Institution in LLDikti Region III Jakarta. Paper presented at the Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021), Jakarta, Indonesia, November 18. [\[CrossRef\]](#)
- Zahedi, Javad, Mahdi Salehi, and Mahdi Moradi. 2022a. Identifying and classifying the contributing factors to financial resilience. *Foresight* 24: 177–94. [\[CrossRef\]](#)
- Zahedi, Javad, Mahdi Salehi, and Mahdi Moradi. 2022b. Identifying and classifying the financial resilience measurement indices using intuitive fuzzy DEMATEL. *Benchmarking: An International Journal*. ahead-of-print. [\[CrossRef\]](#)
- Zimon, Grzegorz, Arash Arianpoor, and Mahdi Salehi. 2022. Sustainability reporting and corporate reputation: The moderating effect of CEO opportunistic behavior. *Sustainability* 14: 1257. [\[CrossRef\]](#)