



(INVESTIGATING THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON THE RISK OF FINANCIAL HELPLESSNESS IN COMPANIES LISTED ON THE IRAQI STOCK EXCHANGE)

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Article history:	Abstract:
Received: May 20 th 2022 Accepted: June 20 th 2022 Published: July 28 th 2022	The purpose of this research is to investigate the impact of corporate social responsibility on the risk of financial distress in companies listed on the Iraqi stock exchange. The statistical population under investigation consists of 20 companies admitted to the Iraqi Stock Exchange, which were selected for the 7-year period of 2014-2020. The independent variable in this research is the social responsibility of the company and the dependent variable is financial helplessness. After determining the research method, the required information was collected by using the real data taken from the financial statements of the Iraqi stock companies and finally by using the software version 10 of this data and information. was analyzed. The results of examining the hypothesis of this research showed that corporate social responsibility has a negative and significant effect on the helplessness of Iraqi stock exchange companies. Therefore, it can be said that by disclosing the information related to the social responsibility of companies, it is possible to prevent the bankruptcy and financial helplessness of the companies admitted to the Iraqi Stock Exchange.

Keywords: Corporate social responsibility, financial helplessness, Iraqi Stock Exchange

FIRST CHAPTER GENERAL RESEARCH INTRODUCTION

The category of corporate social responsibility has been a sensitive and attention-grabbing issue in recent years, and the desire to invest in companies that practice and report on corporate social responsibility is increasing, and in the field of financial reporting Especially in management accounting, it has gained prominent importance (Hosseini and Ghobadi, 2015.) The existing theoretical researches regarding the effect of social responsibility on the value of the company or its financial performance have remained inconclusive. "Conflict Resolution Theory" explains that high social responsibility activities can lead to high company value by reducing the conflict of interests between managers and stakeholders, improving the company's reputation and increasing its profitability. However, the theory of "overinvestment" shows that such methods are expensive and cause concern about

investment, especially in the financial crisis situation. In addition, empirical literature has found both positive and negative effects of social responsibility on company value (Benlamelli and Batr, 2015.) On the other hand, it should be said that management's financial decisions are important and vital for improving the company's financial situation, but unwise decisions can ultimately lead to the company's financial helplessness (Darabi, 2016.) Today, the recent financial helplessness of large international companies has caused the issue of financial helplessness to be raised as a very important category in financial management. Therefore, it is very important to investigate the causes of helplessness from a financial point of view, and most importantly, to evaluate financial helplessness with the help of common models. In fact, financial helplessness is the end of the way and activity of economic enterprises, and in this regard, the correct understanding and recognition of the causes of financial helplessness by



the financial management of companies is very necessary and important. Because financial managers, if they have sufficient knowledge of the causes and factors that cause financial helplessness, they can inform the management and provide preventive solutions by timely identifying the signs of financial crises in the company, before the collapse of the company (Mohsani et al., 2013).

The present study examines the impact of corporate social responsibility on the risk of financial distress in companies listed on the Iraqi stock exchange. In this research, managers use the tool of social responsibility as a strategy to reduce financial helplessness with the aim of increasing social responsibility activities and disclosure and reporting, increasing their credibility and reputation. According to the argument of risk management, a company that reports on social responsibility activities pays more attention to the interests of the stakeholders. In other words, a positive increase in social responsibility should have a systematic negative relationship with financial helplessness. This research shows the effect of companies' attention to social responsibility activities in reducing financial helplessness.

problem statement

Since in modern economic perspectives, company compulsion is a general point of view. based on which it is argued that companies should participate in social activities in order to achieve society's expectations. Incorporating social aspects into organizational decision-making is not without challenges and is at stake with trade-offs between cost and benefits for a business. In fact, in decisions related to social responsibilities, the relationship between benefit and cost should be considered (Shehzad et al., 2021). However, some researchers argue that participation in social responsibilities is not a cost or limitation but can be seen as a competitive advantage that will be useful in competitive markets to gain more market share (Porter et al., 2006).

Corporate social responsibility (CSR) and financial helplessness are important research topics that are often considered separately (Deegan, 2002). The motivation to participate in corporate social responsibility is multidimensional and can vary from cultural and social reasons to economic and financial reasons. Investing in corporate social responsibility can range from reducing pollution to reducing energy and water consumption, and it includes heavy investment in corporate social responsibility activities.

In addition, irresponsible companies in the field of social performance are fined by consumers as well as investors. For example, Volkswagen lost 20% of its

market value overnight due to its cheating scandal, and Facebook similarly lost 20% of its share price due to issues related to the disclosure of user data privacy.

Corporate social responsibility is defined as "the continuous commitment of business to show ethical behavior and contribute to economic development and improve the quality of life of the workforce and their families, as well as society in general" (WBCSD, 2000, p. 3). The Commission of the European Communities defines corporate social responsibility as "a concept whereby companies voluntarily incorporate social and environmental concerns into their business operations and interactions with their stakeholders".

In particular, corporate social responsibility emphasizes the social and moral responsibilities of organizations towards different stakeholders, i.e. protecting the environment and caring for employees, as well as providing quality goods and services to their customers. These parameters are of great importance for reasonable business improvement and gaining respect (Holm and Watts, 2000; Jamali, 2008).

Based on the concept of corporate social responsibility and also considering the important responsibility towards shareholders, organizations consider implicit social contracts with other stakeholders such as workers, customers, society as a whole and with regulatory institutions (Sundarajan and Brown 2016). Therefore, for the legal existence of organizations, it is effective and necessary to balance multiple lines of operation and manage multiple interest groups through corporate social responsibility strategies (Schneider et al., 2016).

Moreover, the current business environment is dynamic and volatile due to the growth of globalization, rapid innovation and intense competition, which leads to more internationalization of businesses. This, in turn, means that businesses should be a broader set and

consider more complex factors in evaluating their performance and establishing their legitimacy. Therefore, companies are forced to shift from setting short-term economic goals to striving to achieve social, ethical, and environmental goals and promoting transparent business practices to sustain long-term performance (Hardjeno and van Merwijk 2001).

Apart from this, corporate social responsibility is not only an effective mechanism to strengthen healthy relationships between companies and their stakeholders to ensure sustainable business operations and corporate legitimacy, but also plays an important role in enhancing a company's financial performance and its reputation among the public. Its customers and



investors play a role in the market and society as a whole. (Saeidi et al., 2015)

CSR activity helps to increase customer satisfaction, which in turn increases customer satisfaction and acts as an effective marketing tool to create a good reputation for the company in the market. In addition, CSR helps companies achieve and maintain a competitive advantage over their competitors, which further improves their profits (Drumright 1994, Maignan et al. 2001). In addition, by adopting socially responsible behavior, companies try to minimize their business and operational risks because in this case, investor confidence increases and in turn reduces the cost of capital (Ju and Na, 2012) and It improves the financial performance of the business (Saeidi et al., 2015; Schultens, 2008.)

The question that exists is whether doing good to society is also in the interest of business units? Extensive studies have investigated the financial rewards of corporate social responsibility, such as Feldman et al. (1997), Jiao (2010), Orlitzky et al. (2003) and Nelling and Webb (2009) and examine the direct relationship between corporate social responsibility participation and financial performance. As a result, studies focus on the process through which CSR affects firm performance and provide multiple interpretations (Kim et al., 2012; El Goul et al., 2011; Sarvis and Tamayo, 2013; Linz et al., 2012). colleagues, 2017; Bae et al., 2018.)

With this description, the researcher intends to answer the main question of the research, whether corporate social responsibility has an effect on the risk of financial helplessness of companies in companies admitted to the stock exchange of Iraq. If the answer is yes, how is this effect. (?)

The necessity and importance of research

On the one hand, attention has been paid to the role of social responsibilities in achieving society's expectations as one of the most important stakeholders of companies. In developing countries, the issue of social partnerships has been given more attention. Fulfilling the social responsibilities of the company can be beneficial and important for the company in several ways. On the other hand, financial helplessness can be defined as a stage before the bankruptcy of the company. Due to the wide range of stakeholders of companies, financial helplessness can be very important. Because if the company remains in a state of financial helplessness, the wealth of the shareholders in the company will be destroyed, and other beneficiaries, including creditors, will face a high probability of defaulting on the company's obligations. Therefore, since financial helplessness affects the

interests of all stakeholders in companies, addressing the desired relationships in the research

Now it can be important and necessary, and it can also be said that CSR activity helps to increase customer satisfaction, which in turn increases customer satisfaction and acts as an effective marketing tool to create a good reputation for the company in the market. Furthermore, CSR helps companies to achieve and maintain a competitive advantage over their competitors, which further helps to improve their profits (Drumright 1994, Maignan et al. 2001). In addition, by adopting socially responsible behavior, companies try to minimize their business and operational risks because in this case investor confidence increases and in turn reduces the cost of capital (Ju and Na, 2012) and performance. Finance improves business (Saeidi et al., 2015; Schultens, 2008.)

Corporate social responsibility is not only an effective mechanism to foster healthy relationships between companies and their stakeholders to ensure sustainable business operations and corporate legitimacy, but also plays an important role in enhancing a company's financial performance and reputation among its customers and investors. It plays a role in the market and society as a whole. (Saeidi et al., 2015)

Considering that dealing with the desired relationships in the current research can be very important for shareholders, creditors, investors, auditors, board of directors of companies, etc. Therefore, it seems necessary to conduct the present research.

Aims Of Research

The main purpose of the research:

Determining the impact of corporate social responsibility on the risk of financial helplessness in companies listed on the Iraqi stock exchange

Ideal goal:

- The ideal goal of this research is to expand the theoretical foundations related to factors affecting financial helplessness. Government.

Functional Goal:

- Providing proposals based on the research results to the managers regarding the impact of the role of corporate social responsibility in reducing the financial helplessness of companies.

Research hypothesis

According to the objectives of the research, the hypothesis was formed as follows:

Corporate social responsibility has an impact on the risk of financial helplessness in companies listed on the Iraqi stock exchange.



Subject area

Corporate social responsibility has an impact on the risk of financial helplessness in companies listed on the Iraqi stock exchange.

spatial territory

The companies accepted in the Iraqi Stock Exchange are:

temporal realm

Between 2014 and 2020.

SECOND CHAPTER

THEORETICAL FOUNDATIONS AND RESEARCH BACKGROUND

THEORETICAL FOUNDATIONS

FINANCIAL DISTRESS

Today, the rapid development of technology and extensive environmental changes have given increasing momentum to the economy, and the increasing competition of institutions has limited the achievement of profit and increased the probability of bankruptcy. Owners, managers, investors, business partners and creditors are as interested in evaluating a company's financial position and its tendency to bankruptcy as government institutions (Qadri et al., 2016). Also, the financial helplessness of large international companies has caused the issue of financial helplessness to be raised as a very important category in financial management; Because in case of bankruptcy, many costs are imposed on them, besides, the bankruptcy of companies usually affects the liquidity of the capital market and the development of the economy. Also, financial helplessness and bankruptcy of companies leads to waste of resources and failure to take advantage of investment opportunities. At the time of bankruptcy, banks usually reduce lending to bankrupt companies and ask for a higher interest rate for the loans they give to companies to compensate for the additional risk. In a similar way, investment institutions such as pension funds and insurance companies reduce the purchase of stocks and invest more in buying bonds of banks or similar markets. All this will lead to a decrease in liquidity in the capital markets, an increase in the cost of capital for companies and a decrease in economic growth (Nikbakht and Sharifi, 2019.)

Financial helplessness is a serious issue for the economic life of countries. The individual and social cost of financial helplessness raises the issue of predicting financial helplessness as an important issue for many managers, banks, investors, policy makers and auditors .

has done. Predicting financial helplessness is very important for three groups. These groups include

managers, creditors and auditors. Managers, as the representatives of the shareholders, follow the activities that lead to the continuation of the activity and profitability of the company. In order to evaluate the company's ability to repay its obligations, creditors want to evaluate the continuity of business units. Auditors, as another of these groups, must comment on the financial statements of the business continuity and the fairness of the information in the financial reports. Therefore, they They are interested in predicting financial helplessness or the continuation of companies' activities (Mohseni et al., 2013.)

Reasons for financial helplessness:

Newton (1998) has generally divided the reasons of financial helplessness into two categories of internal and external reasons. According to him, the external organizational reasons of the statement (Hajiha, 2013:)

.1Characteristics of the economic system: the management of the company must accept the changes that occur in the economic structure. He cannot make a change in them, but must implement the necessary adjustments in the company's operations in the direction of this system. Smaller companies are more exposed to the risk of financial helplessness, because large companies can better resist the lack of market stability.

2 Competition: One of the reasons for financial helplessness is competition, but effective management is the opposite of this reason.

.3 Changes in business and improvements and transitions in public demand: If companies are unable to apply modern methods and wide and timely knowledge of new consumer demands, they will fail.

4 Business fluctuations: Studies have shown that the inconsistency between production and consumption, lack of employment, reduction in sales, falling prices, etc., have caused an increase in the number of bankrupt companies. However, the lack of temporary peace is not known as the underlying cause of financial helplessness.

.5Funding: Prof. Namakia, using World Bank data for the period 1980-1990, stated that the problems related to financing, more than the economic conditions, cause the financial helplessness of small companies.

.6Accidents: Some factors are beyond the company's control, such as natural events. This group is seen in all societies regardless of their specific economic system.

Costs of financial helplessness:

It is very important to evaluate the financial helplessness of companies; Because the failure of the



company brings many direct and indirect costs to the beneficiaries. The direct costs of financial helplessness are usually related to the legal process of restructuring carried out after the stage of non-payment of full debt. These costs represent the compensation paid to compensate the efforts of lawyers, accountants, consultants and expert evidence to support legal negotiation procedures (Bris et al., 2006). Direct costs occur only in times of reorganization or liquidation. Indirect costs are the costs of the company's lost opportunity as a result of the deterioration of the company's ability to pay its debt. Although these lost opportunities play an important role in lost sales, reduced productivity and losses in the market situation, but their roots are in the sources of financial helplessness such as the allocation of less than optimal resources, asymmetric information and the hidden problem of conflict of interest. Is. The hidden problem of conflict of interest is that financial helplessness may lead to issues that reduce the efficiency of management.

Corporate social responsibility:

In the field of work ethics, most of the efforts have been made to distinguish between types of responsibility. For this purpose, a clear attitude should be created regarding the concept of accepting responsibility. Responsibility often refers to some kind of relationship between people and their environment has it. In the field of communication between individuals and organizations, accountability implies accountability; An answer that is more than a projection, for example, answers like "this is our way of working" or "market factors leave us no choice"; There is nothing more than justification. In accepting responsibility, a person's attitude towards the actions he performs is also a part of his answer, and this answer may be questioned (Newman et al., 2015). Responsible action requires an answer based on the intentions and motivations of actions and activities. Bowens claims that in order to be accountable, there must be an opportunity to act responsibly. Freedom to act responsibly is a general precondition for accountability. This general precondition can be divided into different aspects, including the desire to act, the ability to foresee and foresight, the possibility of action, and the existence of the skills of an informed assessment (Newman et al., 2015.)

Dimensions of corporate responsibility:

The responsibility of organizations can be divided into four dimensions: economic responsibility, legal responsibility, social responsibility, and moral responsibility. The first dimension of the responsibility of organizations is the economic dimension in which

economic activities and actions are considered and the primary responsibility of every economic enterprise is to earn profit. The second dimension of the responsibility of organizations is the legal dimension based on which organizations are required to Act within the framework of the law and general regulations. Society determines these rules and all citizens and organizations are obliged to respect these rules as a social value. The legal dimension of social responsibility is called social obligation. The third dimension of the responsibility of organizations is the social dimension and includes the set of duties and obligations that the organization must perform in order to preserve and help the society with an all-round approach of preserving the unity and public interests of the country. The fourth dimension of the responsibility of organizations is the dimension It is moral. In this case, organizations are expected to respect people's values, norms and beliefs and pay attention to ethical issues in their work and activities. The moral dimension of social responsibility is called social accountability (Aghaei and Kazempour, 2015.)

THEORIES OF SOCIAL RESPONSIBILITY:

Carriga and Pele (2004) divided social responsibility theories into four groups:

A) Instrumental theories: It is assumed that the company is a tool to create wealth and this is the only social responsibility of the company. This group of theories are called instrumental theories, because they consider corporate social responsibility as a strategic tool to achieve economic goals and create wealth (Bagherpour et al., 2014). Friedman's famous view in this context states that the only responsibility of the company towards the society is to maximize the profits of the shareholders within the legal framework and moral customs of the country.

b) Political theories: It includes the theories that the business unit should fulfill the social demand based on political theories. This group of theorists emphasize that social demand from the business unit is necessary for its survival and continuation of its activity and growth, and even for its existence itself. Basically, this group of theories emphasizes the interaction and communication between business units and society, and its main concern is the power and status of the company and its inherent responsibility towards society. Although there are different approaches in this field, two prominent approaches are law-abiding company and corporate citizen. Law-Medar Company states that the social responsibilities of companies are caused by the level of their social power. The corporate citizen also considers the company as a



citizen that has certain connections and contributions in the community (Cariga and Pele, 2004.)

c) Integrated theories: These theories deal with how to integrate social needs through business and claim that business is dependent on society for its origin, sustainability and growth. Social needs are generally considered as a factor in the formation of society's interaction with business and legitimizing it. As a result, company management should consider social needs and integrate them in a way (Barzegar, 2013.)

d) Ethical theories This group of theories has paid attention to social responsibilities from a moral point of view. Accordingly, companies must accept social responsibility as a moral obligation. These theories are based on the principles and right actions to achieve a good society (Shah Hosseini and Arabloui Moghadam, 2015). Ethical theories include normative stakeholder theory, universal law, sustainable development, and the public interest approach.

Performance of social responsibility and financial helplessness:

Researchers have investigated the relationship between social responsibility and financial performance of the company. The evidence obtained by them shows a positive relationship between these two variables. Godfrey et al. (2009) found that financial performance in companies with high social responsibility and in companies that have more relationships with institutional shareholders, creditors and employees, is at a favorable level. Al-Gol et al. (2011) found in their study that participation in social responsibility activities reduces the cost of capital.

According to the argument of risk management, a company that reports social responsibility activity pays more attention to the interests of stakeholders. In addition, it is very effective in assessing the risk of the company and creating future cash inflows and reducing the cost of capital. Therefore, companies can improve their financial situation by increasing social responsibility activities, and hence the possibility of financial helplessness decreases. In other words, a company that uses social responsibility activities can use its credit to reduce the risk of financial helplessness. To put it more clearly, the companies that are looking for financially stable activities are influenced by the attitude and actions related to social responsibility, and following this issue, they consider the legality and ethics of their activities (Tehrani). , 2017.)

As a result, a company develops policies, strategies and activities related to social responsibility that provide the most favorable financial results in a complex and competitive business environment.

Therefore, the perspective of risk management shows that the increase

Positive social responsibility activities should have a systematic negative relationship with financial helplessness (Elhadi et al., 2017.)

RESEARCH BACKGROUND

Foreign background

Farooq et al. (2021) investigated the role of corporate social responsibility (CSR) on the probability of financial distress on a sample of 139 member companies of the Pakistan Stock Exchange (PSX) during the years 2008-2019. The research method is logistic regression. They found that there is a significant negative effect of CSR on financial helplessness in both PLR and GMM models. This finding is consistent with the perspective of CSR stakeholders, as investing in CSR not only aligns interests between stakeholders and stakeholders, but also reduces the risk of financial distress.

Rahman et al. (2020) have investigated the effect of social responsibility on the company's performance and risk, considering the role of the company's reputation on this relationship. The data required to conduct this research were used from selected companies of some European and Asian countries in the period from 2014 to 2018. Using the regression model, the research results show that the effect of social responsibility on the company's risk is negative and significant, while this effect on the company's performance is positive and significant. Also, the research results show that the company's reputation has a significant effect on the relationship between social responsibility and the company's performance and risk.

DOMESTIC BACKGROUND

Kamel Zamad (1401) investigated the effect of social responsibility and intellectual capital on the performance of companies admitted to the Iraqi Stock Exchange. The research population is all the member companies of the Iraq Stock Exchange, which were selected by sampling with the screening method of 20 companies from the companies admitted to the Iraq Stock Exchange during the period of 2020-2014, and using combined data and regression method. Generalized least squares of the desired hypotheses were tested in the research. The obtained results indicate that the social responsibility of the company did not affect the financial performance of the companies listed in the Iraqi stock exchange, but the intellectual capital has a positive and significant effect on the performance of these companies.



Hossein Hossein (1400) conducted a research on social responsibility in Iraqi banks, a comparative study of Islamic and conventional banks in Iraq. And it was said that the role of Islamic and conventional banks in society has expanded recently, because it also includes the social aspect, and with the increase in the global trend of interest in social responsibility, the responsibility of Islamic banks has expanded and their role in the government has increased to achieve profit. . and became a partner with a social role that contributes to social service crimes and sustainable development. The main purpose of the research was to compare the role of Islamic banks and the role of traditional banks, and as for the secondary goals, the goal was to find out what form and role the role of social responsibility is in Islamic banks. Social responsibility in traditional banks on the other hand and identifying similarities and differences between social responsibility in banks traditional and between Islamic banks, and the importance of our study in this research was in the reflection of our knowledge because many customers and clients want to know the difference between the social roles of Islamic banks and traditional banks and the importance of this research to know the role of senior managers in Banks active in Iraq in the realization and practice of social responsibility in it and the resulting results. Serving active banks in Iraq, to clarify the impact of social responsibility on the improvement, development and progress of active banks in addition to academic benefits, because it is one of the studies that has not been investigated at the local level, and the researcher concluded from the comparison of the role and activating the responsibilities that Islamic banks have an effective and active role in serving the society that Islamic banks participate in Qarz al-Hasna programs as a charitable way to treat social problems, in addition to providing short-term facilities to charitable societies and funds Poverty guarantees these loans. Participation, in order to create all-round development in Islamic countries, and do not settle for just one formula. Like Murababa, which is currently one of the most common formulas in private banks of the Iraqi government

CHAPTER III

METHODOLOGY

RESEARCH METHOD

This research is an applied research in terms of its purpose, because in terms of the implementation process, this research uses capital market data, has a hypothesis, and for this reason, it is considered a part

of quantitative research. In terms of inference method, this research is descriptive. The method of testing the research hypotheses is the statistical analysis method of the correlation analysis type. The research design used is quantitative in terms of data type and retrospective and retrospective in terms of time type. In terms of implementation logic, the type of research is inductive. In this research, it was tried to use the variables that happened in the past to predict the future with the help of estimation model. Therefore, this research is longitudinal and prospective in terms of time.

Statistical Society

According to the topic of this research, the statistical population of the research includes all member companies of the Iraqi Stock Exchange (Financial Board) except (brokerage companies, insurance companies and banking companies) because the type of financial activities of these Companies are fundamentally different from other companies.

THE STATISTICAL SAMPLE

All the data and information needed for the research are collected by observational method. For this purpose, the financial statements of the companies admitted to the Iraqi Stock Exchange during the years 2014 to 2020 are reviewed and collected by industry, considering the following standards.

Not changing the financial year and activity during the activity period

The company's symbol should be active so that it is traded at least once a year

The company's financial information is available for the study period

By trusting and relying on the Internet (the official website of the Iraqi Stock Exchange and Securities Organization, which was updated on 26/04/2022) and also their authenticity through the collection of documentary data, the companies included in the research sample and The aforementioned criteria have been identified, and their number is 20 companies for 7 years in industries (communications, industry, investments, agricultural services, hospitality and tourism). Therefore, the sample size is equal to 140 company-year data.

MODELS USED IN RESEARCH

Research data are composite data. To analyze the research data and test the research hypotheses, regression analysis and correlation coefficient, which are implemented



in 10E-views software, are used. The regression model of the research is as follows:

In order to test the hypotheses of the research, following Farooq et al. (2021), the model is developed as follows:

model (1)

$$\begin{aligned} \text{FD}]_{it} = & \beta_0 + \beta_1 \text{CSR}]_{it} + \beta_2 \text{SIZE}]_{it} + \beta_3 \text{LEV}]_{it} + \beta_4 \text{AGE}]_{it} + \beta_5 \text{SG}]_{it} + \epsilon]_{it} \end{aligned}$$

The dependent variable

FD: Financial distress risk

According to Farooq et al. (2021), Altman's Z index is used.

$$Z\text{-Score} = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$$

That:

A = capital in production / total assets

B = Retained Earnings / Total Assets

C = Earnings before interest and taxes / total assets

D = Market value of equity / total debt

E = Sales / Total Assets

A number less than 1.8 indicates the potential probability of bankruptcy of the company in the next two years with a probability of 95%, while the number Z is greater than this value means there is no probability of bankruptcy of the company and the companies are healthy and will not be in financial distress if the company if they have financial problems, the number is one and otherwise, the number is zero.

INDEPENDENT VARIABLE

CSR: social responsibilities

According to Kashanipour et al. (2015), the following 19 indicators are used as a measure of participation in the company's social responsibilities, in such a way that if any of the following indicators are disclosed, the number one and otherwise the number zero is assigned to this variable. Finally, the total scores show the company's social participation score.

Employee relations, social participation, environmental products

- The health of the employees' environment
- Staff training
- Employee benefits
- Staff profile

- Employee share ownership
- Employee health and safety - Cash donation program
- Charity program
- Scholarship program
- Financial sponsors for sports activities
- Public projects - Product safety
- Product quality
- Product development
- After-sales service - Air pollution control
- Prevention and compensation program
- Protection and use of recycled products
- Award in the field of environment

CONTROL VARIABLES

SIZE: Company size, logarithm of total company assets

LEV: financial leverage, the ratio of total debt to total assets of the company

Age: The age of the company, the logarithm of the company's founding period until the year under review

SG: Sales growth is equal to the current year's sales minus the previous year's sales divided by the previous year's sales.

Diagnostic tests

Various tests are used to determine the type of model used in mixed data. The most common ones are the Chow test to use the fixed effect model against the combined data estimation model (Pool), the Hausman test to use the fixed effect model against the random effect model, and the LM test to use the random effect model against the Pool model. . Chow test is performed to apply the pool model against the fixed effect model.

The most common test to determine the type of mixed data model is the Hausman test. The Hausman test is based on the presence or absence of a relationship between the estimated regression error and the independent variables of the model. If this relationship exists, the random effect model will be used, and if this relationship does not exist, the fixed effect model will be used. The hypothesis indicates the lack of relationship between the independent variables and the estimation error, and the hypothesis indicates the existence of a relationship.

If the variance of the cross-sectional effects in the random effect model is insignificant, it is possible to use the method of combining all



the data and using the ordinary least squares estimation (Pool) to estimate the relationships between the variables. Based on this, to determine the random effect model versus the Pool model, Brioche Pagan's LM test is used.

1 Jarak test - Bra

In order to test the normality of the data, usually the best and most efficient method, which is done faster, is the normality test with the help of normal distribution indicators, especially the coefficients of skewness and skewness, so it is tried to introduce a suitable statistic with a specific distribution to test the normality of the data. Faster, better and easier with more accuracy.

2 Stationarity Test In Mixed Data

The unit root tests of mixed data were established by Kuah (1992 and 1994) and Britton (1994). These studies were completed by Lin and Levin (1992 and 2003) and Im, Sons and Shin (1997 and 2003).

3. Lane and Levin (LL) test

The unit root test related to time series examines the stationarity or nonstationarity of variables using an equation. Lin and Levin showed that in combined data, using the unit root test for these data has more test power than using the unit root test for each section separately.

4 Fisher's test

Another method to test the unit root of mixed data is to use the significance level of the advanced Dickey-Fuller unit root test. The basis of this method is derived from Fisher's (1932) method, which was later expanded in detail by Madala and Wu (1999). Accordingly, this test is known as the MW (Madala and Wu) test.

IN THE FOURTH CHAPTER INTRODUCTION

Data analysis is a multi-step process in which the data collected through different methods are summarized, categorized and finally processed to provide a basis for establishing various types of analysis and data communication. to be provided in order to test the hypotheses. In this process, the data are refined both conceptually and empirically, and various statistical techniques play a significant role in inference and generalization. In this chapter, using the data collected from the statistical sample of the research, which includes 20 companies in the course 2014-2020, research hypotheses are tested. The hypothesis testing method in the present research is the generalized least squares method, which was done by using Evioz 10 software.

research findings

Analysis of central indicators 1 and dispersion 2

The most important central index is the mean, which indicates the balance point and center of gravity of the distribution. The median indicates that half of the data are less than this value and the other half are greater than this value. In general, dispersion parameters are a measure to determine the degree of dispersion from each other or the degree of dispersion of them compared to the average. One of the most important dispersion parameters is the standard deviation.

In the descriptive statistics section, data analysis has been done using central indicators such as mean and standard deviation dispersion indicators. The figure below shows the central and dispersion indices of all the variables related to the research variables.

جدول (1-4) توصیف متغیرهای شرکت‌ها

standard of maximum and minimum skewness of elongation	Variables mean, median, deviation	standard of maximum and minimum skewness of elongation	Variables mean, median, deviation	standard of maximum and minimum skewness of elongation	Variables mean, median, deviation	standard of maximum and minimum skewness of elongation	Variables mean, median, deviation
44.3	6.58	0.000	0.1	0.14	0.000	0.02	Financial Distress



5.46	1.56	1	10	2.009	1	2.10	Corporate social responsibility
6.11	1.7	8.40	12.55	0.87	9.56	9.77	size of the company
1.58	0.25	0.005	1.94	0.59	0.64	0.76	Financial Leverage
6.11	1.016	7	59	0.59	27	27.30	Company age
17.39	3.43	8160	53068720	74.71	1906385	4543888	Sales growth

In the above table, the concentration indices (mean and median) and dispersion indices (standard deviation) of the variables are displayed. The most important index of concentration is the average, the closeness of this value to the standard deviation indicates high concentration of data and low dispersion of data.

Financial helplessness has a mean of 0.02 and a standard deviation of 0.14. The difference between these two indices indicates the relatively high dispersion of the data of this variable.

The social responsibility of the company has an average of 2.10, which means that among the indicators of social responsibility, an average of 2

indicators are disclosed annually by the company regarding the social responsibility of the company. The standard deviation of this variable is equal to 2.009, which indicates the low dispersion of the data.

The highest dispersion of the data is related to the variables of sales growth and company size, and the lowest dispersion is related to financial leverage.

Jarak test - for

In order to check the hypothesis of normality of the research variables, the Jarek-Bera test is used. In this test, the zero hypothesis emphasizes the normality of the variables and the opposite hypothesis emphasizes the non-normality of the distribution of the variables.

Table (4-2) Jarak test - Bra

for significance level	Jarak statistic	Variables
0.000	10909.7	Financial Distress
0.0000	91.9	Corporate social responsibility
0.000	126.07	size of the company
0.001	13.14	Financial Leverage
0.000	80.13	Company age
0.000	1472.4	Sales growth

Considering the significance level of the Jarque-Bera test and the fact that this value is less than 0.05 at the 95% confidence level, the null hypothesis is rejected and it is concluded that the variables do not follow the normal distribution. However, according to the central

limit theorem, if the desired sample size exceeds 20 samples, the variable distribution will tend towards the normal distribution (Safari Shali, 2010). Therefore, considering that the number of companies in the sample is high, the non-normality of the data will not



affect the fit of the regression model based on this test.

Panel data mean test

When the mean, variance, and covariance of the research data series are not a function of time, we say that the data are valid. In this research, before estimating the models, we will check the validity of the researched data, because in the case of invalidity of the data, the t and F statistics will be invalid and skewed, and the fitted regression will be false. . Unit root tests of time series data are invalid in models that

use panel data. Therefore, variable invariance tests in the form of panel data unit root tests should be used. Therefore, Levin, Lin Vecho (LLC), Im, Sons and Washin (IPS) and Fisher-Phillips-Perron (PP) tests were used to check non-invalidity. These three tests are among the most important unit root tests in panel data, although different methods may provide contradictory results in unit root tests based on panel data. In all these tests, the null hypothesis is that there is a single root.

Table (3-4) unit root test of panel data

Outcome variable Levin, Lynn, and Choim and Sons, and Fisher	Phillips Perron	Outcome variable Levin, Lynn, and Choim and Sons, and Fisher	Phillips Perron	Outcome variable Levin, Lynn, and Choim and Sons, and Fisher
16.67	2.09	-6.88	The value of the statistic	social responsibility
0.081	0.018	0.000	Significance level	
684.7	-55.72	-2.87	The value of the statistic	Financial Distress
0.034	0.0041	0.002	Significance level	
76.16	-1.74	-6.68	The value of the statistic	Financial Leverage
0.0005	0.040	0.000	Significance level	
186.44	-44.06	53.13	The value of the statistic	Sales growth
0.009	0.005	0.0098	Significance level	
241.02	-25.14	-28.94	The value of the statistic	Company age
0.0009	0.004	0.008	Significance level	
91.11	-2.14	-13.80	The value of the statistic	size of the company
0.000	0.015	0.000	Significance level	

According to the above table and the significance level obtained from the tests, since the significance level of the test is less than 0.05, the null hypothesis based on the non-significance of the research variables is

rejected, therefore the research variables are significant.
 Autocorrelation test of residuals



In this research, Durbin-Watson test was used to determine the presence or absence of autocorrelation. In regression, when the behavior of the dependent variable is investigated over a period of time, we may face the problem of non-independence of errors, this type of relationship in the data is called autocorrelation. If there is autocorrelation in errors, linear regression cannot be used. The Durbin-Watson statistic is between 0 and 4. If there is no serial correlation between the residuals, the value of this

statistic should be close to 2. If it is close to zero, it indicates a positive correlation, and if it is close to 4, it indicates a negative correlation. In general, if this statistic is between 1.5 and 2.5, there is no need to worry. It should be noted that the autocorrelation mentioned here is between times t and $1t$ -, the absence of autocorrelation means the errors of time t and $1t$ -. The results of this statistical test, hypotheses H_0 and H_1 are as follows:

Absence of autocorrelation between error sentences: H_0
 Existence of autocorrelation between error sentences: H_1

Table (4-6) Durbin-Watson statistic

The result of Doberin	Watson statistic, limits of autocorrelation of the model	The result of Doberin	Watson statistic, limits of autocorrelation of the model
LACK OF SELF-RELIANCE	1.96	$< 2/5DW1/5 <$	MEASURING THE ERROR OF THE FIRST HYPOTHESIS MODEL

Choosing the right pattern for the model
 Limer and Hausman f-tests are used to select the appropriate model for the model (choice of pool or panel model).
 Limer's F test
 Limer's F test was used to choose between panel data and combined data methods. In Limer's F test, the H_0 hypothesis of the same width of the sources

(combined data) is placed against the opposite hypothesis H_1 , the heterogeneity of the width of the sources (panel data method). The summary of the results of Limer's F test is presented in the table below. The null hypothesis and counter hypothesis for Limer's F test are as follows:
 H_0 : pooled data method
 H_1 : Panel data method

Table (7-4) results of the Lemer test

Method	Test result	p-value	Fآماره	Description
combined (board)	H_0 is rejected	0.000	106.24	Hypothesis model 1

The results of Limer's F test indicate that according to the obtained significance level which is less than 0.05, the null hypothesis of the existence of consolidated data is rejected.
 Hausman test (choice between fixed and random effects)

The null hypothesis and the opposite hypothesis for the Hausman test are as follows:
 H_0 : random effects method
 H_1 : Fixed effects method

Table (8-4) results of Hausman test

Method	Test result	p-value	Khi Do statistics	Description
Fixed effects	H_0 is rejected	0.007	9.7	Hypothesis model 1



Considering the significance level of the Hausman test and the fact that this value is greater than 0.05, it is concluded that the fixed effects model is suitable for this model.

Checking the research hypothesis

Hypothesis: Corporate social responsibility has an effect on the risk of financial helplessness of the company in the companies admitted to the stock exchange of Iraq.

Table (9-4) regression equation coefficients for the first hypothesis

$FD_{it} = \beta_0 + \beta_1 CSR_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 AGE_{it} + \beta_5 SG_{it} + \epsilon_{it}$					
Significant level (Prob)	T	standard error	B (regression coefficient)	independent variable	The dependent variable
0.000	-4.76	0.21	-0.56	Corporate social responsibility	Financial Distress
0.84	0.2000	0.096	0.019	size of the company	
0.25	1.15	0.102	0.11	Financial Leverage	
0.76	-0.29	0.006	-0.001	Company age	
0.0003	-3.43	0.57	-1.96	Sales growth	
0.005	2.08	1.12	2.33	constant coefficient a	
0.79			The coefficient of determination		
0.78			Adjusted coefficient of determination		
114			Fisher's value		
0.000			Fisher's significance level		
1.96			Watson camera		

In this hypothesis, the coefficient of determination is equal to 0.79, which shows that the independent variables have the ability to predict the dependent variable. Also, the adjusted coefficient of determination is equal to 0.78, the closeness of this value to the

coefficient of determination indicates the realness of the data and the appropriate fit of the regression model. On the other hand, the significance level of Fisher's test is less than 5%, which means that the model of this hypothesis is significant.



Considering the significant level of the t-test and the fact that this value is less than 0.05 at the 95% confidence level, it is concluded that the social responsibility of the company has a negative and significant effect on financial helplessness. In other words, with the increase in the disclosure of the social responsibility of the company, the amount of financial helplessness and as a result the probability of bankruptcy of the company decreases.

Also, the results of the above table indicate that the increase in sales growth in the company has a negative and significant relationship with financial helplessness and causes it to decrease.

Other control variables in the research have no significant relationship with financial helplessness.

Summary of hypothesis test results

The summary related to the hypothesis test of the research is presented in Table (4-11) جدول (4-11).
 Summary of the test of research hypotheses

Test result	The subject of the hypothesis	hypothesis
Reject the null hypothesis	Corporate social responsibility has an impact on the risk of financial helplessness in companies listed on the Iraqi stock exchange.	First

THE FIFTH CHAPTER: CONCLUSION AND RECOMMENDATIONS CONCLUSION

The results of the test of the main hypothesis that "corporate social responsibility has an effect on the risk of financial helplessness of the company in companies admitted to the stock exchange of Iraq." It indicates that the social responsibility of the company has a negative and significant effect on the financial helplessness of the companies admitted to the Iraqi Stock Exchange. In this way, it can be said that the disclosure of social responsibility information may increase the mutual understanding of the stakeholders of corporate governance and risk management. Therefore, increasing social responsibility activities by creating future cash flows, reducing the cost of capital, leads to less financial crisis.

In this regard, Javaheri Tehrani (2017) came to the conclusion that corporate social responsibility has a negative and significant effect on the financial helplessness of companies. Farooq et al. (2021) also found that there is a significant negative effect of CSR on financial distress in both PLR and GMM models. This finding is consistent with the perspective of CSR stakeholders, as investing in CSR not only aligns interests between stakeholders and stakeholders, but also reduces the risk of financial distress. Also, Amer et al. (2021) stated in a research that the remuneration of managers and the tenure of the CEO as criteria for the failure of corporate governance mechanisms have a negative and significant effect on financial helplessness. Also, Rahman et al. (2020) showed that the effect of social responsibility on company risk is negative and significant. These results are consistent with the results of the present study

RESEARCH PROPOSALS

.1Financial analysts and investors are advised to pay attention to the company's decisions regarding social responsibility strategies when evaluating the value of companies, because the responsibility of companies has a direct effect on their value.

.2It is suggested to the companies of the Iraqi stock exchange, considering that there is no standard format for the disclosure of social responsibility in companies, to prepare this standardized and coordinated format in the reports of the board of directors and the company require them to implement those standards.

.3According to the results of the research and the role of social responsibility in reducing financial helplessness, it is suggested to the managers of business units to create more appropriate policies to increase participation in social responsibility activities by creating the necessary infrastructure. adopt and improve the disclosure of social responsibility information so that investors can make more appropriate decisions for investment activities in business units.

Companies listed in the Tehran Stock Exchange should pay attention to the aspect of social responsibility and human resources in the selection of corporate social responsibility strategies because it has a significant impact on the definition of social responsibility and consequently on the value of the company.

Suggestions for further research

.1Considering the change of factors influencing the financial crisis and bankruptcy of the company, such as economic, social and political conditions, in future studies, the effect of these factors can be included as moderating factors in the research.

.2In order to strengthen the results in the next research, it is suggested to examine monthly and



quarterly reviews using interim information of the companies.

.3The comparative analysis of the obtained results by industries and stock exchange groups can have significant results in terms of the performance of different groups.

.4Examining the relationship between financial helplessness and social responsibility of the company by considering the life cycle of the companies present in the Iraqi Stock Exchange as a moderator is suggested.

Research limitations

-1Due to the fact that the data of the current research are not adjusted for inflation, therefore, the generalizability of the results should be accompanied with caution.

-2Limitation in access to the information of some companies has caused the removal of some observations, on the other hand, in this research, only some factors affecting financial indicators have been investigated, while various factors have an impact on this issue.

-3It has not been possible to control other possible intervening variables such as macro environmental and political factors.

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