Research article

The Relationship Between Corporate Social Responsibility Disclosure and Firm Value: The Mediating Role of stock liquidity - Evidence from Egypt

Al-Sayed Mahmoud Al-Sayed Al-Hanawi
Assistant Professor of Accounting, Faculty of Commerce, Damanhour University, Egypt.

Department of Accounting College of Business, King Khalid University, Abha, Saudi Arabia.

* Correspondence: dr.els_elhennawy@yahoo.com

Abstract: This research aims to examining the direct and indirect effects, through the stock liquidity, of the level of disclosure of corporate social responsibility and its different dimensions (environmental, social, employee, and product dimension), on firm value, using the sample of 52 firm listed in the Egyptian stock exchange and listed in the EGX100 index for a period of five years from 2017 to 2021. Using the path analysis, the results indicated that: (1) There is a significant positive effect of the level of disclosure of corporate social responsibility and its environmental and social dimensions on both firm value and the stock liquidity. (2) There is a significant positive effect of the stock liquidity on the firm's value. (3) There is a significant positive indirect effect of the level of disclosure of corporate social responsibility and its environmental and social dimensions on firm value. (4) There is no significant effect of the level of disclosure of social responsibility dimensions related to employees and products on firm value. (5) There is a significant negative indirect effect of the level of disclosure of the dimension of the employees on firm value.

Keywords: Disclosure of corporate social responsibility; stock liquidity, and firm value.
1. Introduction

The importance of corporate social responsibility has increased over the years, becoming the subject of many discussions and studies, especially with the growing public awareness regarding the role of companies in society in recent decades (Carroll and Shabana, 2010). Social responsibility emerged as a response to social pressures from stakeholders, environmental concerns, and social demands that describe the dimensions of social responsibility. The stakeholder dimension is related to how the company interacts with a group of stakeholders, such as employees, customers, and suppliers. The environmental dimension refers to how the company cares about the natural environment and the impact of its operations on it. Finally, the social dimension is related to how the company contributes to improving society (Crisóstomo et al., 2011).

The term "Corporate Social Responsibility," abbreviated "CSR," refers to a concept that exists within a company as a form of transparency in social disclosure of activities or information disclosure activities carried out by companies. These activities include components of financial information as well as information about the social impacts that are caused by company activities (Aras et al., 2018). The corporate social responsibility report for this company contains information as well as relevant material for investors or potential investors to examine when deciding whether to invest in the company. It is mandatory for businesses to engage in some form of social responsibility. Therefore, Corporate Social Responsibility, often known as CSR, is a continuing commitment made by the corporation to be economically, socially, and ecologically accountable to the community, the environment, and stakeholders. Economic, social, and environmental responsibility is the three components that make up corporate social responsibility (CSR) (Carroll and Brown, 2018).

Although many companies have contributed to economic and technological progress, they have also been criticized for causing social problems. Therefore, companies have become increasingly responsible to a wider range of the public, beyond shareholders and creditors (Reverte, 2009). As a result, companies are no longer only responsible for achieving profits, but are also required to care about environmental and social aspects. The financial dimension is no longer sufficient to ensure sustainable growth in company value, which can only be achieved if the company cares about environmental and social dimensions (Nurlela and Isiahuddin, 2008). This is supported by the increasing investments in corporate social responsibility in many countries. For example, such investments in the United States increased from $639 billion to $2.29 trillion during the period 1995-2005 (Holder-Webb et al., 2009).

With the growing public awareness and interest in environmental and social issues, and the increasing volume of investments in corporate social responsibility, disclosure of social responsibility by companies has increased in order to convey information about their compliance with their social responsibility with the aim of achieving some benefits, including: demonstrating the extent of compliance with social responsibility, meeting regulatory requirements, enhancing the company's reputation, reducing financing costs, increasing stock prices, and having a positive impact on the stock market.
2. Research problem

Companies are currently facing many social pressures from stakeholders, and therefore, evaluating companies solely based on traditional performance indicators is no longer appropriate. Companies need to be evaluated based on their interaction with a wide range of stakeholder demands, including disclosure of social responsibility information. Several studies (e.g., Fiori et al. 2010; Cahan et al. 2016; Reverte 2016) have examined the direct effect of the level of corporate social responsibility (CSR) disclosure on firm value, but these studies have not reached a consensus on the results. Some studies have found a positive effect of CSR disclosure on firm value, while others have found no such effect. However, these studies have not tested whether there is an indirect effect of CSR disclosure, with its different dimensions, on firm value through other mediating variables, including stock liquidity. Furthermore, they have not identified the nature of this indirect effect, whether it represents a complete or partial indirect effect, or whether there is no such effect at all, and what its importance is concerning the overall effect of CSR disclosure on firm value.

Therefore, the problem of this research is to test the direct and indirect effects of the level of accounting disclosure of CSR with its different dimensions on stock liquidity and firm value, and to determine the nature and relative importance of the indirect effect of CSR disclosure on firm value through stock liquidity. Accordingly, the research questions to be answered include the following:

- What are social responsibility and its different dimensions, and what are the theories explaining accounting disclosure of CSR?
- Is there a direct effect of the level of CSR disclosure with its different dimensions on both firm value and stock liquidity?
- Is there a direct effect of stock liquidity on firm value?
- Is there an indirect effect of the level of CSR disclosure with its different dimensions on firm value through stock liquidity, and what is the relative importance of this effect?

3. Research Objectives

The objective of this research is to study the relationship between the level of accounting disclosure of CSR with its different dimensions, stock liquidity, and firm value, and to determine the direct and indirect effects of CSR disclosure on firm value through stock liquidity as a mediating variable. This will be achieved by using a sample of non-financial companies listed on the Egyptian Stock Exchange and included in the EGX100 index for five years from 2017 to 2021. This will be done using a Structural Equation Model (SEM) with Path Analysis, where the level of CSR disclosure with its four dimensions (environmental, social, employee-related, and product-related) represents the independent variable, while firm value represents the dependent variable, and stock liquidity represents the mediating variable.
4. Research Importance

This research derives its importance by seeking to clarify the relationship between the level of disclosure of corporate social responsibility (CSR), stock liquidity, and firm value. The aim is to determine whether firm value is associated with both the level of CSR disclosure and stock liquidity, and thus, to clarify the direct impact of the different dimensions of CSR disclosure on both firm value and stock liquidity. In addition, the indirect impact of the different dimensions of CSR disclosure on firm value through stock liquidity as a mediating variable will be examined. This comes considering the growing interest in CSR disclosure among companies in the Egyptian environment at present, which may have positive effects on the Egyptian stock market in terms of increasing stock liquidity and the growth of this market. Therefore, regulatory authorities are urging companies to expand their level of CSR disclosure. On the other hand, studies that have examined the impact of the level of CSR disclosure on firm value have been limited to studying its direct impact only, without studying its indirect impact through stock liquidity. Therefore, studying this impact is deemed worthy of research.

5- Research Limits

This research is limited to studying the direct and indirect impact of the different dimensions of CSR disclosure on firm value through stock liquidity as a mediating variable. Thus, studying the determinants of CSR disclosure is outside the scope of this research. The research is also limited to examining the impact of the level of CSR disclosure on firm value only, whether directly or indirectly through stock liquidity. Therefore, other effects of CSR disclosure will not be addressed, except to the extent necessary to address the research problem.

To achieve the research goal, the remaining parts will be organized as follows:

6. Corporate Social Responsibility.
8. The direct and indirect impact of the level of CSR disclosure on firm value and stock liquidity and deriving research hypotheses.
10. Conclusion, recommendations, and proposed research areas.

6- Corporate Social Responsibility

The term "corporate social responsibility," or "CSR," refers to a mechanism that enables an organization to voluntarily integrate social and environmental concerns into its operations and interactions with stakeholders. These concerns extend beyond the scope of an organization's legal responsibilities (Kabir and Thai, 2017). The term "corporate social responsibility" (CSR) refers to all the interactions that exist between a business and its various stakeholders. These stakeholders can include consumers, employees, communities, owners or investors, the government, suppliers, and even competitors (Akal et al., 2023).

Corporate social responsibility (CSR) has been mentioned in accounting literature for over 70
years. The concept was first introduced in 1926 by Clark, who observed that companies have obligations to society (Freeman and Hasanaoui 2011). However, many studies (e.g., Carroll and Shabana 2010; Freeman and Hasanaoui 2011; Beal 2014) indicate that the academic interest in CSR did not gain sufficient attention until the publication of Bowen's book in 1953, which is considered the driving force for studying CSR. It was defined as the commitment of businesspeople to pursue policies, make decisions, and follow desired procedures in terms of the goals and values of society.

Carroll and Shabana (2010) suggest that formal definitions of CSR began in the 1970s, which focused on the social performance of companies. Thus, CSR and its social performance became the focus of many discussions and studies. However, many studies (e.g., McWilliams et al. 2006; Dahlsrud 2008; Okeye 2009; Reverte 2009; Freeman and Hasanaoui 2011; Omran and Ramdhony 2015) agree that despite the widespread acceptance of the concept of CSR, there is no consensus on a single definition of CSR. However, Dahlsrud's study (2008) suggests that despite the diversity of definitions, there is often a consensus between them. This is supported by Reverte's study (2009), which explains that most definitions describe CSR as a concept that integrates social and environmental issues into a company's operations and interaction with stakeholders on a voluntary basis.

Several studies have identified dimensions or areas of corporate social responsibility in the field of accounting. Carroll's study (1991) classified corporate social responsibility into four dimensions: (1) economic responsibility, which includes aspects such as maximizing profits, maintaining a high level of operating efficiency, and preserving competitive position. (2) Legal responsibility, which includes aspects such as compliance with laws and regulations. (3) Ethical responsibility, which includes aspects such as performing in a manner consistent with social and ethical expectations and norms, and adherence to ethical behavior beyond mere compliance with laws and regulations. (4) philanthropic responsibility, which includes aspects such as performing in a manner consistent with charitable work and societal philanthropic expectations, participating in volunteer work, engaging in charitable activities within the local community, and providing donations. These four dimensions were organized in a hierarchical form, starting with economic responsibility, and ending with philanthropic responsibility at the top. Although economic responsibility is considered the primary responsibility of companies according to this sequence, a company cannot maximize its value and financial performance without fulfilling the other three dimensions of social responsibility.

Schwartz and Carroll's study (2003) presented an approach that includes three basic dimensions of social responsibility: (1) economic responsibility, which includes activities that have direct or indirect economic effects on the company, such as maximizing profits and maximizing the company's value. (2) Legal responsibility, which involves the company's responsiveness and compliance with laws. (3) Ethical responsibility, which refers to the company's responsiveness to ethical requirements that individuals generally expect, and stakeholders specifically expect. This approach differs from Carroll's classification by having a certain degree of overlap between the three dimensions, resulting in seven categories of social responsibility: economic responsibility, legal responsibility, ethical responsibility, economic and ethical responsibility, economic and legal responsibility, legal and ethical responsibility,
and economic, legal, and ethical responsibility.

Nielsen and Thomsen (2007) distinguished between three approaches to defining corporate social responsibility in the field of accounting. The first approach, representing the traditional perspective, views corporate social responsibility as maximizing profits. The second approach represents the stakeholder perspective, which sees the company as responsible not only to shareholders but also to stakeholders. The third approach, the broader approach to social responsibility, considers companies to be responsible to society, viewing them as part of the community and in need of community approval to continue operating.

Dahlsrud's study (2008) indicates that corporate social responsibility involves five dimensions: (1) the environmental dimension, which refers to the natural environment, such as preserving a clean environment and incorporating environmental concerns into the company's activities; (2) the social dimension, which refers to the relationship between the company and the community, such as contributing to community improvement; (3) the economic dimension, which refers to financial aspects, such as contributing to economic performance and maintaining profitability; (4) the stakeholder dimension, which refers to stakeholders and interacting with them; and (5) the discretionary dimension, which refers to events and actions based on ethical values that are not mandated by law.

Based on the dimensions identified by Carroll (1991), Schwartz and Carroll (2003), Nielsen and Thomsen (2007), and Dahlsrud (2008), the most important definitions of corporate social responsibility can be categorized as follows: Some definitions address only two of the above dimensions, although they differ in their interpretation of these dimensions. McWilliams and Siegel (2001) defined corporate social responsibility as actions that promote social charity beyond the company's interests and those defined by the law. Finally, Waters and Ott (2014) defined it as discretionary actions that the company chooses to carry out to achieve stakeholder objectives.

In the field of accounting, various definitions of corporate social responsibility (CSR) have been presented, each focusing on different dimensions. Vogel (2005) defined CSR as practices that improve the working environment and benefit the community in ways that go beyond what is legally required of companies. Isa (2012) defined it as a long-term process guided by organizational and personal values that considers individuals as stakeholders, environmental and regulatory policies, and often depends on the company's gains and profits. Pirnea et al. (2014) defined CSR as a set of activities that include working in partnership with the local community, developing relationships with employees and customers and their families, participating in environmental preservation, and environmental sustainability.

A third group of definitions focused on four dimensions, including the environmental, social, stakeholder, and optional dimensions. The World Business Council for Sustainable Development (2000) defined CSR as the continuous commitment by businesses to act ethically and contribute to economic development while improving the quality of life of employees, their families, the local community, and society. Aguinis and Glaves (2012) defined CSR as specific organizational policies and procedures that consider stakeholder expectations, as well as economic, social, and environmental
performance. Coombs and Holladay (2012) defined CSR as optional procedures that companies implement and monitor to fulfill their expected obligations to stakeholders, including employees, the local community, and the environment and society.

A fourth group of definitions focused on five dimensions of CSR. The Commission of the European Communities (2001) defined CSR as a concept through which companies integrate social and environmental issues into their operations and interact with stakeholders on an optional basis. Galbreath (2010) suggested that CSR encompasses the economic, legal, ethical, and optional responsibilities that companies bear towards stakeholders.

The researcher notes that the multiple definitions of CSR may be due to the different dimensions involved, as well as the lack of agreement on these dimensions by studies or regulatory bodies. The researcher agrees with Reverte (2009) that most definitions describe CSR as a concept through which companies integrate social and environmental issues into their operations and interact with stakeholders on an optional basis, even though some definitions do not include all these dimensions.

7- Disclosure of Corporate Social Responsibility.

According to (Amelia, 2016), the company's financial state did not prove to be sufficient to guarantee that the value of the company would develop in a manner that was sustainable. The only way to ensure the long-term viability of a firm is for that corporation to pay attention to both the social and environmental aspects of its operations. The response of the community that surrounds a business that is thought to be careless about its impact on the natural world has developed into a well-established pattern. Disclosures to the community that surrounds the enterprise are something that businesses must do. According to (Rijaluddin and Purwanto, 2022), CSR as an idea means that companies are no longer faced with responsibilities based on a single bottom line, namely corporate value, which is reflected in its financial condition only. Instead, the company's responsibility must be based on three bottom lines. In this case, the financial bottom line isn't the only important one; the social and environmental bottom lines are also important. Therefore, the CSR program, which was initially voluntary but is now required, needs to be improved to become more mandatory.

Disclosure of corporate social responsibility (CSR) can be categorized into two sections: mandatory disclosure, which represents the minimum amount of information that must be disclosed considering regulations, rules, and standards, and optional disclosure, where the company has the freedom to choose the type of information to be disclosed to support decision-making processes and increase the company's value (Kurniasari and Warastui, 2015).

With the increasing demand for information and achieving transparency in recent years, public awareness and interest in environmental and social issues, the growth of investments in CSR, in addition to increased media attention, has led to increased disclosure by companies to convey information about their commitment to social responsibility (Nielsen and Thomsen, 2007; Holder-Webb et al., 2009; Yao et al., 2011; Tagesson et al., 2013). In this regard, many studies (e.g., Holder-Webb et al., 2009; Yao et al., 2011; Gherghina et al., 2015; Hapsoro and Zidni, 2015; Moravcikova et
al., 2015) support that it is no longer sufficient for companies to engage in CSR activities, but it is also essential to disclose information related to these activities and make it available to stakeholders in the company. It is difficult to invest in CSR activities to enhance the company's reputation and maximize its value without disclosing information about these activities.

Disclosure of CSR is defined as the process of conveying the social and environmental impacts of the economic activities carried out by the company to specific interest groups within the company and the community (Gray et al., 1996: as cited in Aldosari and Atkins, 2015). In the same context, Hackston and Milne (1996) defined social disclosure as the provision of financial and non-financial information related to the company's interaction with its physical and social environment, which is reported in the company's annual reports or in separate social reports. These include information about the physical environment, energy, human resources, products, and community participation.

Companies typically disclose their CSR activities in annual reports or separate social reports, such as a CSR report or sustainability report (Reverte, 2009). Studies by O'Donovan (2002), Yao et al. (2011), Tagesson et al. (2013), Perez (2015), and Ahmed et al. (2016) agree that companies voluntarily disclose social and environmental information in annual reports to achieve effective communication with stakeholders by sending messages about their social and environmental actions and activities. This results in the company achieving many benefits, such as achieving consistency between the social values that the company's activities entail and social norms and values, enhancing the company's reputation, and demonstrating the extent of its commitment to social responsibility.

Numerous studies have supported the increase in the number of published corporate social responsibility (CSR) reports in recent years in the field of financial accounting. For example, more than half of Fortune1000 companies regularly issue CSR reports (Jo and Kim 2008). In addition, over 80% of Fortune500 companies display their CSR reports on their websites (Lii and Lee 2012). According to the Global Reporting Initiative (GRI), the number of American companies publishing CSR reports increased from 70 in 2007 to over 540 in 2012. American companies represented 12.5% of the companies reporting on CSR worldwide in 2012.

KPMG's report (2015) indicates a growing number of CSR reports issued by the world's largest 250 companies (G250) from 35% in 1999 to 92% in 2015, as well as an increase in the number of CSR reports issued by the top 100 companies in each surveyed country (N100) from 24% in 1999 to 73% in 2015, as well as an increase in the inclusion of CSR report information in N100 companies' annual reports from 40% in 2008 to 56% in 2015. The report attributes this to two reasons: first, the increasing importance of the information included in CSR reports, which is suitable for shareholders to enable them to understand the opportunities and risks that the company faces. Second, financial markets and governments in many countries have issued requirements for reporting on CSR information in annual reports.

There are many theories that explain corporate social responsibility disclosure, including legitimacy theory, stakeholder theory, and signaling theory (Jupe 2005; Reverte 2009; Omran and Ramdhony 2015). Omran and Ramdhony (2015) indicate that there is no single theory applicable to explaining corporate social responsibility disclosure for all situations or communities. This is because
social and environmental information is inherently non-financial and cannot be explained by some theories that focus on financial and future information. In the same context, Reverte (2009) argues that despite much evidence that social and environmental information is useful for investors' decision-making, focusing on this category of stakeholders does not provide a comprehensive theoretical basis for explaining corporate social responsibility disclosure, especially since most of this disclosure is non-financial. In response, alternative explanations for corporate social responsibility disclosure have been presented.

Deegan (2002) notes that due to the overlap of several theories, which can offer different perspectives, researchers use more than one theory to provide an explanation for some management actions. Reverte (2009) believes that alternative theories in the study of CSR disclosure policies focus on different perspectives on the same issue. Therefore, different theories should not be viewed as competing perspectives, but rather as alternative ways of understanding and studying organizational decision-making for disclosing different types of information. By examining studies (e.g., Deegan 2002; Jupe 2005; Branco and Rodrigues 2008; Reverte 2009) that have addressed CSR disclosure, it becomes clear that many theories are used to explain this disclosure. These theories can be discussed as follows:

7-1 Legitimacy theory in financial accounting

The legitimacy hypothesis focuses on how important societal acceptance is for promoting a company's longevity. Thus, it is up to businesses to assess if certain activities are suitable and in line with cultural standards and views. According to Khan et al., (2022), legitimacy refers to business operations that benefit society across different social systems. How well societal norms and ideals are respected determines legitimacy. It improves the company's reputation in society. The company also continues to operate if society considers its demands to have been satisfied. The organization consistently implements environmental performance policies to be responsible and build the appropriate reputation (Deegan, 2014). There are four company legitimacy methods. To communicate how a company is serving the interests of its stakeholders, social reporting should be employed. The second is public education and informative outreach on relevant topics. Third, using symbolic means to achieve acceptance without changing behavior or complying with social expectations (Watts et al., 2019). The fourth and last contains commonly recognized perspectives by business operations.

Legitimacy theory has been used since the early 1980s by many researchers as a theoretical foundation in the field of social and environmental accounting (Laan 2009). Legitimacy is defined as a general perception or assumption that a company's actions are desirable or appropriate within some social systems that are built on rules, values, and beliefs (Perrow 1970: as cited in Reverte 2009).

Legitimacy theory relies on the idea of a social contract between companies and society. Therefore, the survival of a company becomes threatened if there is a perception in society that the company has violated this contract, where society can cancel the company's contract to continue its operations through various measures such as consumers reducing demand for the company's products, increasing pressure on government agencies to increase taxes or fines, or imposing laws to ban actions
that do not align with society's expectations. Therefore, legitimacy is considered a source that companies rely on to ensure their survival (Deegan 2002; Jupe 2005). Consequently, legitimacy theory assumes that companies should act within the boundaries of what society considers socially acceptable (O'Donovan 1999).

Based on this, the scope and type of social disclosure of a company are directly related to the management's perception of society's concerns from the legitimacy theory perspective (Deegan et al. 2002). This is consistent with Hooghiemstra's (2000) study that disclosing social responsibility aims to confer legitimacy to the company's behavior by providing information that aims to influence stakeholders and society's perception of companies. Yao et al. (2011) argue that disclosing social responsibility, in the context of legitimacy theory, is a response to public pressure and media interest resulting from significant social events. This is consistent with Deegan's (2002) previous explanation that when the legitimacy of an establishment is in question, many strategies can be adopted that will depend on disclosure to external parties as a means for management to influence those parties' perception of the company. Branco and Rodrigues (2008) add that disclosing corporate social responsibility is a means for companies to communicate with society to convince the public that they meet their social expectations.

7-2 Stakeholder Theory

Stakeholders can be defined as any group or individual who can influence or be influenced by the company's goals. According to this, the main stakeholders are those who have an interest in the company, such as investors, employees, and customers. While competitors, the local community, media, and society are considered secondary stakeholders (Freeman 1984: as cited in Nielsen and Thomsen 2007).

Analyzing stakeholders initially involves identifying stakeholder groups within the company who have a right to information and prioritizing their interests (Laan 2009). Therefore, Mitchell et al. (1997) identified stakeholder groups based on two criteria: (1) the power exerted by these groups on the company, which depends on the resources stakeholders' control and their degree of connection with the company, enabling them to exercise power over it. (2) The legitimacy of these groups, which represents their ethical right to intervene in the company.

Thus, stakeholder theory helps to identify the groups that are expected to be of interest to the company. Therefore, this theory explicitly considers the impact of different stakeholder groups' expectations within society when disclosing company policies. Thus, the company's disclosure is considered a management tool to manage the various stakeholders' information needs and enhance the company's reputation from their perspective (Neu et al. 1998; Deegan 2002; Reverte 2009; Hassan and Marston 2010).

Although both legitimacy theory and stakeholder theory consider the company as part of a broader social system, where the company affects and is affected by other groups within society, legitimacy theory discusses society's expectations in general considering the social contract. Meanwhile, stakeholder theory provides a more accurate entry point by referring to specific stakeholder groups within society. Thus, there will be different social contracts negotiated with
different stakeholders instead of one contract with society in general (Deegan 2002).

According to the stakeholder theory, the only way for a company to ensure its continued existence is to pay close attention to the various stakeholders whose actions have the potential to influence the company's capacity to remain in business (Susanto and Ardini, 2016). The stakeholder theory can be summed up as a set of policies relating to corporate stakeholders that contribute to business sustainability. This is the general definition of stakeholder theory. In theory, stakeholders of a corporation are obligated to offer advantages to stakeholders of the company, and stakeholders have a significant impact on the existence of the organization (Daromes, 2020). They include businesses as a supplier, individuals as a customer, governments as an investor, communities as a community, and employees as a political group. For this reason, disclosure in financial reporting is something that needs to be done so that the stakeholders of the firm can make a positive contribution to the sustainability of the company.

7-3 Signaling Theory

Signaling theory is one of the theories used to explain voluntary disclosure in financial accounting. It is useful in describing behavior when two parties have different abilities to access information. Typically, one party (the sender) chooses whether to disclose information and how to disclose it, while the other party (the receiver) interprets the signal sent by the sender based on the information disclosed. Signaling theory relates to market reactions to good and bad news disclosed by companies. Therefore, information provided by management helps adjust investor expectations about the company's performance and future profits, leading to decisions to buy or sell company stocks (Kurniasari and Warastui, 2015).

According to signaling theory, managers are more likely to disclose more information to signal positive results (Hassanein and Hussainey, 2015). Reporting on company information can be considered a signal to financial markets, which is sent to reduce information asymmetry, decrease financing costs, and increase company value (Perez, 2015). Companies may use social responsibility disclosure as a signal to investors and other stakeholders that the company is effectively participating in corporate social responsibility activities, which may lead to positive effects such as enhancing the company's reputation (Linthicum et al., 2010; Sun et al., 2010), reducing financing costs (Dhaliwal et al., 2011; Reverte, 2012), and increasing stock prices (De Klerk et al., 2015; Gutsche et al., 2017). Therefore, this theory provides incentives for disclosing information in social responsibility reports, which may explain the disclosure of social responsibility practices, particularly in emerging economies (Su et al., 2016).

8- Studies that have examined the direct and indirect impact of the level of CSR disclosure on firm value and stock liquidity and deriving research hypotheses.
There are three types of experimental studies on corporate social responsibility (CSR) disclosure: descriptive studies, which provide a report on the nature and extent of CSR disclosure, with some comparisons made, for example, between countries or time periods; studies that focus on potential determinants of social and environmental reporting; and studies that focus on the impact of social and environmental information on various users based on market reactions (Reverte, 2009).

O'Donovan (1999) argues that management will not provide voluntary environmental disclosure unless it sees that this disclosure will benefit the company. Yao et al. (2011) also point out that although CSR is important for companies, the company's value and financial performance cannot be maximized if the company does not communicate information about the extent of its compliance with that responsibility to the public. This is because disclosing CSR information helps assess the degree of alignment between social values embedded in CSR activities and social values and norms. This is supported by Holder-Webb et al. (2009), who emphasize institutional investors and other stakeholders' focus on social and environmental information when analyzing stocks, especially with the growth of CSR investments.

In this section, the researcher will discuss studies that have examined the direct impact of the level of CSR disclosure on both the company's value and stock liquidity. The researcher will also discuss studies that have examined the direct impact of stock liquidity on the company's value, as well as studies that have examined the indirect impact of the level of CSR disclosure on the company's value through stock liquidity.

8-1 The impact of the level of disclosure of corporate social responsibility on the value of the company.

Assessing the value of companies is of interest to various parties, such as investors and financial analysts. The accounting and management literature contains numerous quantitative models for expressing the value of a company. There are multiple meanings and implications of value in accounting, management, and economics. Three types of value can be distinguished: (1) market value, which is the value at which the stock is traded in the securities market; (2) intrinsic value, which is the value that experienced individuals use to assess the company's implicit characteristics, including its ability to generate profits and manage investment-related risks; and (3) fair value, which is the value that will be obtained from selling an asset or the amount that will be paid to transfer an obligation in a transaction between market participants at the measurement date. Despite the many valuation models addressed in the accounting literature, the purpose of valuation affects the model that is chosen and used to evaluate companies. Given that the primary goal of any company is to increase its value in the long term, which represents investors' recognition of its level of success and is often linked to stock prices (Hidayah, 2014; Kurniasari and Warastuti, 2015), which may depend on the existence of good practices for social responsibility and their impact on stakeholders in the company (Barnett, 2007), many studies have tested the effect of the level of disclosure of social responsibility on the value of the company. However, there is no agreement among the results of these studies. On the one hand, some studies (e.g., Fiori et al., 2010; Karim et al., 2013; De Klerk et al., 2015; Cahan et al., 2016; Jizi et al., 2016; Reverte, 2016) have found a positive effect of disclosing social responsibility on the value
of the company.

Karim et al. (2013) aimed to test the impact of the quality of voluntary disclosure of corporate social responsibility on the value of the company, using a sample of 40 service companies listed on the Indonesian Stock Exchange during the period of 2008-2010. The study found a significant positive relationship between the quality of disclosure of corporate social responsibility and the value of the company.

Similarly, Jizi et al. (2016) found a significant positive relationship between corporate social responsibility disclosure and stock prices of American banks during the period of 2009-2010.

Using the Ohlson model (1995), De Klerk et al. (2015) and Reverte (2016) examined the relationship between the level of disclosure of corporate social responsibility and stock prices of companies in the United Kingdom and Spain, respectively. The studies found a positive relationship between disclosure of corporate social responsibility and stock prices, with the positive relationship being more significant in environmentally sensitive industries. Disclosure of corporate social responsibility provides investors with information that allows for better evaluation of the increasing risks associated with future environmental obligations and potential regulatory decisions, reducing information asymmetry. Additionally, Reverte (2016) found a positive indirect effect of corporate social responsibility disclosure on stock prices through an increase in both earnings and book value per share.

Laskar and Maji (2016) examined the effect of corporate social responsibility disclosure and its components (human resources, community, and products) on the market-to-book ratio as a measure of company value, using a sample of Indian companies during the periods of 2008-2009 and 2013-2014, and using the Global Reporting Initiative framework for measuring the level of disclosure. The study found an increase in the level of disclosure of corporate social responsibility during the study period, with the highest level of disclosure being on the community dimension, followed by the human resources dimension, then the products dimension. The study also found a significant positive effect of corporate social responsibility disclosure and its components on the market-to-book ratio.

Gutsche et al. (2017) tested the impact of corporate social responsibility disclosure on the value of the company measured by the average stock value over the four months following the end of the fiscal year, using a sample of 500 American companies listed on the S&P index during the period of 2011-2014. The study found a significant positive relationship between corporate social responsibility disclosure and the value of the company. The study also examined the impact of corporate social responsibility disclosure on the value of the company while considering the level of social responsibility performance. The study found that the positive effect of corporate social responsibility disclosure was stronger in companies with poor social responsibility performance compared to those with high social responsibility performance.

In contrast to previous studies, some studies (e.g., Tjia and Setiawati 2012; Dagiliene 2013) have found no significant impact of disclosing corporate social responsibility on firm value. Tjia and Setiawati’s (2012) study aimed to test the relationship between corporate social responsibility
disclosure and the value of banks in Indonesia using Tobin's Q ratio during the period of 2008-2010. The study found no effect of corporate social responsibility disclosure on bank value. Dagiliene's (2013) study examined the impact of corporate social responsibility reporting on firm value, applying it to a sample of 30 companies listed on the Lithuanian stock exchange as an emerging market. The study found no relationship between corporate social responsibility reporting and firm value, whether relying on accounting indicators (return on assets) or market indicators (stock market value).

On the other hand, some studies have found different results regarding the impact of disclosing corporate social responsibility on firm value, both among the dimensions of corporate social responsibility, companies with different ownership structures, countries, and the time horizon of the impact. Bowerman and Sharma's (2016) study aimed to test the impact of corporate social responsibility disclosure on stock prices using a sample of 91 companies in the UK and 85 companies in Japan. Using Ohlson's (1995) model, the study found a significant positive relationship between the level of corporate social responsibility disclosure and stock prices in UK companies, and that relationship was more significant in companies operating in environmentally sensitive industries. However, the study found no significant relationship between the level of corporate social responsibility disclosure and stock prices in Japanese companies.

On the other hand, Cahan et al. (2016) investigated the relationship between corporate social responsibility (CSR) disclosure and firm value, and how this relationship differs across countries using a sample of 676 companies from 21 countries in 2008. CSR disclosure was divided into expected and unexpected components, with the latter denoting additional information provided in CSR disclosure. The study found a positive relationship between unexpected CSR disclosure and firm value, as measured by Tobin's Q ratio. However, the study did not find a relationship between expected CSR disclosure and firm value. While countries with stronger institutional settings encourage greater unexpected CSR disclosure, evaluation of unexpected CSR disclosure was higher when institutions were weaker.

Further research by Fiori et al. (2010), Nguyen et al. (2015), and Verbeeten et al. (2016) examined the impact of different dimensions of CSR disclosure. Using a sample of 33 listed companies in Italy over a six-year period (2002-2007), Fiori et al. (2010) found a positive association between the quality of employee-related CSR disclosure and stock prices, while the quality of CSR disclosure related to the environment and society was negatively associated with stock prices.

Using a sample of Vietnamese listed companies during 2010-2013, Nguyen et al. (2015) found no significant relationship between the four dimensions of CSR disclosure (environmental, social, employee, and customer/supplier) and firm value, as measured by Tobin's Q at the end of the year. The study attributed this to a period of at least three months between the end of the fiscal year and the publication of financial reports, where stock prices and investment decisions at year-end may not be affected by CSR disclosure information. However, the study found a positive relationship between environmental CSR disclosure and firm value at the end of the following fiscal year, while employee-related CSR disclosure was negatively associated with firm value at the end of the following fiscal year. No significant relationship was found between social CSR disclosure, customer/supplier-related
CSR disclosure, and firm value at the end of the following fiscal year.

Using Ohlson's (1995) model, Verbeeten et al. (2016) found that German companies' CSR disclosure had evaluative relevance, with varying degrees across CSR dimensions. Social CSR disclosure was positively associated with firm value, while there was no significant relationship between environmental CSR disclosure and firm value.

Using a sample of 91 of the largest French companies over a period of ten years (2001-2010), Nekhili et al. (2017) tested the relationship between corporate social responsibility (CSR) reporting and firm value measured by Tobin's Q ratio, and whether this relationship differs between family and non-family firms. The study found that family firms disclose less information regarding CSR compared to non-family firms. The study also found a positive relationship between CSR disclosure and firm value in family firms, while a negative relationship was found in non-family firms.

Edmawati, (2018) states that CSR disclosure has proven to have a significantly positive effect on increasing company value. Likewise, research (Fajriana and Priantinah, 2016; Puspita and Kurnia, 2018; Sari and Priantinah, 2018) found that CSR positively affects company value. In addition, the ups and downs of the company's value are also influenced by the company's ownership structure. (Ardillah et al., 2022) states that the greater the managerial ownership in a company, the more management will improve its performance to benefit shareholders and their interests. In contrast, research (Effendi, 2020; Puspaningrum, 2017) found that CSR does not affect company value.

Fauziah et al., (2021) examine and analyze the effect of corporate social responsibility disclosure (CSRD) on firm value through investment efficiency and innovation. In agricultural, primary industry and chemicals, mining, property, real estate, and building construction sectors, listed on the IDX from 2015 to 2018 through investment efficiency and innovation. The results of the PLS analysis indicate that such disclosure positively and insignificantly affects firm value through investment efficiency. Better exposure and efficiency tend to increase substantial value, although the improvement is insignificant in the underinvestment scenario. Furthermore, disclosure positively and significantly enhances firm value through innovations with research and development activities.

WAHID and ARDINI (2021) examine the effect of environmental performance and good corporate governance (GCG) on the firm values mediated by corporate social responsibility (CSR). The sample in this study was obtained using a purposive sampling method and collected from 205 companies. The analytical method used is moderating regression analysis. The results of this study indicate, first, that corporate social responsibility affects the value of the company. The results of this study indicate that better corporate governance will increase the value of the firm and vice versa. Second, corporate social responsibility has a direct effect on the firm value, but the effect is still smaller when compared with the internal mechanisms of good corporate governance. This study also found that corporate social responsibility cannot mediate the effect of good corporate governance on firm value. Third, the company’s environmental performance influences the company’s value. Finally, the effect of environmental performance on company value will be better if mediated by corporate social responsibility. This result shows that environmental performance is a proof that the company’s
environmental and social concern, which is manifested in corporate social responsibility, will be responded positively by the market so that it will increase share prices (firm value).

Akal et al., (2023) aims to analyze corporate social responsibility disclosure to companies with financial performance as an intervening variable on the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange involving 13 companies. The type of data is secondary to the company's annual financial report. For data analysis using descriptive statistical techniques, classical assumption test, and multiple linear regression. The results of this study indicate that CSR disclosure has a negative and insignificant effect on firm value. At the same time, CSR disclosure negatively and significantly impacts financial performance. Based on the path analysis method, corporate social responsibility disclosure cannot affect company value and financial performance. We suggest that companies consistently implement CSR even though it does not affect company value because companies still have to manage the impacts that arise.

Saher et al. (2023) examine The Impact of Corporate Social Responsibility (CSR) and Green Investments on Sustainable Performance: The Mediating Role of Firm Financial Performance. 130 manufacturing companies that have been registered on the Pakistan Stock Exchange between 2019 & 2021 made up the sample for this study. The analysis reveals that investments in CSR (corporate social responsibility) and environmental preservation boost financial and long-term sustainability. On the other hand, financial performance doesn't change much when it comes to sustainable performance. Additionally, the impact of green investments on sustainable performance is mediated by financial performance. However, CSR investment cannot be mediated by financial success.

The researcher suggests that conflicting results in studies examining the relationship between CSR disclosure and firm value may be due to several reasons. Firstly, differences in the environment in which the study was conducted, as some studies were conducted in advanced financial markets, while others were conducted in emerging markets. Secondly, differences in the requirements for CSR disclosure depend on the environment in which the study was conducted. Thirdly, differences in the methodology used to measure the level of CSR disclosure. Finally, differences in the methodology used to measure firm value, as some studies relied on Tobin's Q ratio, while others relied on market-to-book value ratio, market value of stocks, or Ohlson's model (1995) to determine the extent of the relationship between CSR disclosure and stock prices, as well as its indirect effect on firm value by supporting the evaluative capacity of accounting information represented in profits and book value per share. However, many of these studies have found a positive relationship between CSR disclosure and firm value. Based on the above, the first hypothesis of the research in its alternative form can be derived as follows:

- **H1: The level of CSR disclosure has a positive effect on firm value.**

On the other hand, the level of disclosure of different dimensions of CSR may vary, and therefore, the effect of the level of disclosure of these dimensions on firm value may also differ. Consistent with Hackston and Milne (1996), Nguyen et al. (2015), Laskar and Maji (2016), and Verbeeten et al. (2016), the impact of disclosure of four dimensions of CSR on firm value will be tested, namely: environmental dimension, social dimension, employee-related dimension, and product-related dimension. To test this
The following four sub-hypotheses were derived:

- **H1a:** The level of environmental disclosure has a positive effect on firm value.
- **H1b:** The level of social disclosure has a positive effect on firm value.
- **H1c:** The level of employee-related disclosure has a positive effect on firm value.
- **H1d:** The level of product-related disclosure has a positive effect on firm value.

### 8-2 The Impact of Corporate Social Responsibility Disclosure Level on Stock Liquidity

Information plays a crucial role in the trading process, as it reduces information asymmetry among market participants and therefore reduces the degree of stock price dispersion, leading to increased stock liquidity (Haddad et al., 2009). Investor behavior in the stock market is often determined by the information they receive, with investors who receive less information likely to suffer losses compared to those who receive more information (Xu and Liu, 2017). Stock liquidity refers to the ability to execute large orders without incurring high transaction costs. Stock liquidity is defined as the ability to trade large quantities of stocks with minimal price impact, cost, and delay (Sidhu, 2016).

Several studies have found a positive relationship between disclosure level and stock liquidity by reducing information asymmetry among market participants (Leuz and Verrecchia, 2000; Espinosa et al., 2005; Haddad et al., 2009; Frino et al., 2013). On the other hand, the study by Lang et al. (2012) suggests that increased transparency is associated with lower transaction costs and, therefore, increased stock liquidity. Accordingly, it is expected that managers will disclose information on social responsibility to give a positive signal to investors, which may lead to increased market liquidity. Therefore, some studies have examined the relationship between social responsibility disclosure and stock liquidity, considering that this can reduce information asymmetry among market participants. Most of these studies have found a positive relationship between social responsibility disclosure and stock liquidity.

Gao et al. (2016) aimed to test the impact of social responsibility disclosure quality on stock liquidity, using a sample of Dutch firms during the period 2004-2012. The study found a significant and positive relationship between social responsibility disclosure quality and stock liquidity, using three measures of stock liquidity, including (1) the Amihud (2002) price impact measure, (2) the annual average natural logarithm of daily trading value, and (3) the turnover rate, which is defined as the annual average ratio of the number of shares traded daily to the number of shares issued.

On the other hand, Akrout and Ben Othman (2016) conducted a study using a sample of 163 companies from the Middle East and North Africa region during the period of 2010-2012. They found that increased levels of environmental disclosure led to a decrease in price dispersion, indicating an increase in stock liquidity. The study attributed this result to the fact that higher levels of environmental disclosure reduce information asymmetry.

Another study by Subramaniam et al. (2016) aimed to test the impact of corporate social responsibility (CSR) disclosure on stock liquidity using a sample of 194 listed companies in the Malaysian stock exchange in 2009. The study found a negative relationship between CSR disclosure...
and stock liquidity using the Amihud (2002) price impact measure. However, the study did not find a significant effect of CSR disclosure on stock liquidity using the effective bid-ask spread and turnover ratio as liquidity measures.

Xu and Liu (2017) focused on the role of CSR disclosure in reducing information asymmetry, which was expressed using two measures: stock price volatility and stock liquidity measured by the daily relative bid-ask spread. Using a sample of Chinese firms during the period 2009-2011, the study found a significant improvement in stock liquidity after CSR disclosure.

Heriansyah and Haryanti (2023) aims to determine how much influence of company size/asset, profitability, liquidity, and board of commissioner's effect on corporate social re-possibility disclosure of banks listed on Indonesia Stock Exchange in 2016-2019. The analysis was performed using independent variables that company size, profitability, liquidity, and board of commissioners, while the dependent variable used is corporate social responsibility disclosure. This type of research is quantitative by using secondary file. The population in this study are banks listed on Indonesia Stock Exchange in 2016-2019 with a population of 39 banks. The method of selecting samples using purposive sampling and obtained samples as 25 banks. The results of study explain that company size and profitability have no effect on corporate social responsibility disclosure, meanwhile, liquidity and board of commissioners positively and significantly effect on corporate social responsibility disclosure.

Yang et al., (2023) investigate the impact of CSR on stock price crash risk, and to examine the moderating effect of analyst coverage on the ‘CSR – crash risk’ nexus. Using a sample of 8037 firm-year observations from Chinese-listed firms between 2010 and 2018, we find that CSR is negatively associated with crash risk. Analyst coverage cannot catalyze the positive role of CSR in reducing financial opacity, and thereby weakens the negative association between CSR and stock price crash risk. This implies that analysts fail to sufficiently disseminate firm-specific information, which in turn aggravates the information gap between insiders and outside investors. Our results remain robust after considering potential endogeneity and alternative CSR measures. The current study advances the understanding of ‘CSR – crash risk’ relationship with the moderating effect of analyst coverage. We also provide important references for investors and policymakers to better understand abnormal stock price fluctuations.

The researcher concludes that many studies have supported the positive relationship between CSR disclosure and stock liquidity. This can be explained within the signaling theory, where CSR disclosure helps to reduce information asymmetry between the company and investors by providing positive signals to the market participants. As a result, stock prices are based on information, leading to a decrease in price dispersion and potentially creating value for the company in the short term through increased stock liquidity. Based on this, the second hypothesis of the alternative research can be derived as follows:

- **H2: CSR disclosure has a positive effect on stock liquidity.**

Given the multiple dimensions of CSR, and the potential differences in the impact of disclosure on each dimension on stock liquidity, the following four sub-hypotheses can be derived:
• H2a: Environmental disclosure has a positive effect on stock liquidity.
• H2b: Social disclosure has a positive effect on stock liquidity.
• H2c: Employee-related disclosure has a positive effect on stock liquidity.
• H2d: Product-related disclosure has a positive effect on stock liquidity.

8-3 The Impact of Stock Liquidity on Firm Value in Financial Accounting

Stock liquidity can help stimulate investment activity by experienced investors who have access to information, improving investment decisions in stocks (Arian et al. 2014; Nguyen et al. 2016). Stock liquidity may also support firm value by reducing the required rate of return, increasing investor confidence, and creating positive feedback. This is because stock liquidity encourages the entry of informed investors, leading to increased information content of stock prices for stakeholders, which in turn improves operational performance and reduces financial constraints (Fang et al., 2009). Therefore, many studies have examined the relationship between stock liquidity and firm value, with most finding a positive relationship.

Using a sample of companies from 46 countries during the period 1994-2007, Lang et al. (2012) found that higher stock liquidity is associated with lower cost of capital and higher firm value measured by Tobin's Q. The study also found that stock liquidity is an important means through which transparency affects firm value and cost of capital.

A study by Arabsalehi et al. (2014) aimed to test the relationship between stock liquidity and the performance of listed companies on the Tehran Stock Exchange during the period 2003-2012. The study found a significant positive effect of stock liquidity on two measures of firm performance: economic value added and Tobin's Q, but no significant relationship between liquidity and asset returns. Using a sample of 108 companies listed on the Tehran Stock Exchange during the period 2007-2012, Arian et al. (2014) supported the previous study's finding of a significant relationship between turnover, as a measure of stock liquidity and Tobin's Q. However, the study did not find a significant relationship between Tobin's Q and price dispersion as a measure of stock liquidity.

Studies by Fang et al. (2009), Wu and Liu (2011), and Nguyen et al. (2016) added another dimension to test the above relationship by analyzing Tobin's Q into three components: operating income-to-price ratio, leverage ratio, and operating income-to-assets ratio. Fang et al. (2009) found a positive relationship between stock liquidity and firm performance measured by market-to-book ratio, attributing this to the fact that higher stock liquidity leads to increased information content of stock prices. The study also found no significant relationship between stock liquidity and operating income-to-price ratio, while a negative relationship was found between stock liquidity and both leverage ratio and operating income-to-assets ratio.

Nguyen et al. (2016) supported the findings of Fang et al. (2009) regarding the relationship between stock liquidity and the three components of Tobin's Q, applying it to a sample of Australian companies during the period 2001-2010. The study also found a positive relationship between stock liquidity and Tobin's Q as a measure of firm value.

Based on a sample of Taiwanese companies, Wu and Liu (2011) found a significant relationship
between stock liquidity and firm value. The study also found that high stock liquidity is positively associated with the proportion of equity in the company's capital structure and higher levels of operating profitability. Additionally, the study found that the impact of liquidity on firm performance was stronger for companies that suffer from significant corporate governance problems. Conversely, the study found a negative impact of stock liquidity on firm value for companies with low levels of information transparency.

Based on the above, the third hypothesis for the research can be derived in its alternative form as follows:

• **H 3: Stock liquidity has a positive impact on firm value.**

8-4 The Impact of Corporate Social Responsibility Disclosure Level on Firm Value through Stock Liquidity in Financial Accounting.

Several studies have supported the existence of an indirect impact of corporate social responsibility (CSR) disclosure on firm value and financial performance through some mediating variables. Putu et al. (2014) found a significant and positive impact of CSR on firm value through profitability as a mediating variable, based on a sample of companies listed on the Indonesian stock exchange. Similarly, Lin et al. (2015) found that intellectual capital mediates the positive relationship between CSR and financial performance measured by return on assets, based on a sample of US companies. Nurdin and Hamzah (2016) also supported the positive and significant impact of CSR disclosure on stock returns through earnings persistence as a mediating variable, based on a sample of companies listed on the Indonesian stock exchange.

On the other hand, several studies (e.g., Lang et al. 2012; Akrout and Ben Othman 2016; Xu and Liu 2017) have found that CSR disclosure plays an important role in the stock market, as it reduces information asymmetry among market participants, leading to increased stock liquidity. Moreover, several studies (e.g., Fang et al. 2009; Lang et al. 2012; Arian et al. 2014) have shown that stock liquidity improves investment decisions, increases investor confidence, and reduces the required rate of return, which supports firm value. This suggests that CSR disclosure may have an indirect positive impact on firm value through the mediating variable of stock liquidity, in addition to its direct impact.

Based on the above, the fourth hypothesis for the research can be derived in its alternative form as follows:

• **H4: The level of CSR disclosure has a positive impact on firm value through stock liquidity as a mediating variable.**

To test the extent of the indirect impact of CSR disclosure on firm value through each dimension of CSR, the following four sub-hypotheses will be derived:

• **H4a: The level of environmental disclosure has a positive impact on firm value through stock liquidity as a mediating variable.**

• **H4b: The level of social disclosure has a positive impact on firm value through stock liquidity as a mediating variable.**

• **H4c: The level of employee-related disclosure has a positive impact on firm value through stock liquidity as a mediating variable.**
H4d: The level of product-related disclosure has a positive impact on firm value through stock liquidity as a mediating variable.

9- Empirical Study

The objective of empirical study is to test the research hypotheses related to the impact of corporate social responsibility disclosure level on both firm value and stock liquidity, as well as to test the impact of stock liquidity on firm value, and finally the indirect impact of CSR disclosure level on firm value through stock liquidity. This will be carried out by applying the study on a sample of companies listed on the Egyptian Stock Exchange, with the aim of identifying the direction of the relationship between the three variables in the Egyptian business environment. This will be achieved by addressing the following aspects: the community and sample of the empirical study, description and measurement of study variables, statistical methods used results of the structural model analysis, descriptive statistics of the study sample, and results of testing the research hypotheses as follows:

9-1 Sample

The study community comprises all contributing companies listed on the Egyptian Stock Exchange over a period of five years from 2017 to 2021. The sample of the study was selected according to the following criteria:

a) The company is listed on the Egyptian Stock Exchange over the study period.
b) The company is listed in the EGX 100 index, which measures the performance of the top 100 active companies, to avoid any biased stock prices during the study period.
c) The company does not belong to the banking and financial services sectors, due to their unique characteristics and their reflection on the financial reports of the companies.
d) The company's fiscal year ends on December 31st of each year.

As a result of applying the four criteria above, a sample of 52 companies was selected for the study. The necessary data for conducting the empirical study was obtained from the financial reports of the companies, as well as the stock prices of the companies from the Egyptian Exchange Company for Information Dissemination, and the information available on the companies' websites. Table (1) shows the number and percentage of companies represented in the study sample according to the sectors to which those companies belong.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
<th>Percentage of Companies by Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Resources Sector</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Chemicals Sector</td>
<td>3</td>
<td>6%</td>
</tr>
<tr>
<td>Construction and Building Materials Sector</td>
<td>8</td>
<td>15%</td>
</tr>
<tr>
<td>Food and Beverage Sector</td>
<td>8</td>
<td>15%</td>
</tr>
</tbody>
</table>
9-2 Description and Measurement of Study Variables

The study variables include three variables: (1) independent variable, level of disclosure of social responsibility and its various dimensions. (2) Mediating variable, stock liquidity. (3) Dependent variable, firm value, in addition to a set of control variables. The researcher will define these variables and their measurement models as follows:

9-2-1 Independent variable: Level of disclosure of social responsibility

The independent variable is the level of disclosure of social responsibility and its four dimensions: environmental dimension, social dimension, employee-related dimension, and product-related dimension. Disclosure of corporate social responsibility is the process of conveying the social and environmental impacts of the company's economic activities to specific interest groups within the company and the community. Such information includes information about the environment, community involvement, human resources, and products.

The researcher will derive a proposed index of disclosure of corporate social responsibility with its four dimensions, to measure the level of disclosure for companies listed on the Egyptian Stock Exchange, based on studies by Kiliç et al. (2015), Jizi et al. (2016), Nekhili et al. (2017), and Xu and Liu (2017), as follows:

<table>
<thead>
<tr>
<th>Environmental Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Environmental policies and objectives.</td>
</tr>
<tr>
<td>2. Environmental management systems.</td>
</tr>
<tr>
<td>3. Environmental awards (ISO).</td>
</tr>
<tr>
<td>4. Conservation of natural resources.</td>
</tr>
<tr>
<td>5. Recycling.</td>
</tr>
<tr>
<td>7. Environmental training.</td>
</tr>
</tbody>
</table>
9-2-2 Mediating Variable: Stock Liquidity

The mediating variable is stock liquidity, which is defined as the ability to trade large amounts of stocks with minimum impact on price, cost, and delay. As a result, large orders can be executed without incurring high transaction costs (Sidhu, 2016).

Studies have used various indicators to measure stock liquidity, including: (1) Amihud's price impact indicator, which is defined as the annual average of the absolute daily return-to-volume ratio (Gao et al., 2016; Subramaniam et al., 2016). (2) The annual average of the natural logarithm of daily trading value (Gao et al., 2016). (3) Turnover ratio, which is defined as the annual average of the ratio of daily traded shares to total outstanding shares (Arian et al., 2014; Gao et al., 2016; Subramaniam et al., 2016). (4) Amivest liquidity ratio, which refers to the average ratio of trading volume to absolute
returns (Goyenko et al., 2009; Stefanovski and Rasin, 2013). The researcher will use the annual average of the natural logarithm of daily trading value to measure stock liquidity (Gao et al., 2016).

9-2-3 Dependent Variable: Firm Value

Studies have adopted various methods to measure firm value, including: (1) Market value of equity (De Klerk et al., 2015; Bowerman and Sharma, 2016; Reverte, 2016; Verbeeten et al., 2016). (2) Price-to-book value ratio (Laskar and Maji, 2016). (3) Tobin's Q ratio (Fang et al., 2009; Lang et al., 2012; Tjia and Setiawati, 2012; Cahan et al., 2016; Nekhili et al., 2017). Consistent with previous studies, the researcher will use Tobin's Q ratio to measure firm value, as follows:

\[ \text{Tobin's Q} = \frac{\text{Market value of equity}^* + \text{Book value of liabilities}}{\text{Book value of total assets}}. \]

* Where: Market value of equity = Total outstanding shares \( \times \) Closing price of the stock at the end of the third month after the end of the fiscal year (De Klerk et al., 2015; Bowerman and Sharma, 2016; Verbeeten et al., 2016) (1). The higher Tobin's Q ratio is above one, the greater the indication of firm value increase.

9-2-4 Control Variables

Several studies (e.g., De Klerk et al. 2015; Gherghina et al. 2015; Akrout and Ben Othman 2016; Gao et al. 2016; Jizi et al. 2016; Subramaniam et al. 2016) have identified various firm-related factors that may affect both stock liquidity and firm value. Therefore, a set of control variables will be included, which are as follows:

- **Firm size**: measured by the natural logarithm of the total assets of the company.
- **Financial leverage**: measures the risk of the company and is measured by the ratio of debt to total assets.
- **Age of the company**: measured by the natural logarithm of the number of years from the date of the company's listing on the stock exchange until the beginning of the fiscal year.
- **Return on assets**: measured by the ratio of net profits to total assets.

9-3 Statistical Methods Used to Test Research Hypotheses

The researcher will use the Structural Equation Modeling (SEM) approach, which enables testing a series of relationships between the measured variables simultaneously and is particularly preferred for testing indirect effects (mediation). The model may include some dependent variables, as they depend on other independent variables that affect them. At the same time, these dependent variables are independent variables for other dependent variables that are influenced by them (Herda 2013). For example, stock liquidity is considered a dependent variable that is influenced by independent variables represented by the level of disclosure of social responsibility and its various dimensions. At the same time, stock liquidity is considered an independent variable that affects another variable, which is firm value.

To estimate the proposed model, the researcher used the AMOS software version 18, which is the most common software used for this purpose. To measure direct and indirect effects of the studied variables, the researcher used path analysis. The researcher used two models to test the research hypotheses. The first model tests the four main hypotheses that address the relationship between the
level of disclosure of social responsibility and both firm value and stock liquidity, as well as the relationship between stock liquidity and firm value. Finally, the indirect effect of the level of disclosure of social responsibility on firm value through stock liquidity. The second model tests the sub-hypotheses of the main research hypotheses, which address the relationship between the level of disclosure of the four dimensions of social responsibility and both firm value and stock liquidity, as well as the relationship between stock liquidity and firm value. Finally, the indirect effect of the level of disclosure of the four dimensions of social responsibility on firm value through stock liquidity as a mediator variable. Figure (1) illustrates the study model.

The study model includes the following variables: (a) the independent variable, which includes the level of disclosure of social responsibility and the level of disclosure of its four dimensions. (b) The mediating variable, stock liquidity. (c) The dependent variable, firm value. (d) Control variables, which include company size, financial leverage, company age, and return on assets.

The researcher will use the P.value to judge the statistical significance of the test at a 95% confidence level and a significance level of 5%. If the observed P.value is greater than or equal to 5%, the null hypothesis is not supported and the alternative hypothesis is accepted. If the P.value is less than 5%, the null hypothesis is supported, and the alternative hypothesis is not accepted.

The results of the study's structural model analysis using the annual average of natural logarithm of daily trading value as a measure of stock liquidity revealed high goodness of fit indicators. For the first model, the $\chi^2$ value was 1.048, and the GFI was 0.999. The AGFI was 0.967, and the CFI was 1.000, while the NFI was 0.997. The RMR was 0.003, and the RMSEA was 0.014. For the second model, the $\chi^2$ value was 0.712, and the GFI was 0.999. The AGFI was 0.969, and the CFI was 1.000, while the NFI was 0.999. The RMR was 0.002, and the RMSEA was 0.000.
Figure (1) Study Model

- Direct effect
- Indirect effect
9-4 Descriptive Statistics

The purpose of this section is to present the most important descriptive statistics for the variables of the empirical study. Table (2) shows the mean, standard deviation, highest and lowest values for the study variables over the study period. Additionally, Table (3) displays the mean values for the study variables for each year of the study. The descriptive statistics in Table (2) indicate a low level of disclosure of social responsibility, including its four dimensions. The mean values for disclosing social responsibility, environmental dimension, social dimension, employee dimension, and product dimension for the sample companies over the study period were 0.2079, 0.0443, 0.0650, 0.0827, and 0.0155, respectively. Moreover, there is a significant difference between the highest and lowest values for some of these variables. Therefore, the standard deviation for disclosing the environmental dimension, social dimension, and product dimension were 0.0716, 0.0933, and 0.0311, respectively. These values are higher than their respective means, indicating a high dispersion among the sample companies in this regard. As for stock liquidity, the descriptive statistics in Table (2) indicate that the average daily trading value measured using the natural logarithm of the daily trading value was 13.1509. The standard deviation for the stock liquidity measure was 1.6560, which is lower than the mean value. Regarding firm value, the descriptive statistics in Table (2) indicate that the mean value was 1.1210, with no significant dispersion among the sample companies. The standard deviation for firm value was 0.5925, which is lower than the mean value.

Table (2) - Descriptive Statistics for Study Variables over the Study Period

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Highest Value</th>
<th>Lowest Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Responsibility Disclosure Level</td>
<td>0.2079</td>
<td>0.2039</td>
<td>0.83</td>
<td>0.03</td>
</tr>
<tr>
<td>Environmental Disclosure Level</td>
<td>0.0443</td>
<td>0.0716</td>
<td>0.23</td>
<td>0.0000</td>
</tr>
<tr>
<td>Social Disclosure Level</td>
<td>0.0650</td>
<td>0.0933</td>
<td>0.30</td>
<td>0.0000</td>
</tr>
<tr>
<td>Employee Disclosure Level</td>
<td>0.0827</td>
<td>0.0637</td>
<td>0.30</td>
<td>0.03</td>
</tr>
<tr>
<td>Product Disclosure Level</td>
<td>0.0155</td>
<td>0.0311</td>
<td>0.10</td>
<td>0.0000</td>
</tr>
<tr>
<td>Stock Liquidity</td>
<td>13.1509</td>
<td>1.6560</td>
<td>17.426</td>
<td>9.2013</td>
</tr>
<tr>
<td>Firm Value</td>
<td>1.1210</td>
<td>0.5925</td>
<td>3.7139</td>
<td>0.2451</td>
</tr>
</tbody>
</table>

* Number of observations for the five years combined is 255.

This table shows the descriptive statistics for the study variables over the study period. The social responsibility disclosure level has a mean of 0.2079, indicating a low level of disclosure among the sample companies, with a wide range of values ranging from 0.03 to 0.83. The mean environmental disclosure level is 0.0443, with a higher standard deviation of 0.0716, indicating a wide dispersion among the sample companies. The mean social disclosure level is 0.0650, with a higher standard deviation of 0.0933. The mean employee disclosure level is 0.0827, with a standard deviation of 0.0637. The mean product disclosure level is 0.0155, with a standard deviation of 0.0311. The stock liquidity
measure has a mean of 13.1509, with a standard deviation of 1.6560, and the firm value has a mean of 1.1210, with a standard deviation of 0.5925. The highest value for the stock liquidity measure is 17.426, while the lowest value is 9.2013. The highest value for the firm is 3.7139, while the lowest value is 0.2451.

Regarding the individual years of the study, the statistics in Table (3) indicate an increase in the mean for social responsibility disclosure level, social disclosure level, and employee disclosure level in 2019 and 2021 for the entire study period. As for product disclosure level, it increased in 2017, 2019, and 2021 compared to the entire study period. However, the mean for environmental disclosure level increased in 2019 and 2020 compared to the entire study period.

Regarding stock liquidity, the descriptive statistics in Table (3) indicate an increase in the stock liquidity measure in 2017, 2018, and 2019 compared to the entire study period. As for firm value, the statistics in Table (3) indicate an increase in the mean for firm value in 2018 and 2019 compared to the mean for the entire study period.

Overall, the study findings suggest that companies have increased their level of disclosure in various dimensions, particularly in social responsibility, social, and employee dimensions during specific years of the study. Additionally, there were increases in stock liquidity and firm value during specific years of the study. These findings have implications for financial accounting research and practice, as they suggest that companies are becoming more transparent in their disclosures, which may impact on their financial performance and market value.

<table>
<thead>
<tr>
<th>Variable</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Responsibility Disclosure Level</td>
<td>0.2018</td>
<td>0.2048</td>
<td>0.2148</td>
<td>0.2059</td>
<td>0.2122</td>
</tr>
<tr>
<td>Environmental Disclosure Level</td>
<td>0.0437</td>
<td>0.0427</td>
<td>0.0465</td>
<td>0.0451</td>
<td>0.0433</td>
</tr>
<tr>
<td>Social Disclosure Level</td>
<td>0.0596</td>
<td>0.0642</td>
<td>0.0688</td>
<td>0.0641</td>
<td>0.0682</td>
</tr>
<tr>
<td>Employee Disclosure Level</td>
<td>0.0824</td>
<td>0.0819</td>
<td>0.0831</td>
<td>0.0822</td>
<td>0.0843</td>
</tr>
<tr>
<td>Product Disclosure Level</td>
<td>0.0157</td>
<td>0.0154</td>
<td>0.0160</td>
<td>0.0143</td>
<td>0.0163</td>
</tr>
<tr>
<td>Firm Value</td>
<td>0.981</td>
<td>1.3133</td>
<td>1.1959</td>
<td>1.0068</td>
<td>1.1019</td>
</tr>
</tbody>
</table>

* The number of observations is 51 for the years 2017 and 2020, 52 for the years 2018 and 2019, and 49 for the year 2021.

The decrease in the number of observations from 52 in 2017 is due to one of the sample companies being listed on the stock exchange at the beginning of 2017, and therefore it was not possible to calculate the age of the company variable. The decrease in the number of observations from
52 in 2020 and 2021 is due to the delayed publication of financial statements for these companies, resulting in the suspension of trading on these companies' stocks.

This table shows the descriptive statistics for the study variables for each individual year. The mean values for social responsibility disclosure level, environmental disclosure level, social disclosure level, and employee disclosure level fluctuated slightly from year to year, with an overall increasing trend. The mean value for product disclosure level also varied slightly from year to year, with a peak in 2021. The stock liquidity measure and firm value fluctuated from year to year, with the highest values for both measures observed in 2018.

The decrease in the number of observations for certain years is attributed to specific factors, such as the delayed publication of financial statements or the listing date of one of the sample companies. These factors should be considered when interpreting the results of the study.

9.5 Research Hypotheses Testing Results

This section of the study aims to test the research hypotheses using path analysis. The researcher used two models to test the study hypotheses. The first model tests the main hypotheses, while the second model tests the sub-hypotheses of the main research hypotheses. Table 4 shows the statistical analysis results for the direct effect of social responsibility disclosure level on both stock liquidity and firm value. Table 5 shows the statistical analysis results for the direct effect of the four dimensions of social responsibility disclosure on both stock liquidity and firm value. Table 6 shows the direct, indirect, and total effects of social responsibility disclosure level on firm value. Table 7 presents the direct, indirect, and total effects of the four dimensions of social responsibility disclosure on firm value.

9.5.1 Results of Testing the First Hypothesis

The first main hypothesis aims to test the impact of social responsibility disclosure level on firm value. The statistical analysis results in Table 4 indicate a significant and positive effect of social responsibility disclosure level on firm value. The path coefficient was 0.926, the P-value was 0.000, and the C.R. value was 5.125. Therefore, the first main hypothesis is accepted.

This finding is consistent with the results of studies conducted by Karim et al. (2013), De Klerk et al. (2015), Cahan et al. (2016), Jizi et al. (2016), Laskar and Maji (2016), Reverte (2016), and Gutsche et al. (2017), which also found a positive impact of social responsibility disclosure on firm value. However, this finding differs from the results of studies conducted by Tjia and Setiawati (2012) and Dagiliene (2013), which found no significant effect of social responsibility disclosure on firm value.

These results highlight the importance of social responsibility disclosure in enhancing firm value and should be considered by companies when developing their social responsibility strategies.

Table 4: Direct Effect of Social Responsibility Disclosure Level on Stock Liquidity and Firm
Table 5: Direct Effect of Social Responsibility Disclosure Level on Stock Liquidity and Firm Value by Dimension

<table>
<thead>
<tr>
<th>Study Model 1</th>
<th>Path</th>
<th>Path Coefficients</th>
<th>C.R.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR ---&gt; LIQUIDITY</td>
<td>0.926</td>
<td>5.125</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LIQUIDITY ---&gt; TOBIN's Q</td>
<td>1.026</td>
<td>2.105</td>
<td>0.035</td>
<td></td>
</tr>
<tr>
<td>SIZE ---&gt; TOBIN's Q</td>
<td>0.086</td>
<td>3.818</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LEV ---&gt; TOBIN's Q</td>
<td>-0.216</td>
<td>-3.796</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>AGE ---&gt; TOBIN's Q</td>
<td>0.032</td>
<td>0.195</td>
<td>0.845</td>
<td></td>
</tr>
<tr>
<td>ROA ---&gt; TOBIN's Q</td>
<td>-0.171</td>
<td>-3.240</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>SIZE ---&gt; LIQUIDITY</td>
<td>2.426</td>
<td>6.208</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LEV ---&gt; LIQUIDITY</td>
<td>1.021</td>
<td>7.010</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>AGE ---&gt; LIQUIDITY</td>
<td>-0.217</td>
<td>-0.481</td>
<td>0.631</td>
<td></td>
</tr>
<tr>
<td>CSR ---&gt; LIQUIDITY</td>
<td>-0.708</td>
<td>-5.061</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Model 2</th>
<th>Path</th>
<th>Path Coefficients</th>
<th>C.R.</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENTAL ---&gt; TOBIN's Q</td>
<td>1.923</td>
<td>3.224</td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td>SOCIAL ---&gt; TOBIN's Q</td>
<td>0.945</td>
<td>1.965</td>
<td>0.050</td>
<td></td>
</tr>
<tr>
<td>EMPLOYEE ---&gt; TOBIN's Q</td>
<td>0.710</td>
<td>0.951</td>
<td>0.342</td>
<td></td>
</tr>
<tr>
<td>PRODUCT ---&gt; TOBIN's Q</td>
<td>-1.592</td>
<td>-1.369</td>
<td>0.171</td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL ---&gt; LIQUIDITY</td>
<td>4.537</td>
<td>2.961</td>
<td>0.003</td>
<td></td>
</tr>
<tr>
<td>SOCIAL ---&gt; LIQUIDITY</td>
<td>6.552</td>
<td>5.447</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>EMPLOYEE ---&gt; LIQUIDITY</td>
<td>-7.498</td>
<td>-4.006</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PRODUCT ---&gt; LIQUIDITY</td>
<td>-2.63</td>
<td>-8.63</td>
<td>0.388</td>
<td></td>
</tr>
<tr>
<td>LIQUIDITY ---&gt; TOBIN's Q</td>
<td>0.075</td>
<td>3.141</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>SIZE ---&gt; TOBIN's Q</td>
<td>-0.241</td>
<td>-4.041</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LEV ---&gt; TOBIN's Q</td>
<td>0.111</td>
<td>0.657</td>
<td>0.511</td>
<td></td>
</tr>
<tr>
<td>AGE ---&gt; TOBIN's Q</td>
<td>-0.165</td>
<td>-3.147</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>ROA ---&gt; TOBIN's Q</td>
<td>2.49</td>
<td>6.341</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>SIZE ---&gt; LIQUIDITY</td>
<td>0.651</td>
<td>4.317</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>LEV ---&gt; LIQUIDITY</td>
<td>0.619</td>
<td>1.409</td>
<td>0.159</td>
<td></td>
</tr>
<tr>
<td>AGE ---&gt; LIQUIDITY</td>
<td>-0.608</td>
<td>-4.632</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

*Where:

- Study Model 2 tests the direct and indirect effect of the four dimensions of social responsibility disclosure level on firm value.
- ENVIRONMENTAL: disclosure level for environmental responsibility, SOCIAL: disclosure level for social responsibility, EMPLOYEE: disclosure level for employee responsibility, PRODUCT: disclosure level for product responsibility. Other variables are defined as previously defined in Table 4.

*Where:
- The total number of observations for the five years is 255.
- Study Model 1 tests the direct and indirect effects of social responsibility disclosure level on firm value.
- Path coefficients correspond to regression coefficients, while the C.R. value corresponds to the t-test value in regression analysis.

Regarding the impact of the level of disclosure of the four dimensions of corporate social responsibility on firm value, the statistical analysis results in Table 5 show a significant positive effect of the environmental responsibility disclosure level on firm value. The path coefficient value was 1.923, the P-value was 0.001, and the C.R. value was 3.224. Therefore, the first sub-hypothesis is accepted. This is consistent with the findings of Nguyen et al. (2015) who found a significant positive effect of environmental responsibility disclosure level on firm value. However, it differs from the findings of Fiori et al. (2010) and Verbeeten et al. (2016).

Similarly, the statistical analysis results indicate a significant positive effect of social responsibility disclosure level on firm value. The path coefficient value was 0.945, the P-value was 0.050, and the C.R. value was 1.965. Therefore, the second sub-hypothesis is accepted. This is consistent with the findings of Verbeeten et al. (2016) but differs from the findings of Fiori et al. (2010) and Nguyen et al. (2015).

On the other hand, the statistical analysis results in Table 5 show a positive but insignificant effect of employee responsibility disclosure level on firm value. The path coefficient value was 0.710, the P-value was 0.342, and the C.R. value was 0.951. Therefore, the third sub-hypothesis is rejected. Additionally, the analysis results indicate a negative but insignificant effect of product responsibility disclosure level on firm value. The path coefficient value was -1.592, the P-value was 0.171, and the C.R. value was -1.369. Therefore, the fourth sub-hypothesis is rejected. These findings are consistent with the findings of Nguyen et al. (2015) but differ from the findings of Fiori et al. (2010).

9.5.2 Results of the Second Hypothesis Test

The second main hypothesis aims to test the effect of the level of disclosure of social
responsibility on stock liquidity. The results of the statistical analysis in Table (4) indicate a significant positive effect of the level of disclosure of social responsibility on stock liquidity. The path coefficient value was 1.026, with a P.value of 0.035 and a C.R. value of 2.105. Therefore, the second main hypothesis is accepted.

This is consistent with the interpretation of the relationship between the level of disclosure of social responsibility and stock liquidity from the perspective of signaling theory, where disclosure of social responsibility helps to reduce information asymmetry between the company and investors by providing positive signals to market participants. As a result, stock prices are based on information, which leads to a decrease in price dispersion and an increase in stock liquidity. This is supported by studies by Akrout and Ben Othman (2016), Gao et al. (2016), and Xu and Liu (2017), which found a positive effect of disclosure of social responsibility on stock liquidity. However, this result differs from the study by Subramaniam et al. (2016), which found a negative effect of disclosure of social responsibility on stock liquidity using the Amihud price impact measure, while the study found no significant effect of disclosure of social responsibility on stock liquidity using effective spread and turnover rate as liquidity measures.

As for the effect of the level of disclosure of the components of corporate social responsibility on stock liquidity, the results of the statistical analysis in Table (5) indicate a significant positive effect of the disclosure of the environmental dimension on stock liquidity. The path coefficient value was 4.537, with a P.value of 0.003 and a C.R. value of 2.961. Similarly, the results of the statistical analysis indicate a significant positive effect of the disclosure of the social dimension on stock liquidity, with a path coefficient value of 6.552, a P.value of 0.000, and a C.R. value of 5.447. Therefore, the first and second sub-hypotheses are accepted.

In contrast, the results of the statistical analysis in Table (5) indicate a significant negative effect of the disclosure of the employee dimension on stock liquidity, with a path coefficient value of -7.498, a P.value of 0.000, and a C.R. value of -4.006. Therefore, the third sub-hypothesis is not accepted because the effect was negative rather than positive. As for the effect of the disclosure of the product dimension on stock liquidity, the results of the statistical analysis in Table (5) indicate a negative and nonsignificant effect, with a path coefficient value of -2.630, a P.value of 0.388, and a C.R. value of -0.863. Therefore, the fourth sub-hypothesis is not accepted.

The above results indicate a variation in the importance of social responsibility information for market participants. Environmental and social information may be more important for investors than information related to the other two dimensions of corporate social responsibility (employee and product information), which explains the significant positive effect of disclosure of environmental and social information on stock liquidity. In contrast, investors may have less interest in information related to employees or products.

9.5.3 Results of Hypothesis Test 3

This hypothesis aims to test the effect of stock liquidity on firm value. The statistical analysis results in Table 4 indicate a significant positive effect of stock liquidity on firm value. The path coefficient value is 0.086, the P.value is 0.000, and the C.R. value is 3.818. Similarly, the statistical
analysis results in Table 5 indicate the same positive effect, with a path coefficient value of 0.075, a P.value of 0.002, and a C.R. value of 3.141. Therefore, Hypothesis Test 3 is accepted. This is consistent with previous studies by Lang et al. (2012), Arabsalehi et al. (2014), and Arian et al. (2014) that support the positive role of stock liquidity in improving investment decisions, increasing investor confidence, increasing the informational content of stock prices, reducing the required rate of return, and ultimately improving firm value.

9.5.4 Results of Hypothesis Test 4

The main hypothesis of this study is to test the indirect effect of the level of social responsibility disclosure on firm value. The statistical analysis results in Table 6 indicate a significant positive indirect effect of the level of social responsibility disclosure on firm value through stock liquidity as a mediator variable. The path coefficient value is 0.088 and the P.value is 0.005. Therefore, the main hypothesis of Hypothesis Test 4 is accepted.

The statistical analysis results also show that the indirect effect represents 8.68% of the total effect of the level of social responsibility disclosure on firm value, while the direct effect represents 91.32%. This indicates the presence of both direct and indirect significant effects of social responsibility disclosure on firm value. Therefore, the indirect effect (mediator) is a partial effect, representing only part of the effect of the independent variable on the dependent variable, while part of this effect is attributed to the direct effect of the independent variable on the dependent variable.

Table 6: Direct, Indirect, and Total Effects of the Level of Social Responsibility Disclosure on Firm Value

<table>
<thead>
<tr>
<th>Path</th>
<th>Type of Effect</th>
<th>Effect</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR --- &gt; TOBIN'S Q</td>
<td>Direct</td>
<td>0.926</td>
<td>0.000</td>
</tr>
<tr>
<td>CSR --- &gt; LIQUIDITY</td>
<td>Direct</td>
<td>1.026</td>
<td>0.035</td>
</tr>
<tr>
<td>LIQUIDITY --- &gt; TOBIN'S Q</td>
<td>Direct</td>
<td>0.086</td>
<td>0.000</td>
</tr>
<tr>
<td>CSR --- &gt; TOBIN'S Q</td>
<td>Indirect</td>
<td>0.088</td>
<td>0.005</td>
</tr>
<tr>
<td>Propportion</td>
<td></td>
<td>8.68%</td>
<td></td>
</tr>
<tr>
<td>CSR --- &gt; TOBIN'S Q</td>
<td>Total</td>
<td>8.68%</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Regarding the four dimensions of Corporate Social Responsibility (CSR) disclosure, the statistical analysis results in Table 7 indicate the presence of a significant positive indirect effect of the level of environmental disclosure on firm value through stock liquidity as a mediating variable. The path coefficient was 0.341, and the p-value was 0.005. Thus, the first sub-hypothesis of the fourth main hypothesis is accepted.

The statistical analysis results show that the indirect effect represents 15.06% of the total effect of the level of environmental disclosure on firm value, while the direct effect represents 84.94%. This indicates the presence of a significant direct and indirect effect of the level of environmental disclosure on firm value. Thus, the indirect (mediating) effect is a partial mediator, representing only a part of the independent variable's effect on the dependent variable, while part of this effect is attributed to the
direct effect of the independent variable on the dependent variable.

As for the social dimension disclosure, the statistical analysis results in Table 7 indicate the presence of a significant positive indirect effect of the level of social disclosure on firm value through stock liquidity as a mediating variable. The path coefficient was 0.492, and the p-value was 0.003. Thus, the second sub-hypothesis of the fourth main hypothesis is accepted.

The statistical analysis results show that the indirect effect represents 34.38% of the total effect of the level of social disclosure on firm value, while the direct effect represents 65.62%. This indicates the presence of a significant direct and indirect effect of the level of social disclosure on firm value. Thus, the indirect (mediating) effect is a partial mediator, representing only a part of the independent variable's effect on the dependent variable, while part of this effect is attributed to the direct effect of the independent variable on the dependent variable.

Regarding the employee dimension disclosure, the statistical analysis results in Table 7 indicate the presence of a significant negative indirect effect of the level of employee disclosure on firm value through stock liquidity as a mediating variable. The path coefficient was -0.563, and the p-value was 0.002. Thus, the third sub-hypothesis of the fourth main hypothesis is rejected because the effect was negative and not positive.

The statistical analysis results show inconsistency between the negative and significant indirect effect and the positive and insignificant direct effect. Thus, the indirect (mediating) effect is an inconsistent mediator due to the difference in the direction of the direct (positive) and indirect (negative) effects.

Finally, regarding the product dimension disclosure, the statistical analysis results in Table 7 indicate the presence of a significant negative and insignificant indirect effect of the level of product disclosure on firm value through stock liquidity as a mediating variable. The path coefficient was -0.198, and the p-value was 0.223. Thus, the fourth sub-hypothesis of the fourth main hypothesis is rejected because there was no significant direct or indirect effect of the level of product disclosure on firm value.

**Table 7: Direct, Indirect, and Total Effects of the Four Dimensions of Corporate Social Responsibility Disclosure on Firm Value**

<table>
<thead>
<tr>
<th>Path</th>
<th>Type of Effect</th>
<th>Effect</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENTAL ---&gt; TOBIN's Q</td>
<td>Direct</td>
<td>1.923</td>
<td>0.001</td>
</tr>
<tr>
<td>Proportion</td>
<td></td>
<td>84.94%</td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL ---&gt; LIQUIDITY</td>
<td>Direct</td>
<td>4.537</td>
<td>0.003</td>
</tr>
<tr>
<td>LIQUIDITY ---&gt; TOBIN's Q</td>
<td>Direct</td>
<td>0.075</td>
<td>0.002</td>
</tr>
<tr>
<td>ENVIRONMENTAL ---&gt; TOBIN's Q</td>
<td>Indirect</td>
<td>0.341</td>
<td>0.005</td>
</tr>
<tr>
<td>Proportion</td>
<td></td>
<td>15.06%</td>
<td></td>
</tr>
<tr>
<td>ENVIRONMENTAL ---&gt; TOBIN's Q</td>
<td>Total</td>
<td>2.264</td>
<td>0.001</td>
</tr>
<tr>
<td>SOCIAL ---&gt; TOBIN's Q</td>
<td>Direct</td>
<td>0.945</td>
<td>0.050</td>
</tr>
<tr>
<td>Proportion</td>
<td></td>
<td>65.62%</td>
<td></td>
</tr>
</tbody>
</table>
10- Summary and Recommendations:

The importance of corporate social responsibility and disclosure has increased in recent years due to the growing awareness of the role of companies in society. Companies are no longer responsible solely for generating profits but are now required to also consider environmental and social aspects to ensure sustainable growth. This is supported by numerous studies that show an increase in the number of social responsibility reports published in recent years, as well as the number of such reports on corporate websites.

This study aims to examine the direct and indirect effects of the level of disclosure of social responsibility on the value of the company, using stock liquidity as a mediating variable. The study uses a sample of companies listed on the Egyptian Stock Exchange and included in the EGX100 index over a five-year period from 2017 to 2021. Path analysis was used, where the level of social responsibility disclosure in its four dimensions (environmental, social, employee-related, and product-related) was the independent variable in the model, while the value of the company was the dependent variable, and stock liquidity was the mediating variable.

The researcher concluded that there is no consensus on a single definition of corporate social responsibility that is widely accepted, due to the diversity and difference in the basic concepts and variables of social responsibility that have not been definitively identified to allow for the identification of the specific dimensions of that responsibility. However, most definitions describe corporate social responsibility as a concept through which the company integrates social and environmental issues into its operations and interacts with stakeholders on a voluntary basis. The researcher also found that the disclosure of social responsibility by companies is supported by a number of theories that explain it, such as legitimacy theory, stakeholder theory, and signaling theory. These theories are considered alternative ways to understand and study regulatory disclosure decisions of different types of information and are not competing theories. There is no single theory that can be applied to interpret
the disclosure of corporate social responsibility in all situations or communities.

Based on the results of the study, the researcher recommends that companies should give more attention to social and environmental issues and consider them as key factors in achieving sustainable growth. Companies should also disclose their social responsibility efforts and achievements to their stakeholders, including investors, employees, customers, and communities, through various channels, including annual reports and corporate websites. The researcher also recommends conducting further research to examine the impact of social responsibility disclosure on other financial and non-financial performance measures, as well as the impact of social responsibility on the behavior and attitudes of stakeholders toward the company.

The results of the study showed a positive and significant impact of disclosing corporate social responsibility (CSR) on both firm value and stock liquidity. Additionally, there was a positive and significant impact of disclosing both the environmental and social dimensions of CSR on firm value, while there was no significant impact of disclosing information related to employees or products on firm value.

Regarding the impact of CSR disclosure on stock liquidity, the results showed a positive and significant impact of disclosing environmental and social information, while there was a negative and significant impact of disclosing employee information on stock liquidity. There was no significant impact of disclosing product information on stock liquidity.

Furthermore, the study found a partial positive and significant indirect effect of CSR disclosure on firm value through stock liquidity as a mediator variable. Additionally, the environmental and social dimensions of CSR disclosure had a partial positive and significant indirect effect on firm value through stock liquidity, while disclosing employee information had a partial negative and significant indirect effect on firm value through stock liquidity. Finally, there was no significant indirect effect of disclosing product information on firm value through stock liquidity.

Based on the theoretical and practical findings of the study, the following recommendations can be made:

- Companies should be encouraged to engage in CSR activities, in addition to setting up mechanisms to encourage companies to disclose their level of social responsibility.
- The rules for listing and delisting securities on the Egyptian Stock Exchange should be developed to include requirements related to CSR disclosure. For example, companies are currently required to disclose only the average number of employees and their average income in their board of directors' report, without addressing any other requirements related to their employees.
- This study should be replicated using other measures related to CSR disclosure, stock liquidity, and firm value.

Regarding proposed research areas, it is suggested that future research should investigate the following:

- The impact of CSR disclosure on other variables, such as financing costs and financial reporting quality.
- The relationship between corporate governance, CSR disclosure, firm value, and financial performance.
- The testing of indirect effects of other mediator variables, such as corporate reputation, on the relationship between CSR disclosure and firm value.
- The impact of ownership structure on the level of CSR disclosure.
- The impact of CSR disclosure on investment decisions and credit granting.

References:


Fiori, G., Donato, F., & Izzo, M. F. (2010). Corporate social responsibility and stock prices: An analysis on Italian listed companies. Working Paper. 1Luiss University, Italy and, 2Luspio University, Italy.


O'Donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability


العلاقة بين الإفصاح عن المسؤولية الاجتماعية للشركات وقيمة الشركة: الدور الوسيط لسيولة الأسهم - أداة من مصر

السيد محمود السيد الحناوي
كلية الأعمال، جامعة الملك خالد، أبها، المملكة العربية السعودية
كلية تجارة، جامعة دمنهور، دمنهور، مصر

الملخص:
هدف هذا البحث إلى اختبار التأثير المباشر وغير المباشر – من خلال سيولة الأسهم – لمستوى الإفصاح عن المسؤولية الاجتماعية للشركات بأبعادها المختلفة (البعد البيئي، والبعد الاجتماعي، والبعد المتعلق بالموظفين، والبعد المتعلق بالمنتجات) على قيمة الشركة، وذلك باستخدام عينة من 52 شركة من الشركات المقيدة ببورصة الأوراق المالية المصرية والمدرجة بالمؤشر EGX100 عن فترة خمس سنوات من 2012 إلى 2016. وباستخدام تحليل المسار، أوضحت النتائج ما يلي: (1) وجود تأثير إيجابي ومعنوي لمستوى الإفصاح عن المسؤولية الاجتماعية للشركات وبعديه البيئي والاجتماعي على كل من قيمة الشركة وسيولة الأسهم. (2) وجود تأثير إيجابي ومعنوي لسوق الصرف لأسهم الشركة. (3) وجود تأثير غير مباشر إيجابي ومعنوي لمستوى الإفصاح عن المسؤولية الاجتماعية وبعديه البيئي والاجتماعي على قيمة الشركة. (4) عدم وجود تأثير معنوي لمستوى الإفصاح عن بعدي المسؤولية الاجتماعية المتعلقين بالموظفين والمنتجات على قيمة الشركة. (5) وجود تأثير غير مباشر سلبي ومعنوي لمستوى الإفصاح عن البعد المتعلق بالمروجين على قيمة الشركة.

الكلمات الافتتاحية: الإفصاح عن المسؤولية الاجتماعية للشركات، وسيولة الأسهم، قيمة الشركة.