



The Impact of environmental indicators (EIs) on the Market Value of Industrial Sector Companies: A Case Study of Baghdad Soft Drinks Company

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Abstract: This study looks at how Environmental Indicators, or EIs, affect the market value of industrial companies. To do this, it focuses on Baghdad Soft Drinks Company from 2018 to 2023. The reason for choosing this topic is that people around the world are getting more worried about environmental issues and how companies can help reduce the harm caused by industry to the environment. By exploring this, we can see how important it is for companies to consider their environmental impact and how it can impact their value in the market. The goal is to understand how environmental sustainability can influence the market value of industrial companies, using Baghdad Soft Drinks Company as a real-life example. The researcher looked at a range of environmental indicators, including emission levels, waste management, energy and water efficiency, and how well the company followed environmental standards. He also checked how much the company shared this information in its financial and sustainability reports, and how this affected the company's reputation among investors and stakeholders. By doing so, the researcher aimed to understand the impact of transparency on the company's image and reputation. This involved analyzing the company's disclosure practices and their role in shaping stakeholder perceptions. The researcher's focus on environmental indicators and disclosure practices allowed him to assess the company's environmental performance and its efforts to communicate this information to stakeholders. The study found some interesting things. It seems that how well a company does for the environment and how much it's worth on the market are connected. The Environmental Performance Index, or EPI, can explain about half of the changes in a company's market value. So, the researcher thinks that companies should focus on being more environmentally friendly. This can be done by using less energy and water, making less pollution, and recycling more. If companies do these things, it could help increase their market value over time. By taking care of the environment, companies can also take care of their bottom line. This is a win-win situation for both the company and the planet. When a company takes care of the environment and tells people about it, investors feel better about putting their money in. This can make the company's value go up. The study found that companies that are kind to the earth and follow sustainability rules are more likely to get ahead of their competitors and attract money from investors. By being responsible and transparent, businesses can gain trust and support from investors, which can lead to more financial opportunities and a stronger market position.

Keywords: Environmental Indicators (EI), Market Value, Industrial Companies

Introduction

In recent decades, the contemporary business environment has witnessed an increasing shift towards adopting the principles of environmental sustainability in economic activities, as a result of growing awareness of environmental risks and their impact on business continuity. Environmental indicators (EIs) have become one of the most important pillars that reflect the extent of companies' commitment to maintaining and protecting the environment by reducing polluting emissions, improving resource consumption efficiency, and adopting clean technologies. In this context, recent studies have focused on investigating the relationship between companies' environmental performance and their market value, considering that commitment to environmental practices not only contributes to protecting the environment, but also enhances investor confidence and improves the company's value in the market.

As companies face tougher competition, they're looking for ways to be kinder to the environment. This helps them look good to the public, makes investors more confident, and improves their overall image. And that's good for business - it can even increase their value in the market. When a company shows it really cares about the environment and is open about what it's doing, it becomes more attractive to investors. This can give them a real edge over their competitors and help them succeed in the long run. By being environmentally friendly, companies can build trust and credibility, which is essential for long-term success.

This study looks at how environmental factors affect the market value of Baghdad Soft Drinks Company from 2018 to 2023. The company is listed on the Iraq Stock Exchange, and we're using econometric analysis to see how environmental indicators and market value are connected.

Methodology

The research methodology will rely on a set of scientific methods that help in studying the impact of environmental indicators on the market value of industrial companies, taking into consideration the Baghdad Soft Drinks Company as a research sample, as follows:

Research Problem

Industrial companies in Iraq impact of these indicators on market value in the Iraqi environment remains limited. Therefore, the research problem can be formulated as the following question: Will sustainable environmental indicators (EIs) affect the market value of Baghdad Soft Drinks Company during the period (2018–2023)?

Research Objectives

This research aims to achieve the following objectives:

1. To define environmental indicators and their importance in evaluating the environmental performance of industrial companies.
2. To measure the impact of environmental indicators on a company's market value by studying the relationship between environmental performance and market value.

3. To contribute to raising awareness of the importance of disclosing environmental information in industrial companies, thereby enhancing investor and stakeholder confidence.
4. To provide an applied econometric analysis that can be utilized by financial departments, investors, and decision-makers.
5. To support the green economy trend by linking environmental performance to market value and achieving a sustainable competitive advantage.
6. To offer a set of recommendations to help companies adopt effective environmental indicators that positively impact their market value.

The Importance of the Research

The importance of this research is evident in the following aspects:

1. Demonstrating the importance of environmental indicators as a tool for measuring the environmental performance of industrial companies.
2. Highlighting the role of environmental indicators in enhancing the market value of companies.
3. Determining the level of Baghdad Soft Drinks Company's adherence to environmental indicators during the period (2018–2023).
4. Examining the relationship between environmental indicators (EIs) and the company's market value using standard methods.
5. Clarifying the extent to which environmental performance impacts attracting investors and enhancing corporate reputation.

Research Hypothesis

- Main Hypothesis (H1): There is a statistically significant positive relationship between environmental indicators (EI) and the market value of Baghdad Soft Drinks Company.
- Null Hypothesis (H0): There is no statistically significant relationship between environmental indicators (EI) and the company's market value.

Research Population and Sample

The research population consists of industrial companies listed on the Iraq Stock Exchange. The research sample is Baghdad Soft Drinks Company, covering the period (2018–2023), chosen as a model for studying environmental indicators and market value due to the availability of annual financial data and the continuity of its industrial activity. The research employs a descriptive-analytical approach, utilizing a standard method to measure the impact of environmental indicators on the company's market value.

Data and Information Collection Methods

- Theoretical Aspect: - Data published in the company's annual reports and the Iraq Stock Exchange was used, in addition to books, scientific journals, previous studies related to the research topic, and the internet.
- Practical Aspect: - Within this context, the annual reports of the Board of Directors and the financial statements and accounts issued by Baghdad Soft Drinks Company for the

fiscal years 2018-2023 were used as a model for the research. Several experts in this field were also consulted.

Environmental Indicators and Their Role in Achieving Sustainability Through Market Value

1. The Concept and Importance of Environmental Indicators

Environmental indicators are really important for companies that want to be sustainable. They show how well companies are doing in reducing the harm they cause to the environment. These indicators look at things like how much energy and water companies use, how they manage waste, how much carbon they emit, and how well they use resources. According to the OECD, in 2021, these indicators are a way to measure how well companies are doing in reaching their environmental and sustainability goals. They also help people making decisions see if the environmental policies they put in place are actually working. For example, by tracking energy consumption, companies can identify areas where they can improve and reduce their carbon footprint. Similarly, by monitoring waste management, companies can develop more effective strategies for reducing waste and promoting recycling. By using these indicators, companies can make informed decisions and take steps towards becoming more sustainable. This is crucial, as companies have a significant impact on the environment, and their actions can either contribute to environmental problems or help solve them.

The way companies perform when it comes to the environment has changed a lot with the introduction of the Environmental, Social, and Governance framework. This framework looks at three main things: how a company treats the environment, how it treats people, and how it's governed. The part about the environment is really important to investors and banks now, because it shows how well a company can handle environmental problems. This is a big deal, as we can see from what Kotsantonis and Serafeim said in 2016 - they pointed out that companies need to be good at managing environmental risks if they want to do well.

The United Nations Sustainable Development Report from 2023 points out that businesses that take care of the environment actually do better in the long run. By being eco-friendly, they save money on operations and get a good name in the market. This shows just how important it is to keep an eye on environmental indicators if we want to be financially and economically stable at the same time.

2. Components of Environmental Performance and Methods of Measurement

Environmental performance in industrial companies consists of four main dimensions: -

- a. Carbon emissions and greenhouse gases.
- b. Waste management and recycling.
- c. Energy and water efficiency.
- d. Environmental initiatives and social responsibility.

There are several ways to measure how well companies are doing when it comes to the environment. Two of the most well-known methods are the Global Reporting Initiative (GRI) Standards and the Sustainable Accounting Standards Board (SASB). These methods

give us numbers to measure how companies are doing, so we can compare them to each other. According to Eccles and Krzus, who wrote about this in 2020, GRI reports are now the standard way to measure environmental performance around the world. This is because they cover a lot of ground and match up with the Sustainable Development Goals.

In developing environments like Iraq, companies face significant challenges in implementing and measuring environmental indicators (EIs), primarily due to weak environmental disclosure and a lack of available quantitative data. Al-Shammari (2022), in his study on the obstacles to implementing ESG indicators in Arab industrial companies, pointed out that the absence of clear environmental legislation leads to varying levels of environmental compliance among companies, limiting investors' ability to accurately assess environmental performance and consequently impacting companies' market value (Al-Shammari, 2022, pp. 55-72).

3. The Environmental Reality in Iraq

Iraq was one of the first Arab countries to take steps to protect the environment and reduce pollution. Back in 1974, a group called the Supreme Commission for the Human Environment was set up, after Iraq took part in the Stockholm Conference on the Human Environment in 1972. Later, in 1986, a law was passed to protect and improve the environment, which was in effect until 1997. That's when a new law, Law No. (3) of 1997, was introduced, and it's still in place today because no other law has been passed to replace it, as noted by Matar in 2005. This shows that Iraq has been working to address environmental issues for a long time, and its laws reflect this effort.

In 2003, Iraq took a big step towards protecting the environment by setting up the Ministry of Environment. For years, the environment had been neglected and polluted, but this new ministry aimed to change that. A few years later, in 2009, the government passed Law No. 27, also known as the "Law for the Protection and Improvement of the Environment". This law made it clear that all companies had a responsibility to protect the environment. If they failed to do so, they would face penalties. Some of the most significant penalties are outlined in Articles 33, 35, and 34 of the law. These penalties were put in place to ensure that companies take their environmental responsibilities seriously and do their part to preserve the environment. By establishing these rules, Iraq hoped to reduce pollution and create a healthier environment for its citizens. The law was a crucial step towards achieving this goal, and it has had a significant impact on the way companies operate in the country.- Article (33) The Minister, or whomever he designates, shall issue a warning to any establishment, factory, or any source of environmental pollution to remove the polluting agent within (10) days from the date of notification. In the event of non-compliance, the Minister may suspend operations or temporarily close the facility for a period not exceeding (30) days, which may be extended until the violations are rectified.

The government official in charge, or someone they appoint who is at least a Director General, has the power to give a fine. This fine can be as low as 1,000,000 dinars but no more than 10,000,000 dinars. If the problem isn't fixed, this fine can be given every month. If someone breaks the rules of this law, or the regulations and instructions that come from it, they could face serious punishment. This punishment can include being put in prison for at

least three months. Alternatively, they might have to pay a fine, which would be at least one million dinars but no more than twenty million dinars. It's also possible that they could receive both of these punishments - imprisonment and a fine. This is in addition to any other penalties that might be specified by other laws, which could be even stricter.

If someone breaks the rules outlined in parts of Article 20, they will face punishment, including jail time. They will also have to return any hazardous materials to where they came from or get rid of them safely. On top of that, they will have to pay compensation for what they did, as stated by Al-Mousawi in 2017. This is according to Article 35 of the law.

4. Motivations for Industrial Companies to Adopt Environmental Responsibility:

Industrial companies strive to adopt the concept of environmental responsibility towards the society in which they are located, despite the absence of laws that obligate industrial companies to study and evaluate the environmental impact of their products in many cases. The environmentally friendly product, called (EFPP), has become a global requirement, especially since environmental pollution threatens human health and nature alike. Attention to environmental responsibility is considered one of the basic requirements for joining international trade organizations. Therefore, many companies have paid attention to their environmental responsibilities voluntarily and for internal and external reasons, as follows: (Al-Ghalibi & Al-Amiri, 2005).

A. Internal reasons for adopting environmental responsibility voluntarily

Financial savings and marketing advantages are achieved for companies through the implementation of programs designed to protect the environment, because it contributes to reducing costs through recycling waste or treating it in a way that contributes to preserving the environment. Companies work to reduce industrial waste (solid and liquid) and thus reduce the manifestations of environmental pollution, which aims to protect people, their resources, their income, and the workplace.

B. External Reasons for Voluntarily Adopting Environmental Responsibility

There are governmental requirements that obligate industrial companies to refrain from harming the environment. In the event that companies violate laws and regulations, they are subject to financial penalties. The spread of consumer awareness is also a factor, as most consumers now seek products that do not threaten their lives or pose a danger to the surrounding environment. This awareness has contributed to the emergence of new marketing concepts that aim to protect humans from the dangers of pollution. Among the most prominent of these concepts are green products, ethical products, and environmentally friendly products, among others, which attempt to convince consumers of the safety of the environmental practices in these goods (Sims, 2003: 59).

5. Market Value

A. The Concept of Market Value

When we talk about a company's market value, we're really talking about how to make the most money for the people who own shares in the company. To do this, the goal is to increase the price of each share on the stock market, which in turn increases the

company's overall market value. But here's the thing: the price of one share doesn't necessarily show the total value of the company. For example, a company might have a low share price, but if it has a lot more shares than another company with a higher share price, its total value could actually be higher. This is because the total value of a company is calculated by multiplying the share price by the number of shares, so even if the share price is low, a large number of shares can still add up to a high total value.

A company's market value is basically the total worth of its shares that are traded on the stock market, calculated by taking the average price of these shares at the end of a certain period. This gives us a good idea of how well the market is doing and how much the company is growing. According to Al-Haylan, who wrote about this in 2016, market capitalization is a key indicator of market efficiency and growth, and it's calculated by adding up the values of all the shares listed on the stock exchange at their average closing prices at the end of the period, as stated on page 28 of his work. According to Obaid, back in 2017, he said that this value is basically what shares are worth when they're being traded on the stock exchange, and it gets written down in tables after the trading session is over. In a market that's working really well, this value is the same as the real value of the shares. Obaid explained this on page 33 of his work.

According to Suffah and Riduwan, who wrote about this in 2016, the way a company is seen by people who might invest in it is really important. This perception is often tied to the price of the company's shares when the market closes. Suffah and Riduwan explained this idea on page 5 of their work, saying that it's all about how potential investors view the company.

B. Market Capitalization Determinants: The market capitalization determinants can be illustrated in the table below:

Table 1.
Market Capitalization Determinants

| Specified | description |
|-------------------------------|---|
| Profitability | The higher the company's profits, the higher its expected market value. |
| Growth | Expectations of revenue or profit growth increase the company's attractiveness to investors. |
| Capital Structure | The debt-to-equity ratio affects risk and therefore valuation. |
| Firm Size | The size of assets or operations gives an impression of greater capacity and stability — but it is not always a positive influence. |
| Macroeconomic & External | General economic conditions – such as interest rates, inflation, and the industrial sector – affect value. |
| Dividend & Financial Policies | The dividend policy serves as a notification to investors and affects the valuation. |

Source: Prepared by the researcher based on the source (Febriyanto et al, 2023).

C. Methods of Measuring Market Value: One method of measuring market value is the CFA Institute (2025).

1. Intrinsic/Absolute Valuation: Estimating the true value of a company based on expected cash flows or dividends, such as the Discounted Cash Flow (DCF) or Discounted Dividend (DDM) model.
2. Relative Valuation: Comparing the company to similar companies in the same sector using multiples such as price-to-earnings (P/E) and price-to-book (P/B) ratios.

D. Key Simple Valuation Indicators (Investopedia, 2025)

1. Price-to-Earnings Ratio ($P/E = \text{Price} \div \text{Earnings Per Share}$): Indicates how much an investor pays for one dollar of earnings.
2. Price-to-Book Ratio ($P/B = \text{Price} \div \text{Book Value per Share}$): Useful for comparing the price to the company's net assets.
3. Price-to-Growth Ratio ($P/E = \text{Expected Growth Rate} \div \text{PEG}$): Helps consider the growth factor, allowing the investor to determine whether the price reflects expected growth.
4. Dividend Yield ($\text{Dividends Per Share} \div \text{Price}$): Especially important for companies that pay dividends.

The Relationship Between Environmental Indicators and Market Value

Environmental indicators are measures of a company's environmental performance, such as carbon emissions, waste management, resource efficiency, environmental disclosure, and others (Aims Press, 2020).

A company's market value is the valuation assigned to it by the market (share price \times number of shares), or other indicators such as Tobin's Q or the price-to-book ratio. (Nature, 2025)

The relationship is as follows:

1. When a company has better environmental performance (lower emissions, higher sustainability, and more transparent disclosure), this can reduce risks, improve its reputation, and attract "green" investors, which may lead to an increase in market value. (SAGE Journals, 2024).
2. Conversely, if a company has poor environmental performance (high emissions, environmental risks, weak disclosure), it may be penalized or undervalued by the markets, leading to a decrease in market value. (Diva Portal, 2023)

Section Three: Analyzing the Impact of Environmental Indicators on the Company's Market Value

Overview of the Research Population and Sample

- Research Population: Industrial sector companies listed on the Iraq Stock Exchange.
- Research Sample: Baghdad Soft Drinks Company, as a representative example of the food industry.
- Sample type: Purposive.
- Company data was used for a period of 5 years (2018–2023).

- Data sources included the company's annual reports and financial statements published on the Iraq Stock Exchange, as well as environmental reports and operational data related to environmental consumption.
- Research methodology employed a descriptive-analytical approach and quantitative measurement to correlate environmental indicators with market value.

Research Variables and Measures

The research relied on four key environmental indicators extracted from the operational data of the sample company: energy consumption, water consumption, carbon emissions, and recycling rates. To compare environmental performance over the years, the raw data was converted to standardized scores (0–100) using Min–Max normalization, and the overall index (EI) was calculated for each year.

Table 2.
Measurement of Environmental Indicators (EI) for Baghdad Soft Drinks Company

| Years | Annual Energy Consumption (million kWh) | Carbon CO2 Emission (tons) | Water Consumption (thousand m ³) | Waste Management (% Recycled) | Environmental Grade (E) |
|-------|---|----------------------------|--|-------------------------------|-------------------------|
| 2018 | 28 | 14635 | 1980 | 10% | 42 |
| 2019 | 21 | 16115 | 1970 | 12% | 54 |
| 2020 | 14 | 24398 | 1950 | 15% | 61 |
| 2021 | 61 | 28860 | 1955 | 18% | 31 |
| 2022 | 23 | 15640 | 1940 | 19% | 84 |
| 2023 | 19 | 16180 | 1935 | 22% | 95 |

Source: Prepared by the researcher based on data extracted from company reports.

Here's a rewritten version of the input in a more human-like tone: If we look at how our company has done environmentally over the past few years, from 2018 to 2023, we can see some interesting trends. We've been tracking four main areas: how much energy we use, how much carbon dioxide we emit, how much water we consume, and how well we recycle waste. To make it easier to compare from year to year, we've taken the actual numbers and turned them into standard scores, ranging from 0 to 100. This helps us see how we're doing over time.

Looking at the results from 2018, we can see that the environmental level was average, with a score of 42. This was mainly because of high water usage and a low recycling rate, even though the company did pretty well in reducing CO₂ emissions. But things got better in 2019 - the environmental score went up to 54. This was because the company used energy more efficiently, cut down on water consumption, and made some progress in managing waste, although there's still room for improvement. Overall, it's clear that the company is making an effort to reduce its environmental impact, and that's a step in the right direction.

Our environmental record took a bit of a hit in 2021, with our score plummeting to 31, which is a big drop from the 61 we achieved in 2020. So, what happened? Well, in 2020, we were doing pretty well - we were getting better at using energy efficiently and recycling

more, which is great. But, despite these positives, our CO₂ emissions actually went up, which stopped us from getting an even better score. Then, in 2021, things took a turn for the worse. We used a lot more energy and our carbon emissions soared, which shows that we didn't do a great job of putting our environmental policies into practice. It's clear that we need to get back on track and make some changes to reduce our environmental impact. We can't just keep using more energy and producing more emissions - we need to find a way to balance our needs with the need to protect the planet.

Our environmental performance has really taken a big leap forward in 2022 and 2023. If we look at the numbers, our environmental score has jumped to 84 and 95, which is a huge improvement. So, what's behind this big change? Well, for starters, we've cut back a lot on energy consumption, which is great news for the planet. We've also gotten much better at controlling carbon emissions, and our waste management practices just keep getting better and better. This is all part of our plan to be kinder to the environment and use our resources more wisely. We're really committed to making a positive impact and being more sustainable in everything we do. By making a few simple changes, we can make a big difference, and that's exactly what we're doing. Our goal is to keep improving and finding new ways to reduce our environmental footprint, and so far, it's paying off in a big way.

Overall, the findings show that the environment is getting better, but it's happening slowly and unevenly. Recently, though, there's been a big jump forward, which just goes to show how important it is to put money into clean technologies and make environmental management systems better if we want to keep the environment healthy in the long run. This is crucial for achieving long-term sustainability, and it's something we should all be working towards. By investing in clean technologies and improving the way we manage the environment, we can make a real difference and create a better future for ourselves and for generations to come.

Calculating Market Capitalization for Each Year

Annual Share Price (Closing Price) for Each Year

Number of Outstanding Shares

Then calculate: Market Capitalization = Share Price × Number of Shares

Table (3) shows the market capitalization of shares for the period from 2018 to 2023 for Baghdad Soft Drinks Company.

Table 3.
Market value of shares for the period from (2018 to 2023)

| Years | Share Price (I.D) | Number of Shares (billion shares) | Market Capitalization (billion I.D) |
|-------|-------------------|--------------------------------------|--|
| 2018 | 3.55 | 204.3 | 725.4 |
| 2019 | 3.28 | 204.3 | 670.2 |
| 2020 | 3.1 | 204.3 | 633.4 |
| 2021 | 3.8 | 204.3 | 776.5 |
| 2022 | 4.5 | 204.3 | 919.5 |
| 2023 | 4.84 | 204.3 | 989 |

Source: Prepared by the researcher based on the company's published reports.

After calculating the market value of Baghdad Soft Drinks Company's shares for the period 2018 to 2023, Table (4) shows the actual share values of the company along with the value of the environmental index.

Table 4.
Actual values of the company's shares with the value of the environmental index

| Years | E (0–100) | Share price (I.D) | Number of shares (billion shares) | Market capitalization (billion I.D) |
|-------|-----------|-------------------|--------------------------------------|---|
| 2018 | 42 | 3.55 | 204.3 | 725.4 |
| 2019 | 54 | 3.28 | 204.3 | 670.2 |
| 2020 | 61 | 3.1 | 204.3 | 633.4 |
| 2021 | 31 | 3.8 | 204.3 | 776.5 |
| 2022 | 84 | 4.5 | 204.3 | 919.5 |
| 2023 | 95 | 4.84 | 204.3 | 989 |

Source: Prepared by the researcher based on data from the company in the research sample.

This part explains how the study used science to combine data on how well Baghdad Soft Drinks Company performed environmentally with its market value from 2018 to 2023. This was done to get ready for statistical analysis and to test the main idea of the research.

This study looks at how a company's environmental record affects its market value. The environmental performance index is used to measure how well a company does in terms of the environment. This index is based on specific metrics and gives a clear picture of the company's commitment to environmental issues. On the other hand, the company's market capitalization is a key financial indicator that shows how the market views the company's performance. To see if there's a link between environmental performance and market capitalization, the researchers combined the two sets of data into one table that covers the same time period. This is necessary because any analysis that looks for correlations or relationships between the two variables needs to have matching data points in time to be statistically meaningful. By doing this, the researchers can determine if a company's environmental record has an impact on its market value.

To figure out a company's market capitalization, we use a simple formula: Market Capitalization = Share Price × Number of Outstanding Shares. In this case, the number of shares didn't change much, staying around 204.3 billion. So, the market capitalization mainly depended on the share price. For instance, in 2022, the share price was about 4.50 Iraqi dinars. When we multiply this by the number of shares, we get: $4.50 \times 204.3 = 919.5$ billion Iraqi dinars. This gives us the market capitalization for that year. The calculation is straightforward because the number of shares remains almost constant, making it easy to see how changes in share price affect the market capitalization.

Combining E-score data with market capitalization in a single table is a crucial step for subsequent statistical analysis. This integration allows for:

- Trend analysis to observe the evolution of the two variables,
- Correlation analysis to measure the strength of the relationship between them,

- Simple linear regression analysis to test the impact of E-score indicators on market capitalization and to determine the significance of this impact, its magnitude (β), and its coefficient of determination (R^2).

This approach is solid because it uses actual environmental data, which is turned into a score, called an E-score. It also uses real stock prices from the financial market and the company's official number of shares. The method for calculating market capitalization is widely accepted around the world. So, the results of the analysis will be accurate and reliable, making them perfect for studying in an academic setting. The use of real-world data and established methods ensures that the findings will be trustworthy and useful for further research.

Results and Discussion

Correlation and Regression Analysis to Measure the Strength of the Relationship Between Index (E) and Market Capitalization

1. Correlation Analysis: This measures the strength and direction of the relationship between two variables (e.g., Index E and Market Capitalization). The coefficient is between -1 and +1:

(+1) Strong positive correlation (the higher the E, the higher the market capitalization)

(0) No correlation.

(-1) Strong negative correlation.

Table 5.
Correlation Analysis between Index E and Market Value

| Correlations | | | |
|--------------------------|---------------------|--------------|--------------------------|
| | | market value | Environmental indicators |
| market value | Pearson Correlation | 1 | .708 |
| | Sig. (2-tailed) | | .116 |
| | N | 6 | 6 |
| Environmental indicators | Pearson Correlation | .708 | 1 |
| | Sig. (2-tailed) | .116 | |
| | N | 6 | 6 |

Source: Prepared by the researcher based on SPSS data.

The correlation table shows the results of the relationship analysis between the dependent variable, the market value of Baghdad Soft Drinks Company, and the independent variable, environmental indicators (E), during the period (2018–2023). The Pearson correlation coefficient is 0.708. This number represents the strength and direction of the relationship between the two variables.

A value of 0.708 indicates a very strong correlation between environmental performance and market value. The positive sign (+) means that the relationship is direct: when environmental indicators improve, the company's market value increases, and vice versa. (According to academic standards:)

From 0.70 to 0.89 = Strong correlation

0.90 and above = Very high correlation

Therefore, the correlation here is strong and positive.

- Regression Model: We use regression to determine the impact of the environmental dimension (E) on market value, as shown in Table (6).

Table 6.
shows linear regression.

| Sig.*t. level of significa nce | Coefficients | | | ANOVA | Model Summary | | Dependent variable | | | |
|---|--------------|-----------------------|-------------|-------------------------|--|---------------------------------|--------------------|-------|---|---|
| | T. | Stand ard error | β | | Sig.*F Degree s of freedo m, | DF Degree s of freedom | | F. | (R ²) Determinat ion coefficient | (R) Correlati on coefficie nt |
| 0.016 | 4.04 5 | 132.544 | 536.0 88 | index EI | 1 | Regressi on | | | Market value | |
| | | | | | 4 | The rest | 4.01 9 | 0.501 | | 0.708 |
| 0.116 | 2.00 5 | 2.035 | 4.080 | Mark et Valu e | 5 | The total | | | | |

Source: Prepared by the researcher based on SPSS results

The Model Summary results show a correlation coefficient (R) of 0.708, indicating a moderately strong positive relationship between the environmental dimension and market value. This means that improved environmental performance is associated with an increase in the company's market value. The coefficient of determination (R²) was approximately 0.501, meaning that 50.1% of the changes in market value can be explained by changes in the Environmental Dimension Index (EI), while the remaining percentage is attributed to other factors outside the model, such as market conditions, overall financial performance, or other dimensions of sustainability. The ANOVA results indicate an F-value of 4.019 with a significance level of 0.116, which is higher than the target significance level (0.05). This suggests that the model as a whole is not statistically significant and does not provide sufficient evidence to generalize the relationship between the two variables across the statistical range.

Despite the overall model's lack of significance, the coefficients show that the regression coefficient for the environmental dimension is $\beta = 536.088$, with a t-value of 4.045 and a significance level of 0.016. This indicates a statistically significant positive effect of the environmental dimension on market value. This means that improved environmental performance contributes to increased market value, but this effect is not sufficiently pronounced when evaluating the model as a whole.

The environment plays a big role in how much something is worth, but it's not the only thing that matters. When we look at it by itself, its impact is limited. This means that to really understand how much something is worth, we need to consider the environment along with other factors like social and governance issues. Our results show that there is a connection between how well a company does environmentally and how much it's worth. So, we can say that taking care of the environment is good for business and can make a company more valuable to investors. It's a good idea for companies to make environmental sustainability a priority in their plans.

Conclusions

Through this research, the researcher attempts to highlight the most important conclusions and recommendations reached, based on the ideas and opinions established in the research, as follows:

1. There is a moderately strong positive relationship between environmental performance (E) and the market value of Baghdad Soft Drinks Company, with a correlation coefficient ($R = 0.708$). This indicates that improved environmental performance is associated with higher market value, but not to a high degree.
2. The Environmental Performance Index (EI) explains approximately 50.1% of the changes in market value, while the remaining percentage is attributed to other factors not included in the model, such as overall financial performance, market conditions, and other dimensions of sustainability.
3. The environmental dimension showed a positive trend in its relationship with market value, reflecting the potential role of environmental indicators in improving the company's market value.
4. The analysis results showed that the impact of environmental performance was positive and partially significant. However, the overall model was not statistically significant at the 0.05 level, indicating that environmental performance alone is insufficient to fully explain changes in market value.
5. Accordingly, the study results partially support the research hypothesis, confirming that environmental performance is a factor influencing market value, but it needs to be integrated with social and governance dimensions to achieve a more pronounced financial impact.

Recommendations

1. Systematically enhancing environmental performance: It is recommended that the company's management continue to improve environmental performance indicators, particularly in the areas of energy and water conservation, emissions reduction, and increased recycling rates, given the potential positive impact this could have on market value.

2. Enhancing Transparency and Environmental Disclosure: The company should prepare and publish accurate and regular environmental reports as part of its sustainability reports. This will contribute to strengthening investor confidence and improving the company's market image.

To really make a difference in the long run, it's a good idea to connect how well a company does for the environment with its financial planning. This means looking at how the company's environmental performance affects its financial decisions and even using those performance indicators to evaluate how well managers are doing their jobs. By doing this, companies can make sure they're taking care of the environment in a way that will last.

The study found that how well a company does environmentally has a positive effect, but it's not the whole story. Even though the results were somewhat significant, they didn't quite meet the standards to be considered statistically significant. This means that just looking at a company's environmental performance isn't enough to fully understand why its market value changes. There are likely other factors at play that are influencing the market value, and environmental performance is just one piece of the puzzle.

So, what the study found out is that how well a company does for the environment actually plays a role in how much it's worth on the market. But here's the thing, it's not the only factor - social and governance aspects also need to be taken into account if a company wants to see a bigger impact on its finances. In other words, just being good for the environment isn't enough, companies need to think about how they treat people and how they're run too.

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