

Impact of Firm Value, Financial Decisions and Financial Performance on Environmental, Social and Governance Practices Voluntary Disclosure: Evidence from Egypt

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Abstract:

The concept of ESG, which stands for Environmental, Social, and Governance, has gained significant traction in the business world in recent years. Investors, stakeholders, and customers alike are increasingly interested in knowing how companies operate beyond their financial performance. ESG involves a company's commitment to sustainability, their impact on the environment, their social responsibility, and their corporate governance practices. Firms, therefore, have a need to disclose information related to their ESG practices as a way to demonstrate their commitment to sustainability and build trust with stakeholders. However, the extent to which firms disclose their ESG practices varies significantly. While some companies provide extensive disclosures, others provide only the minimum required by law. The trend of voluntary disclosure of ESG issues has gained momentum among firms as it has been observed that it helps improve stakeholder trust, reduce risks, and promote long-term sustainability. The main aim of this research is to test

the impact of five major independent variables, which are firm value, financial decisions (financial leverage and dividend policy), and financial performance (profitability and liquidity), on the extent of voluntary environmental, social governance voluntary disclosure as a dependent variable, while using market performance (Tobin's Q) and firm size as control variables for a sample consisting of ٣٦ Egyptian listed firms for the period of ٧ years (٢٠١٥–٢٠٢١). The research hypotheses are examined using both content analysis and OLS regression analysis. Moreover, an overall voluntary disclosure index was constructed to measure the level of disclosure in the Egyptian firms. The results indicate that the initiatives of voluntary disclosure have been under global scrutiny since the last two decades, owing to various stakeholders' persistent needs to be more informed about their corporations, as mandatory corporate disclosure nowadays is insufficient. The statistical results show a significant positive correlation between dividend policy, profitability, and liquidity and ESG voluntary disclosure, an indication that financial performance and ESG voluntary disclosure have become increasingly intertwined as investors demand greater transparency and accountability from companies. ESG factors are no longer considered optional add-ons, but rather crucial components of a company's long-term financial success. By voluntarily disclosing their ESG practices, companies can attract socially responsible investors and demonstrate their commitment

to sustainable growth. The availability of standardized ESG reporting frameworks also makes it easier for stakeholders to evaluate and compare the performance of different companies. Ultimately, robust ESG disclosure can enhance a company's reputation, mitigate risks, and improve long-term financial performance. In addition, results found that there is a significant positive relationship between ESG voluntary disclosure and firm value. Companies that provide greater disclosure about their ESG practices are perceived as more responsible and are more likely to attract socially responsible investors. This ultimately leads to an increase in firm value. Additionally, ESG disclosure can mitigate the negative impact of environmental and social risks and improve a company's reputation, customer loyalty, and employee satisfaction. The findings show a strong correlation between the extent of ESG disclosure and business value, showing that stakeholder trust, transparency, and accountability all increase firm value.

Keywords: Firm Value; Financial Decisions; Financial Performance; Environmental, Social, Governance; Voluntary Disclosure; Egypt.

الملخص:

تعمل البورصة جاهدة على تغيير النظرة الحالية لأعمال المسؤولية المجتمعية، من كونها مجرد أعمال خيرية لتصبح أنشطة تسهم في الإدارة الكفء للمخاطر المرتبطة بأعمال وركائز الاستدامة الثلاثة وهي البعد البيئي والبعد المجتمعي وبعد الحوكمة Environmental, Social and Governance (ESG) وفي إطار تحقيق هذا

النظرة، يتمثل الهدف الرئيسى لهذا البحث في وضع إطار نظري يتعلق بأختبار مدي تأثير كلاً من قيمة الشركة والقرارات المالية (الرافعة المالية وسياسة توزيع الأرباح)، والأداء المالي (الربحية والسيولة) علي الإفصاح الطوعي عن الحوكمة والمسؤولية الاجتماعية لعينة مكونة من ٣٦ شركة من الشركات المدرجة في البورصة المصرية لفترة ٧ سنوات (٢٠١٥-٢٠٢١). وقد تم استخدام تحليل المحتوى وتحليل الانحدار بالإضافة إلي حساب مؤشر للإفصاح الطوعي باستخدام عناصر من ESG لقياس مستوى الإفصاح الطوعي في الشركات المصرية ، وتكمن أهمية البحث في الاحتياجات المستمرة من قبل العديد من أصحاب المصلحة لزيادة الإفصاح الطوعي وذلك نظرًا لأن الإفصاح الإلزامي للشركات أصبح غير كافٍ لاتخاذ القرارات المالية والغير مالية. اظهرت النتائج وجود ارتباط معنوي بين كلا من الهيكل المالي للشركة وسياسة توزيع الأرباح على الإفصاح الطوعي عن عناصر ESG وان هناك ايضاً ارتباط معنوي بين الأداء المالي للشركة وبين زيادة الإفصاح الطوعي ESG .

ووجدت الباحثة أن هناك علاقة معنوية بين الإفصاح عن عناصر ESG وقيمة الشركة، وكذلك علاقة معنوية بين الإفصاح عن عناصر ESG وعناصر الأداء المالية متمثلاً في كلاً من ربحية وسيولة الشركة، وهذا ما يؤيد ضرورة تضمين أبعاد المسؤولية الاجتماعية والبيئية والحوكمة ضمن مسؤوليات إدارة الشركات المصرية لكي تصبح بيانات الزامية يجب أن تقرر وتفصح عنها الشركات مما يحسن من قيمة الشركة وزيادة كفاءتها وتحسن أدائها المالي، وبالتالي تنشيط سوق رأس المال وتحقيق التنمية الاقتصادية والاجتماعية على المستوى القومى.

لذلك توصى الدراسة بضرورة العمل علي زيادة الوعي بأهمية تحسين مستوى الإفصاح والشفافية الطوعي عن أعمال الاستدامة (البيئية، والاجتماعية والحوكمة) وكذلك أهمية إضافة أبعاد المحاسبة عن المسؤولية الاجتماعية والبيئية ضمن مسؤوليات الإدارة العليا في الشركات حتى تصبح التقارير المالية أكثر شمولاً وجودة للمستفيدين منها، وذلك لتحقيق الرشد في إتخاذ القرارات الاقتصادية وتنشيط سوق رأس المال وبالتالي زيادة قيمة الشركة.

الكلمات المفتاحية: قيمة الشركة، القرارات المالية، الأداء المالي، ركائز الاستدامة (البيئية والمجتمعية والحوكمة)، الإفصاح الطوعي، مصر.

١. Introduction

The economy as a whole benefits from voluntary disclosure because it lowers the cost of financing for businesses, which in turn helps investors make better judgments about where to allocate their resources. It might also lessen conflicts of interest in publicly traded companies. Shareholder demands also have an impact on voluntary disclosure (Dhaliwal et al., ٢٠١١). In annual reports, voluntary disclosure refers to the disclosure of information by a company's management that goes above and beyond the restrictions of regulations like generally accepted accounting principles and the Securities and Exchange Commission (Al-Akra & Ali, ٢٠١٢). Beyond required financial reports; any financial and non-financial information supplied by management is regarded as voluntary disclosure. Strategic information such as product, competitor, and customer data; financial information such as management profit estimate and stock price; and non-financial information such as environmental, social, and governance sustainability performance are all examples of voluntary disclosures (Li & Yang, ٢٠١٦). While all businesses must comply with the minimum disclosure requirements, the quantity of additional information that each one discloses to the financial markets varies greatly. By voluntarily disclosing information to the public and assisting investors in

comprehending the management of the business strategy, a firm can increase its reputation. Businesses that voluntarily disclose their financial information freely elect to provide additional accounting data that readers of annual reports believe is necessary to support their decision-making (Banghj & Plenborg, ٢٠٠٨). To assess the quality and worth of a corporation, stakeholders must consider the relationship between voluntary disclosure and firm value, financial performance, and financial decisions. A firm's value, financial performance, and financial decisions are reported in accordance with the quality and extent of voluntary disclosure decisions (Verrecchia, ١٩٨٣). Firm value depends on a variety of factors, including financial performance, reputation, and social responsibility. ESG issues are becoming increasingly important for investors and stakeholders in evaluating a firm's long-term viability. Companies that prioritize ESG considerations may demonstrate better risk management, stronger stakeholder relationships, and greater potential for sustainable growth. By integrating ESG factors into their business strategies, firms can enhance their brand and reputation, attract investors, and improve their overall value. According to Fahmi (٢٠١١), leverage is frequently thought of as a way for a firm to increase its performance and is connected to debt. A ratio of the funds provided by the company's owner with those obtained from outside companies serves as a measure of financial leverage, which shows the company's capacity to satisfy its

financial obligations (Lamia, ٢٠١٤). Leverage provides a summary of the capital structure of the business, allowing the level of risk associated with bad loans to be assessed. According to Sembiring (٢٠٠٥), the higher the leverage, the more likely it is that the business will incur contract-breach debts; the manager will attempt to overstate existing profits when reporting them. In order to declare their present earnings at a higher level, businesses with a high leverage ratio will be less transparent about their ESG. According to the agency theory, companies with larger leverage ratios will disclose more information (Retno & Priantinah, ٢٠١٢). Financial leverage has some substantial consequences for ESG voluntary disclosure, according to research by Lamia et al. (٢٠١٤). The ultimate objective of company investment is dividends. Several studies and ideas concentrate on the reasons for and determinants of dividends as well as how financial and governance variables affect corporate dividend policies (Booth & Zhou, ٢٠١٧; Denis & Osobov, ٢٠٠٨).

٢. Research Problem

The annual financial reports of companies are among the most significant sources of information because they contain a lot of information. So far, some users, particularly creditors and investors, do not find that some of the information offered by the financial reports meets their needs. This is due to the fact that the aforementioned users are constantly in need of the most recent information, particularly on the operations of the businesses

during the financial year. The voluntary nature provides management flexibility to choose what information to disclose. Recent research has shown that the beneficial effect of voluntary disclosure lowers the cost of capital and raises firm value (Dhaliwal et al., ٢٠١١; Cheung et al., ٢٠١٠). According to Hassan et al. (٢٠٠٩), voluntary corporate disclosure encourages share trading and decreases the severity of uncertainty surrounding firm growth prospects. One of the most important factors promoting sound corporate governance has been recognized as corporate disclosure. The company becomes more transparent as a result of voluntary disclosure, which lessens the information gap between insiders and outsiders. This might increase management accountability and lower investor monitoring expenses. Even though it might not be required, this kind of disclosure is a recommended practice. There are limited studies examining the determinants and effects of ESG voluntary disclosure. However, there is still a lack of consensus on the financial effects of ESG disclosure. More research is needed to understand the motivations and consequences of voluntary ESG disclosure by firms. This research aims to fulfill this research gap by examining the impact of firm value, dividend policy, financial leverage, and financial performance (profitability and liquidity) on firm environmental, social, and governance voluntary disclosure.

٣. Research Objectives

This research has main five-fold objectives:

١. To investigate the relationship between firm value and environmental, social, and governance practices through voluntary disclosure.
٢. To investigate the relationship between firm financial leverage and environmental, social, and governance practices through voluntary disclosure.
٣. To investigate the relationship between firm dividend policy and environmental, social and governance practices through voluntary disclosure.
٤. To investigate the relationship between firm profitability and environmental, social, and governance practices through voluntary disclosure.
٥. To investigate the relationship between firm liquidity and environmental, social and governance practices through voluntary disclosure.

٤. Literature Review and Hypotheses Development

٤,١ Firm Value and Environmental, Social, and Governance Voluntary Disclosure

The impact of environmental, social, and governance (ESG) voluntary disclosure on firm value has been a subject of interest in recent years. Prior research has concluded that ESG disclosure has a significant effect on firm value, supporting stakeholder theory. ESG disclosure positively affects firm value, with higher

ESG disclosure leading to higher firm value. Moreover, improved transparency and accountability enhance stakeholder trust and boost firm value. However, some previous studies have shown that ESG disclosure does not influence firm value. The corporate environmental, social, and governance performance criteria and how they relate to business value have been the focus of the ESG literature. Some researchers examine whether ESG factors can be thought of as a potential indicator of successful investment decisions (Richardson, ٢٠٠٩) and whether investors prefer to put their money into businesses with a better reputation for corporate social responsibility (CSR), which could increase the firm's value (De Bakker, Groenewegen, & Den Hond, ٢٠٠٥; Margolis & Walsh, ٢٠٠٣).

Three possible correlations between ESG disclosure and firm value have been discussed in the ESG literature: a positive association, a negative relationship, or a neutral relationship. Many studies have centered on the numerous subcategories of voluntary disclosure. (Tauringana, ٢٠١٢) examined a number of reports on corporate strategy, particularly interim reports. Shah (٢٠١٢) asserts that diversification strategy data can be used to assess the importance of each department within a business. (Charumathi, ٢٠٢٠) developed a voluntary disclosure index made up of projections about the business's strategy and macroeconomic environment. In order to assess the level of intangible disclosure, the value chain scoreboard was developed.

This research revealed that information is correlated with value, which was motivated by the growing significance of intangible assets in a knowledge-intensive company environment. (Ferchichi, ٢٠١٣) examined some different knowledge disclosure items and discovered that there was a strong positive correlation between these items and the firm's value. Moreover, some research discovered no connection between information disclosure and the firm's value. According to Brine et al. (٢٠٠٧), voluntary disclosure of corporate social responsibility has little to no effect on a company's performance. According to Abd Rahman and others (٢٠١٧), the firm's cost of capital is unaffected by the voluntary disclosure of carbon emissions. According to Krisdayanti and Wibowo (٢٠١٩), voluntary disclosure has no impact on a company's performance. Environmental disclosure made voluntarily has no impact on a company's performance (Aras et al., ٢٠١٠; Elsayed & Paton, ٢٠٠٥; Utomo et al., ٢٠٢٠). According to research by Hagberg et al. (٢٠١٥) and Neeveditah et al. (٢٠١٧), environmental management techniques have no impact on a company's performance.

The characteristics of corporate governance for listed businesses are one of the factors influencing the voluntary disclosure research. These traits are numerous and have a variable (positive, negative, or no) impact on the performance of the organization, according to our research. Research has shown that firm value has a significant impact on the extent of ESG

disclosure, with firms with a higher market value disclosing more ESG information than their counterparts. A study by Kim et al. (٢٠١٨) found that companies with higher market values tend to disclose more information on environmental and social issues. Companies with a higher market value are more likely to have a greater number of stakeholders who are interested in their ESG practices and therefore have a greater incentive to provide extensive ESG disclosures. These stakeholders include investors, customers, suppliers, and regulators. These stakeholders use ESG information as a basis for decision-making on investments, partnerships, and procurement, among others.

On the other hand, firms with lower market values may not have a similar incentive to disclose ESG information, as the cost of disclosure is relatively high in comparison to the benefits they can derive from it. Such firms may also be more focused on operational and financial performance, resulting in less attention on ESG practices. The impact of firm value on ESG disclosure is further evident in the adoption of voluntary ESG reporting frameworks such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). Studies have found that companies with higher market values are more likely to adopt voluntary ESG reporting frameworks, which require comprehensive disclosures, thereby providing a standardized approach to ESG reporting that enhances comparability and consistency.

The voluntary disclosure of ESG factors can positively impact a firm's value. Companies that disclose ESG information are perceived to be more transparent, socially responsible, and better managed, which can lead to enhanced reputation and investor confidence. Increased investor interest in sustainable investments also means firms that prioritize ESG considerations are more likely to access capital. However, the effectiveness of ESG disclosure varies depending on the level of detail and credibility of the information disclosed, as well as the relevance of ESG factors to a firm's industry and business model. In conclusion, the extent of ESG disclosure is significantly affected by a company's market value. Higher-market-value firms tend to have greater incentives to disclose their ESG.

Based on the previous illustrated literature, the researcher formed the following hypothesis:

H¹: Firm value has significant positive impact on firm environmental, social and governance voluntary disclosure.

٤,٢ Firm Financial Decision and Environmental, Social, and Governance Voluntary Disclosure

This research focuses on the impact of firm financial decision-making on ESG voluntary disclosure. Companies invest significant resources in producing ESG reports to achieve transparency about their performance. The disclosure of ESG information is a major concern for stakeholders, investors, and consumers who are interested in financial transparency and social responsibility. Better

financial transparency can lead to more favorable cash flow implications, while ESG disclosure can enhance a firm's reputation. Organizations with high degrees of leverage have a propensity to divulge more information, claims Barako (٢٠٠٨).

The capital provider for the company, who would desire a minimal amount of disclosure to satisfy loan covenant requirements, is most likely the driving force behind this. However, the research by Eng and Mak (٢٠٠٣) indicates that companies with less influence tend to reveal more willingly. However, contrary to what some studies (Hossain et al., ١٩٩٤; McKinnon and Dalimunthe, ١٩٩٣) claim, there is a correlation between financial leverage and ESG disclosure. Chow and Wong-Boren (١٩٨٧) claim that this does not offer a justification for voluntary disclosure. Recently, Taylor et al. (٢٠٠٨) conducted research and advocated that determining the disclosure policy for financial instruments should take into account leverage. They assert that organizations that engage in debt capital transactions are overseen and bound by debt covenants. These businesses will ultimately be more motivated to disclose information through ESG voluntary disclosure. Financial leverage is the inclusion of debt in a company's capital structure. In other words, it is the presence of fixed-charge-bearing capital, such as debentures, term loans, and preference shares, in addition to other types of capital like debentures and shares that maximizes the shareholder's wealth.

Financial leverage generally has to do with profit maximization. It is also commonly referred to as "trading on equity" or "gearing." Financial leverage is a concept that applies to both individuals and enterprises, not only corporations. Anybody's financial plan, whether it is for an individual, a business, or a firm, must include debt. A business may employ both debt and equity as sources of funding. Hence, a company's capital structure is the combination of debt and equity that it uses to finance its assets and activities that have a negative impact on environmental, social, and governance issues and voluntary disclosure (Zhang, ٢٠١٣).

The relationship between the debt equity ratio and the ESG voluntary disclosure has been investigated in several studies (Hossain et al., ١٩٩٤; Ahmed and Nicolls, ١٩٩٤; Jaggi & Low, ٢٠٠٠). These researchers discovered a positive correlation between ESG voluntary disclosure and the debt-to-equity ratio. Companies with a high debt-to-equity ratio may be more compelled to provide more financial data in order to satisfy their creditors. As a result, these companies are predicted to be more closely watched by financial institutions, which force them to provide more information than companies with little debt equity. In order to declare the firm's present earnings at a higher level, firms with a high financial leverage ratio will be less transparent about their ESG voluntary disclosure. According to research by Lamia et al. (٢٠١٤), financial leverage has a considerable impact on some important aspects of ESG voluntary disclosure. Some researchers found a strong inverse

link between leverage and ESG voluntary disclosure. Elshabasy (٢٠١٨) investigated how business factors and financial leverage affected the voluntary disclosure of environmental, social, and governance information by Egyptian listed companies. According to this research, there is little correlation between firm financial leverage and the publication of environmental, social, and governance information.

Moreover, Soyinka et al. (٢٠١٧) investigated the impact of firm size, leverage, and return on assets on the voluntary disclosure of environmental, social, and governance information. Data from audited annual reports and accounts of the listed Nigerian deposit money banks were used in the research. Leverage was shown to have a negative association with ESG voluntary disclosure.

Houmani Farahani (٢٠١٤) reported on some of the dividend policies he had learned about through conversations with company leaders in the middle of the ١٩٥٠s. The corporation emphasizes dividend stability first, followed by income, which is seen as the main factor influencing dividend fluctuations. Finally, the dividend policy guides all financial decisions. In order for stakeholders to clearly comprehend the long-term viability of the organization and to lessen information asymmetry and agency conflicts between managers and investors, voluntary disclosure beyond what is required represents the managers' free option. (Rossi, ٢٠٢٠) Poor disclosure quality will increase agency costs

since insiders have greater opportunities to deny outsiders (Han, ٢٠١٨). In contrast, businesses that disclose a lot of information have less information asymmetry and are less likely to be underestimated. The information asymmetry hypothesis further demonstrates that managers can use dividends as a signaling strategy to distinguish superior enterprises from low-quality ones. Management can no longer use extra funds for collection by issuing dividends.

According to Pahi (٢٠١٩), managers of businesses with poorer disclosure quality are more likely to offer shareholders fewer dividends, use free cash flow to fund oligarchic ventures and initiatives with a negative net present value, and splurge on perks. Managers, on the other hand, find it more challenging to rely on shareholders in a transparent disclosure environment since shareholders can more clearly grasp excess cash flows and demand bigger dividend payments. Overall, the numerous elements that make up ESG practices have a strategic and considerable impact on business operations, financial results, and, consequently, dividend-related decisions. Western European companies may serve as an example of high-quality reporting to show their commitment to improved governance standards and to establish a positive reputation. This is because of the level of corporate and regulatory development in Western Europe, the development of its financial markets, and their high commitment to ESG, transparency, and quality of disclosure (Dhaliwal et al.,

٢٠١١; Zahid & Simga-Mugan, ٢٠١٩). So, the businesses draw in investors and raise debt at a low cost, which can be advantageous for the dividend policy (El Ghoul et al., ٢٠١١).

In order to communicate a company's unobservable characteristics (such as an effort to reduce opportunism), these businesses may be more likely to reveal socially responsible operations. This helps businesses cut their cost of capital and, as a result, gives them extra money to pay dividends. Nonetheless, there is still a dearth of data in the EU region that supports the link between ESG and nonfinancial disclosure and dividend distribution policies (Verga Matos et al., ٢٠٢٠), and conflicting findings can still be found. Companies' financial decisions can have significant ESG impacts, leading investors to demand greater ESG disclosure. These findings suggest that ESG disclosure may not only lead to more sustainable practices but also to better financial performance.

Firm financial decision-making is increasingly becoming interlinked with ESG voluntary disclosure. Companies disclosing ESG factors may benefit from improved access to capital, reduced costs of capital, and enhanced reputation, contributing to better long-term performance. Investors, regulators, and stakeholders alike are more frequently considering ESG factors when assessing investment opportunities and evaluating the performance of firms. In light of this, companies should prioritize ESG voluntary disclosure in their financial decision-making

processes, as this can bolster their reputational and financial standing in the long term.

Based on the previous illustrated literature, the researcher formed the following hypotheses:

H₁: Firm financial leverage has significant negative impact on firm environmental, social and governance voluntary disclosure.

H₂: Firm dividend policy has significant positive impact on firm environmental, social and governance voluntary disclosure.

٤,٣ Firm Financial Performance and Environmental, Social and Governance Voluntary Disclosure

In the corporate world, the concept of ESG has gained significant importance in recent times. ESG encompasses factors such as a company's impact on the environment, its social responsibility towards various stakeholders, and its governance policies. Companies that consider these factors in their operations enjoy several benefits, such as improved reputation, enhanced customer loyalty, and better financial performance.

Financial performance and voluntary disclosure of ESG factors have become increasingly important for investors. ESG factors provide insight into the long-term sustainability and ethical practices of companies, which can ultimately impact financial performance. Companies that prioritize ESG considerations are more likely to attract responsible investment and maintain trust with shareholders,

employees, and customers. In recent years, there has been a trend towards increased ESG disclosure, with many companies voluntarily releasing sustainability reports and other ESG-related information. This shift towards transparency has prompted investors to consider ESG factors as part of their investment analysis.

One crucial aspect of ESG is voluntary disclosure, where companies provide information regarding their environmental, social, and governance practices. The disclosure can be in the form of financial statements, annual reports, or specific sustainability reports. The ESG voluntary disclosure practices are of particular significance since they indicate a company's willingness to be transparent about its ESG considerations and are indicative of a company's commitment to societal and environmental concerns. It has been observed that a company's financial performance has a direct impact on its ESG voluntary disclosure practices.

According to a study by the Harvard Business Review, companies with better financial performance tend to have more extensive and transparent ESG disclosure practices. The study further highlights that companies with poorer financial performance are less likely to disclose ESG information or may even withhold it. One possible explanation for this phenomenon could be that companies with better financial performance have better resources, such as staff and funding, to devote to ESG disclosure. Additionally, these companies may adopt a more proactive approach to ESG and view it as a crucial aspect of their operations. On the other hand, companies with poorer

financial performance may prioritize other areas, such as meeting financial targets, and may not have the resources to focus on ESG disclosure. Moreover, a strong correlation between financial performance and ESG disclosure is also important, as it indicates that ESG practices are not just the altruistic motives of a company but good business practices that can translate to better financial returns. Investors, especially those with a particular focus on ESG factors, tend to reward companies with a transparent and proactive approach to ESG. Such companies are more likely to attract investments and shareholders who value ESG.

Numerous recent studies have emphasized the value of ESG in raising corporate performance (Erena et al., ٢٠٢١; Jesuka and Peixoto, ٢٠٢١). According to Wasara and Ganda (٢٠١٩), social disclosure enhances the financial performance of mining businesses that are listed on the Johannesburg Stock Exchange by increasing the return on investment. Moreover, Velte (٢٠١٧) offers more justifications from Germany by showing that while ESG performance has no impact on Tobin's Q, it does have a combined and discrete impact on ROA. According to Khelif et al. (٢٠١٥), environmental and social disclosure has a favorable impact on the performance of South African enterprises. High-quality environmental disclosure enhances investor opinions of businesses in terms of environmental, social, and governance voluntary disclosure, maximizing their worth going forward (Iatridis, ٢٠١٣).

According to Plumlee et al. (٢٠١٥), voluntary environmental, social, and governance disclosure also raises the anticipated cash flow, which raises the company's worth. The return on investment, however, is negatively impacted by environmental, social, and governance voluntary disclosure, according to Wasara and Ganda (٢٠١٩).

Moreover, Alareeni and Hamdan (٢٠٢٠) come to the conclusion that governance performance is positively associated with Tobin's Q and ROA and negatively related to ROE, whereas ESG disclosure has a negative impact on ROE and ROA and a positive impact on Tobin's Q. In research done in the setting of sub-Saharan Africa, Sampong et al. (٢٠١٨) assert a negative association between environmental voluntary disclosure and the firm's value while giving data demonstrating a favorable correlation between social and governance voluntary disclosure and firm value.

Hussain (٢٠٢٠) uses a sample of Global Fortune (N١٠٠) American corporations to cast doubt on the connection between ESG voluntary disclosure and financial performance. The outcomes demonstrate that the performance of the organizations is significantly impacted by their environmental, social, and governance voluntary disclosure (ESGVD). Loh and co. (٢٠١٧) support these findings with data from Singapore, where it was found that disclosure of sustainability is favorably correlated with corporate financial success and that market value increases with increased disclosure. Khan (٢٠١٩) also made the case that

ESG's effectiveness lessens information asymmetry, increases share value, and attracts more investors to the market. According to Qureshi et al. (٢٠٢١), the European Union share price and the ESG indexes show a favorable association, supporting the efficiency of the financial markets. La Torre et al. concurred with these findings (٢٠٢٠).

Reverte (٢٠١٦) also points out that the profitability and book value of Spanish companies are impacted by sustainability disclosures, which have an indirect impact on stock prices. As a result, sustainability disclosures lessen market uncertainty, encourage investors' investment choices, and raise a company's market value (Bona-Sanchez et al., ٢٠١٧). Also, it lowers the cost of financing and gradually raises the company's value (Wong et al., ٢٠٢٠). They claimed that information about a company's reputation, quality, brand equity, and safety is not included in its financial reports.

A wide range of data on CG and environmental and social performance is included in ESG measures. The entire ESG voluntary disclosure information is therefore crucial, especially for management and other interested parties. The results of earlier studies on the link between ESGVD and FP show significant discrepancies. Research revealed that there is insufficient proof of an association between ESG and FP (Eccles et al., ٢٠١٢; Orlitzky, ٢٠١٣). One of the financial metrics that demonstrates a company's capacity to meet its short-term obligations is the liquidity ratio, the stronger the company's

ability to meet its obligations, the higher the liquidity ratio. It offers a crucial benchmark for shareholders to evaluate the state of businesses (Rashid ٢٠١٨; Modugu ٢٠٢٠).

In order to reassure shareholders, businesses with better liquidity ratios may release more data about integrated reporting and value creation. Furthermore, having high liquidity is a sign of a corporation with greater financial performance (Haninun et al., ٢٠١٨). This might encourage businesses to share more data on their non-financial performance in order to please more stakeholders (Mkumbuzi, ٢٠١٦). Using liquidity measures, one may determine how well-positioned a company is to settle its short-term debt obligations. A corporation can clearly be seen to be able to pay its debts that are due soon as well as its ongoing operations if its liquid assets are bigger than its short-term liabilities. A company with a low coverage rate, on the other hand, should raise a warning flag for investors since it may be a hint that the company would struggle to run its operations and fulfill its obligations. So, it's feasible that companies in good financial standing will want to disclose this to investors in order to let them know.

Financial ratios could be one type of disclosure in this case. According to Cooke (١٩٨٩), a higher level of disclosure is related to the firm's soundness, which is indicated by its high liquidity. Wallace et al. (١٩٩٤) discovered a substantial inverse link between liquidity and disclosure level for unlisted Spanish enterprises, while Belkaoui-Raihi (١٩٧٨) discovered no relationship between liquidity and

disclosure level. According to Khlif et al. (٢٠١٥), environmental and social disclosure has a favorable impact on the performance of South African enterprises.

High-quality environmental disclosure enhances investor opinions of businesses in terms of corporate social responsibility (CSR) characteristics, maximizing their worth going forward (Iatridis, ٢٠١٣). According to Plumlee et al. (٢٠١٥), environmental disclosure also raises the anticipated cash flow, which raises the company's worth. The return on investment, however, is negatively impacted by environmental disclosure (Wasara and Ganda, ٢٠١٩). Moreover, Alareeni and Hamdan (٢٠٢٠) come to the conclusion that governance performance is positively associated with Tobin's Q and ROA and negatively related to ROE, whereas social and environmental performance have a negative impact on ROE and ROA and a positive impact on Tobin's Q. In research done in the setting of sub-Saharan Africa, Sampong et al. (٢٠١٨) assert a negative association between environmental disclosure and the firm's worth while giving data demonstrating a favorable correlation between social disclosure and company value.

Hussain (٢٠١٥) uses a sample of Global Fortune (N١٠٠) American corporations to question the relationship between sustainability and financial results. The outcomes demonstrate that the performance of the organizations is significantly impacted by their environmental, social, and governance (ESG)

performance. These conclusions are supported by evidence from Singapore, according to Loh et al. (٢٠١٧), who also found that the level of sustainability disclosure is positively correlated with a company's financial success and market value. Khan (٢٠١٩) also made the case that ESG's effectiveness lessens information asymmetry, increases share value, and attracts more investors to the market. Many researchers have discovered beneficial connections between ESG and FP. Higher FP results from greater ESG levels (Tarmuji et al., ٢٠١٦). For instance, Pasquini-Descomps and Sahut (٢٠١٣) looked into the impact of news-based ESG scores on annual FP as determined by ROA. They demonstrated how yearly variance in ESG initiatives improves a company's image before improving financial performance.

Moreover, Waddock and Graves (١٩٩٧) demonstrated a significant correlation between a company's reputation and its social responsibility ratings. Furthermore, rather than enterprises, the effect of ESG disclosure seems to be more substantial for businesses whose clients are people. Additionally, Albuquerque et al. (٢٠١٢) provided evidence that ESG is a strategic product that a company sells to clients and that this product increases sales.

Sharfman and Fernando (٢٠٠٨), who stated that a firm's ratings on non-accounting indicators like ESG provide a clear picture of how the organization controls the risks it encounters, support this point of view. According to another set of studies, there is a bad correlation between ESG and FP. High ESG

practices might be detrimental to FP. Any other goal that diverts a company from its main goal of increasing shareholders' wealth will reduce the efficacy of the company (Friedman, ٢٠٠٩).

According to the research, companies with high liquidity and/or no financial restraints are more likely to experience agency issues when it comes to ESG initiatives. High capital expenditure and free cash flows, which can be signs of agency expenses, can be a sign of significant liquidity (Jensen, ١٩٨٦; Masulis, Wang, and Xie, ٢٠٠٩; Servaes and Tamayo, ٢٠١٤; Kruger, ٢٠١٥; Ferrell et al., ٢٠١٦). Since managers have the most discretion over when and how to spend cash, capital expenditure decisions made by businesses may be a means of using the asset for personal gain (Masulis et al., ٢٠٠٩).

Therefore, having more liquidity than is necessary could hurt performance. In this regard, the relationship between financial performance, the liquidity variable, and ESG would be adverse. In conclusion, financial performance has a direct impact on the ESG voluntary disclosure practices of companies. Companies with better financial performance tend to have more extensive and transparent ESG disclosure practices, reflecting their proactive approach to ESG.

Based on the previous illustrated literature, the researcher formed the following hypotheses:

H٤: Firm profitability has significant positive impact on firm environmental, social and governance voluntary disclosure.

H^o: Firm liquidity has significant positive impact on firm environmental, social and governance voluntary disclosure.

٥. Research Theoretical Framework

In the research framework presented in Figure (١), five research hypotheses are examined to show the impact of the five main independent variables - namely firm value, financial decisions (financial leverage and dividend policy), financial performance (profitability and liquidity) - on the dependent variable, environmental, social and governance voluntary disclosure.

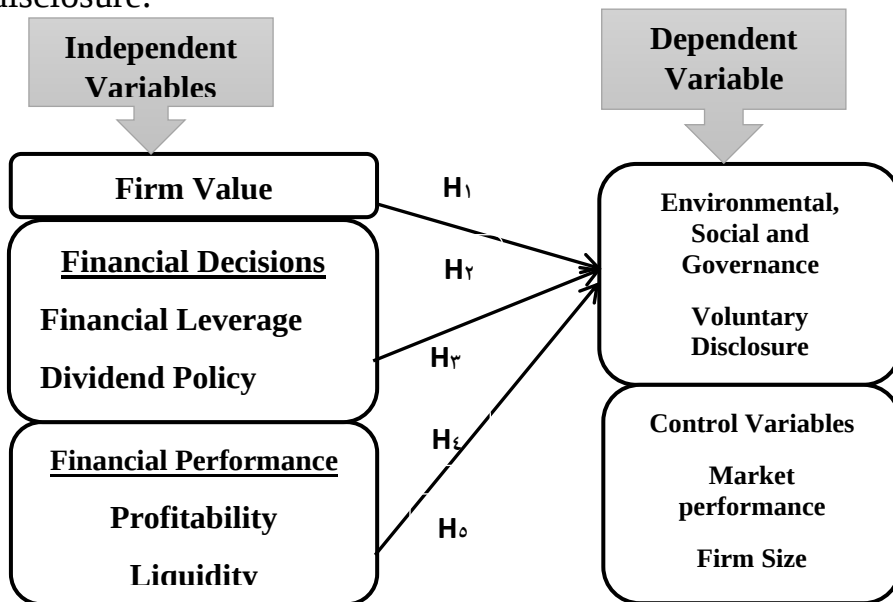


Figure (١): Research Theoretical Framework

٦. Research Methodology

٦.١ Sample Selection and Data Collection

The population of the research comprised all the non-financial firms listed on Egypt's Securities Exchange (EGX ٧٠) during the period ٢٠١٥ to ٢٠٢١. In order to test the research hypotheses, the researcher selected ٣٦ non-financial Egyptian listed firms to show the impact of firm value, financial decisions (financial leverage and dividend policy), and financial performance (profitability and liquidity) on environmental, social, and governance voluntary disclosure. Using ٢٥٢ observations, this included ٣٦ cross-sectional units and a time-series length of ٧. The data were extracted from the annual reports. Environmental, social, and governance voluntary disclosure data are measured using S&P methodology for the S&P/EGX ESG Index, which is disclosed on the Egyptian Exchange website: <https://www.egx.com.eg/en/indexdata.aspx?type=٧&nav=٧>.

The process of creating this index is twofold.

The first step in obtaining an "ESG" score for any company is to define a multi-layered strategy. The second step is to create an index that includes companies with the highest ESG scores. Its relative score determines each company's weight in the index; companies with a higher score carry more weight.

In addition, some weight is given to the size of each company. A secondary threshold for selection is liquidity. A company with a perfect ESG score but no market liquidity can become an impediment to the success of an index. The choice of the sample

was based on the availability of recent data. Consistent with other disclosure studies, this research excluded firms for which there is a lack of data. Financial institutions (banks and companies of financial services) were excluded, as they have particular features and require separate treatment. The researcher will use descriptive statistics and regression analysis to investigate the relationship between the research independent variables and environmental, social, and governance voluntary disclosure.

Table (١) presents the research sample, which is comprised of ٣٦ firms from eight different industry sectors.

Table (١): The Sample of the Research

Number	Sectors	Number of Firm in each Sector	Percentage
١	Real estate	٥	١٣,٨٩٪
٢	Chemicals and Oils	٣	٨,٣٣٪
٣	Construction Materials	٥	١٣,٨٩٪
٤	Food and Beverages	٥	١٣,٨٩٪
٥	Industrial Goods, Services and Automobiles	١٠	٢٧,٧٨٪
٦	Telecommunication	١	٢,٧٨٪
٧	Travel and Leisure	٣	٨,٣٣٪
٨	Technology	٤	١١,١١٪
Total		٣٦	١٠٠٪

٦,٢ Research Variables and Regression Models

The statistical analysis will show the impact of firm value, financial decisions (financial leverage and dividend policy), and

financial performance (profitability and liquidity) as independent variables and market performance. Tobin's Q and firm size, as control variables on the Environmental, Social, and Governance Voluntary Disclosure (ESGVD) as an independent variable using the following five multiple regression models as follows:

١. **Firm Value:** is measured by market capitalization.
٢. **Financial Decisions:** (a) *financial leverage* is measured by the debt-to-equity ratio; (b) *dividend policy* is measured by the dividend payout ratio.
٣. **Financial Performance:** (a) *profitability* is measured by return on asset, return on equity, gross profit margin, and earnings per share; (b) *liquidity* is measured by current ratio, asset turnover, and inventory turnover.

٦,٢,١ First Regression Model

The first regression model used to examine the relationship between firm value and voluntary environmental, social, and governance disclosure.

H₁: Firm value has a significant positive impact on firm environmental, social, and governance voluntary disclosure.

$$ESGVD_{it} = \beta_0 + \beta_1 FV_{it} + \beta_2 ROA_{it} + \beta_3 ROE_{it} + \beta_4 CR_{it} + \beta_5 AT_{it} + \beta_6 TQ_{it} + \beta_7 FS_{it} + \varepsilon_{it}$$

Where:

Dependent variable = environmental, social and governance voluntary disclosure (ESGVD).

β_0 = represents a constant in the regression equation.

β_1 = FV denotes regression coefficient of firm value.

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 = denotes control variables, regression coefficient of return of assets (ROA), return of equity (ROE), current ratio (CR), asset turnover (AT), Tobin's Q (TQ) and firm size (FS).

I_t = Firm i in period t.

T_i = Year fixed effect.

ε_{it} = Standard error term.

٢,٢,٢ Second Regression Model

The second regression model was used to examine the relationship between firm financial leverage and voluntary environmental, social, and governance disclosure.

H٢: Firm financial leverage has a significant negative impact on firm environmental, social, and governance voluntary disclosure.

$$ESGVD_{it} = \beta_0 + \beta_1 FL_{it} + \beta_2 ROA_{it} + \beta_3 ROE_{it} + \beta_4 CR_{it} + \beta_5 AT_{it} + \beta_6 TQ_{it} + \beta_7 FS_{it} + \varepsilon_{it}$$

Where:

Dependent variable = environmental, social and governance voluntary disclosure (ESGVD).

β_0 = represents a constant in the regression equation.

β_1 = FL denotes regression coefficient of firm leverage.

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 = denotes control variables, regression coefficient of return of assets (ROA), return of equity (ROE), current ratio (CR), asset turnover (AT) Tobin's Q (TQ) and firm size (FS).

I_t = Firm i in period t.

T_i = Year fixed effect.

ε_{it} = Standard error term.

١,٢,٣ Third Regression Model

The third regression model was used to examine the relationship between firm dividend policy and environmental, social, and governance voluntary disclosure.

H^٣: Firm dividend policy has a significant positive impact on firm environmental, social, and governance voluntary disclosure.

$$ESGVD_{it} = \beta_0 + \beta_1 DP_{it} + \beta_2 ROA_{it} + \beta_3 ROE_{it} + \beta_4 CR_{it} + \beta_5 AT_{it} + \beta_6 TQ_{it} + \beta_7 FS_{it} + \varepsilon_{it}$$

Where:

Dependent variable = environmental, social and governance voluntary disclosure (ESGVD).

β_0 = represents a constant in the regression equation.

β_1 = DP denotes regression coefficient of dividend policy.

$\beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 = denotes control variables, regression coefficient of return of assets (ROA), return of equity (ROE),

current ratio (CR), asset turnover (AT) Tobin's Q (TQ) and firm size (FS).

I_t = Firm i in period t.

T_i = Year fixed effect.

ε_{it} = Standard error term.

٦,٢,٤ Fourth Regression Model

The fourth regression model is used to examine the relationship between firm financial performance (profitability) and voluntary environmental, social, and governance disclosure.

H٤: Firm profitability has a significant positive impact on firm environmental, social, and governance voluntary disclosure.

$$ESGVD_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 ROE_{it} + \beta_3 GPM_{it} + \beta_4 EPS_{it} + \beta_5 TQ_{it} + \beta_6 FS_{it} + \varepsilon_{it}$$

Where:

Dependent variable = environmental, social and governance voluntary disclosure (ESGVD).

β_0 = represents a constant in the regression equation.

$\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 = ROA, ROE, GPM and EPS denotes regression coefficient of financial performance (profitability), return on assets, return on equity, gross profit margin and earnings per share, respectively.

β_5 and β_6 = indicates control variables, Tobin's Q regression coefficient (TQ), and firm size (FS).

I_t = Firm i in period t.

T_i = Year fixed effect.

ε_{it} = Standard error term.

٦,٢,٥ Fifth Regression Model

The fifth regression model is used to examine the relationship between firm financial performance (liquidity) and voluntary environmental, social, and governance disclosure.

H^٥: Firm liquidity has a significant positive impact on firm environmental, social, and governance voluntary disclosure.

$$ESGVD_{it} = \beta_0 + \beta_1 CR_{it} + \beta_2 AT_{it} + \beta_3 IT_{it} + \beta_4 TQ_{it} + \beta_5 FS_{it} + \varepsilon_{it}$$

Where:

Dependent variable = environmental, social and governance voluntary disclosure (ESGVD).

β_0 = represents a constant in the regression equation.

β_1, β_2 , and β_3 = CR, AT and IT denotes regression coefficient of financial performance (liquidity), current ratio, asset turnover and inventory turnover, respectively.

β_4 and β_5 = indicates control variables, Tobin's Q regression coefficient (TQ), and firm size (FS).

I_t = Firm i in period t.

T_i = Year fixed effect.

ε_{it} = Standard error term.

Table (٢) shows the definitions and measurements of the dependent, independent and control research variables.

Table (٢): Research Variables: Definitions and Measures

Variables / Type	Abbreviation	Definition	Measure
Independent Variable: Firm Value	FV	Firm value includes in its calculation the market capitalization of a company but also short-term and long-term debt as well as any cash on the company's balance sheet.	Market capitalization is the market value of a firm's equity is obtained by multiplying the number of shares outstanding times the price per share.
Independent Variable: Financial Leverage	FL	Financial leverage is the practice of financing the purchase of assets with borrowed money (debt) in the expectation that the income or capital gain from the new asset would surpass the cost of borrowing.	Debt-to-equity (D/E) ratio. It is measured by dividing total liabilities by total equity.
Independent Variable: Dividend Policy	DP	A company's dividend policy determines how its dividends are paid out to shareholders.	The dividend payout ratio measures the proportion of the company's net income to the total amount of dividends paid to shareholders.
Independent Variables: Financial Performance (Profitability) Return on Assets Return on Equity	ROA	Return on assets reflects how a firm effectively and efficiently utilizes its available resources.	Is the ratio of net income divided by average total assets.
	ROE	A firm that can sustain and grow its ROE over time may be good at creating shareholder value because it understands how to reinvest its earnings sensibly to boost productivity and profits.	Is the ratio of net income divided by average shareholder's equity.
	GPM	Gross Profit Margin is the remaining amount of a company's revenue after direct costs are deducted.	Gross Profit Margin equal net Sales minus COGS divided by net Sales.

Gross Profit Margin		One of the most significant measures of a company's financial performance is its gross margin.	
Earnings per Share	EPS	Financial analysts, traders, and investors all pay attention to earnings per share. It is used to make judgments about the potential performance of a firm as well as the stability of its earnings through time and financial standing.	EPS equal net income minus preferred dividends) divided by average outstanding common shares.
Independent Variables: Financial Performance (liquidity) Current ratio	CR	The concept of "liquidity" refers to the ease and speed with which a security or other asset can be converted into cash without losing value.	Current ratio is measured by dividing current assets by current liabilities.
Asset Turnover	AT	The asset turnover ratio assesses how much a business's sales or revenues are in comparison to the value of its assets. The efficiency with which a business uses its assets to produce income can be determined by looking at the asset turnover ratio.	Is the ratio of net sales divided by average total assets.
Inventory Turnover	IT	Inventory turnover is a financial ratio showing how many times a company turned over its inventory relative to its cost of goods sold (COGS) in a given period.	Is the ratio of COGS divided by average value of inventory.

Dependent Variable: Environmental, Social and Governance Voluntary Disclosure	ESGVD	When management of a company decides to share information that goes above and beyond what is required by regulations like GAAP and SEC rules because they believe it will help readers of the company's annual reports make better decisions, this is known as voluntary disclosure.	Disclosure indices are extensive listings of particular items that may be reported in company filings. A measure of the extent of disclosure, but not always the quality of the disclosure, can be obtained by calculating an index score for a given company. Total number of relevant items that should be revealed divided by the number of items that a specific firm actually and voluntarily provided.
Control Variables: Market performance (Tobin's Q) Firm Size	TQ	Tobin's q measures the degree in which the company generates for its shareholders. It compares the book value of its assets to how much more a company is worth.	Tobin's Q = $\frac{\text{Market value of equity} + \text{Book value of short term liabilities}}{\text{Book value of total assets}}$
	FS	The company's total assets.	Total assets' natural log.

٧. Data Analysis and Research Results

In this research, a number of criteria are used to select the best approach from among fixed effect, random effect, and ordinary least squares regression (OLS), in order to draw useful inferences and conclusions. A decision between the OLS and FE is first made using the F-test on the joint significance of the fixed effects intercepts. In other words, we check for time-fixed effects to ensure that no time effect is required. The FE intercepts are all ٠, which is the null hypothesis. The FE approach is preferred over the OLS if the null hypothesis is found to be incorrect because it is thought to give unbiased estimates more accurately (Woodridge, ٢٠٠٦).

٧,١ First Model: Panel Data Regression Results

Model ١: Investigate the impact of firm value on firm environmental, social, and governance voluntary disclosure.

Table (٣): Model ١ - Impact of Firm Value on ESGVD

Model ١: Pooled OLS Dependent Variable: ESGVD				Decision
Independent variables	Coefficient	Drisc/Kraay Standard errors	P – value	
Firm Value (FV)	١٣,٩٧٥٥٦	٤,١٤٩٥٥٤	٠,٠٠٢	Significant
Return on Assets (ROA)	١٨,٣٤٨٤٤	١١,٨٦٩١٢	٠,٠٣١	Significant
Return on Equity (ROE)	١,٥٣٧٢٢٨	١,١٣٦٨٦٩	٠,١٨٥	Insignificant
Current Return (CR)	-٠,٥٩٨٢٥٨٦	٠,٦٠٦٢٥٠٣	٠,٣٣١	Insignificant
Asset Turnover (AT)	٣٣,٠٦٠٦٩	٧,٩٩٩٥٠٧	٠,٠٠٠	Significant
Firm Size (FS)	٧٠,٤٨٤٥٩	٧٦,١٩٧٢٩	٠,٣٦١	Insignificant
Tobin's Q (TQ)	٨,٥٨٩٢٩٨	٦,٤٤٦٢٢١	٠,١٠١	Insignificant
R – squared			٠,٠٢٨٨	
Prob. (F – test)			٠,٠٠٠٠	
Modified Wald test for group wise heteroscedasticity	Chi-square		P – value	
	١٩٢٢٩,٧٩		٠,٠٠٠٠	
Wooldridge test for autocorrelation	F-test		P – value	
	٣٨٩١٤,٢٦١		٠,٠٩٥٧	
Cross sectional dependence Test			P – value	
			٠,٩٤٦٠	

Table (٣) shows the results of panel regression for model ١ estimated using pooled OLS, where the cross-sectional dependence problem proved to exist and thus Driscoll-Kraay standard errors were used. In this model, ESGVD is the dependent variable, while firm value, return on assets (ROA), return on equity (ROE), current return (CR), asset turnover (AT), firm size (FS), and Tobin's Q are the independent variables and controls. The model examined the impact of firm value, which has a significant positive impact on firm environmental, social, and governance voluntary disclosure. The results show that ٤ out of ٧ variables are significant. In other words, firm value, return on assets (ROA), asset turnover, and firm size have a significant impact on a firm's financial performance from both profitability and liquidity aspects at a ١% level of significance.

The overall equation for forecasting ESGVD:

$$ESGVD_{it} = 15.96984 + 13.97556 FV_{it} + 18.34844 ROA_{it} + 1.537228 ROE_{it} - 0.5982586 CR_{it} + 33.06069 AT_{it} + 70.48459 FS_{it} + 8.589298 TQ_{it} + \varepsilon_{it}$$

The findings revealed that firm value (FV) has a significant positive impact on a firm's environmental, social, and governance voluntary disclosure. This result indicates that firm value is positively correlated with ESC disclosure. Moreover, the firm's voluntary disclosure enhances the manager's profit and stock market performance.

Concerning firms' profitability and liquidity, many recent studies have highlighted the importance of ESG in improving company performance (Erena et al., ٢٠٢١; Jesuka and Peixoto, ٢٠٢١). More specifically, the results were consistent with the literature. Wasara and Ganda (٢٠١٩) argue that social disclosure positively affects the return on investment (ROA), which improves the financial performance of companies. In addition, Velte (٢٠١٧) found that ESG performance has a combined and discrete effect on ROA while it has no effect on Tobin's Q. Furthermore, our findings supported Alareeni and Hamdan's (٢٠٢٠) conclusion that social and environmental performance has a negative impact on return on equity (ROE). Moreover, findings showed that ESG disclosure had an important positive and significant effect on a firm's asset turnover, which indicates that the efficiency with which a company is using its assets to generate revenue is positively correlated with ESGVD. Finally, firm size showed an insignificant impact on the financial performance of the firm, which implies that firm size, does not play a significant role in ESG disclosure. In other words, it is not one of the important factors.

٧,٢ Second Model: Panel Data Regression Results

Model ٢: Investigate the impact of financial leverage on firm environmental, social and governance voluntary disclosure.

Table (٤): Model ٢ - Impact of Financial Leverage on ESGVD

Model ٢: Pooled OLS				Decision
Dependent Variable: ESGVD				
Independent variables	Coefficient	Drisc/Kraay Standard errors	P – value	
Financial Leverage (FL)	٩٩,٢٣٣١٣	٤٧,٢٥٨٩٧	٠,٠٤٣	Significant
Return on Assets (ROA)	٢١,٣٩٦٧٩	١٨,٢١٥١٢	٠,٠٤٨	Significant
Return on Equity (ROE)	٢,٢٢٤٨٦١	١,٦٦٩٣٣٥	٠,١٩١	Insignificant
Current Return (CR)	-٠,٦٣٥٠٧٢١	٨٣٦٣٨٤٩	٠,٤٥٣	Insignificant
Asset Turnover (AT)	١٢٣,٩٨٣٢	٥٥,٨٤٨٩٢	٠,٠٣٣	Significant
Firm Size (FS)	١٠,٤٣٨٤٥	٦,٢٩٥٥٥٩	٠,١٠٦	Significant
Tobin's Q (TQ)	٧٠,٢٥٩٤	١٣٩,٦٩٤٦	٠,٦١٨	Insignificant
R – squared		٠,٥٢١		
Prob. (F – test)		٠,٠٠٠٠		
Modified Wald test for group wise heteroscedasticity		Chi-square	P – value	
		١,٩١٤+٠٦	٠,٠٠٠٠	
Wooldridge test for autocorrelation		F-test	P – value	
		٧٨٧٧٥,١٩٨	٠,٠٠٠٠	
Cross sectional dependence Test		P – value		
		٠,٠٠٠٠		

Table (٤) shows the results of panel regression for model ٢ estimated using pooled OLS, where the cross-sectional dependence problem proved to exist and thus Driscoll-Kraay standard errors were used. In this model, ESGVD is the dependent variable, while financial leverage (FL), return on assets (ROA), return on equity (ROE), current return (CR), asset turnover (AT), firm size (FS), and Tobin's Q are the independent variables and controls. The model examined the impact of financial leverage, which has a significant positive impact on

firm environmental, social, and governance voluntary disclosure. The results show that 4 out of 5 variables are significant. In other words, financial leverage (FL), return on assets (ROA), return on equity (ROE), and firm size have a significant impact on a firm's ESGVD at the 1% level of significance.

The overall equation for forecasting ESGVD:

$$ESGVD_{it} = 14.25486 + 99.23313 FL_{it} + 21.39679 ROA_{it} + 2.224861 ROE_{it} - 0.6350721 CR_{it} + 123.9832 AT_{it} + 10.43845 FS_{it} + 70.2594 TQ_{it} + \varepsilon_{it}$$

The findings revealed that financial leverage (FL) has a significant positive impact on a firm's environmental, social, and governance voluntary disclosure. This result indicates that firm financial leverage is positively correlated with ESG disclosure. One possible explanation is that the larger the financial leverage of the firm, the more likely it is to voluntarily disclose its ESG.

Concerning firms' profitability, many recent studies have highlighted the importance of ESG in improving company performance. ROA was found to have a positive correlation with ESGVD. The results confirm that environmental and social performance and collective ESG performance play a crucial role in enhancing the companies' performance. On the other hand, ROE was found to have no significant relationship with ESGVD. Our results were consistent with the literature that proved that both ROE and ESGVD are uncorrelated, and thus no relation is found.

Moreover, findings showed that ESG disclosure had an important positive and significant effect on a firm's asset turnover, which indicates that the efficiency with which a company is using its assets to generate revenue is positively correlated with ESGVD. In addition, results show that leverage is the use of borrowed funds to increase the potential return of an investment. However, it can also increase the risk of financial distress. By disclosing their ESG practices, companies can mitigate the risks associated with environmental and social issues while improving their reputation. Investors can use ESG disclosures to identify potential risks and opportunities, which can inform their investment decisions. As such, ESG voluntary disclosure can play a significant role in investment decisions, especially for environmentally and socially conscious investors. Companies that prioritize ESG aspects in their operations and decision-making practices benefit from improved credit ratings, lower borrowing costs, and access to a wider investor base. These companies can also use their financial power to invest in sustainable projects, contributing to their ESG performance. By disclosing ESG information, companies can enhance transparency, build trust among stakeholders, and attract socially responsible investors; therefore, integrating a sustainable capital structure and ESG disclosure enables companies to achieve long-term value creation while complying with stakeholder demands.

Finally, firm size showed a significant impact on the financial performance of the firm, which implies that firm size, does play a significant role in ESG disclosure. In other words, the larger the firm, the more information about its ESG will be disclosed. The result was consistent with the results of Soror (٢٠٢٢), who found a positive relationship between firm size and ESG disclosure.

٧,٣ Third Model: Panel Data Regression Results

Model ٣: Investigate the impact of dividend policy on firm environmental, social and governance voluntary disclosure.

Table (٥): Model ٣ - Impact of Dividend Policy on ESGVD

Model ٣: Generalized Least Squares (GLS) Dependent Variable: ESGVD				Decision
Independent variables	Coefficient	Standard errors	P – value	
Dividend Policy (DP)	٢٦,٣٣٣٢	٣٠,٥٣.٥٦	٠,٠٩٤	Significant
Return on Assets (ROA)	١٦,٢٤١٦٤	١١,٣٠.٥٩٤	٠,٠٦٠	Significant
Return on Equity (ROE)	١,٥٨٩٢٢٥	١,٠٩٩٨٦٣	٠,١٥٧	Insignificant
Current Return (CR)	-٠,٤١٤٧٧١٩	.٦١٢٦٣٧٤	٠,٥٠٣	Insignificant
Asset Turnover (AT)	٣٦,٨٩٥٦	٨,٢٠.٣١١٧	٠,٠٠٠	Significant
Firm Size (FS)	٨,٣٢٨٨٣٩	٦,٢٩٩٩٨٥	٠,١٩٥	Insignificant
Tobin's Q (TQ)	٦٦,٤٨٧٣٩	٧٣,١٩٨٨٤	٠,٣٧٠	Insignificant
R – squared		٠,٠٢٣٠		
Prob. (F – test)		٠,٠٠٠٠		
Modified Wald test for group wise heteroscedasticity	Chi-square		P – value	
	٦.٦٨٠,٠٥		٠,٠٠٠٠	
Wooldridge test for autocorrelation	F-test		P – value	
	٤٨٤٩٣,٣٦٥		٠,٠٠٠٠	
Cross sectional dependence Test			P – value	
			٠,٠٠٠٠	

Table (٥) shows the results of panel regression for model ٣ estimated using pooled OLS, where the cross-sectional dependence problem proved to exist and thus Driscoll-Kraay standard errors were used. In this model, ESGVD is the dependent variable, while dividend policy (DP), return on assets (ROA), return on equity (ROE), current return (CR), asset turnover (AT), firm size (FS), and Tobin's Q are the independent variables and controls. The model examined the impact of financial leverage, which has a significant positive impact on firm environmental, social, and governance voluntary disclosure. The results show that ٣ out of ٧ variables are significant. In other words, dividend policy (DP), return on assets (ROA), and asset turnover (AT) have a significant impact on a firm's ESGVD at the ١% level of significance.

The overall equation for forecasting ESGVD:

$$ESGVD_{it} = 17.25479 + 26.33332 DP_{it} + 16.24164 ROA_{it} + 1.589225 ROE_{it} - 0.4147719 CR_{it} + 36.8956 AT_{it} + 8.328839 FS_{it} + 66.48739 TQ_{it} + \varepsilon_{it}$$

The results showed that a firm's voluntary disclosure of its environmental, social, and governance practices is significantly enhanced by its dividend policy (DP). This outcome is consistent with Trihermanto and Yunieta's (٢٠٢٠) conclusion that there is a positive correlation between non-financial disclosure and dividend payments because better disclosures give shareholders accurate knowledge about the cash flows created by the

organization. Additionally, from ٢٠١٠ to ٢٠١٨, Saeed and Zamir (٢٠٢١) looked at the effect of ESG disclosure on dividend payouts of businesses in emerging economies.

The empirical findings show that dividend payments are negatively and significantly impacted by ESG disclosures. The empirical findings of the two studies described above show that dividend policy and CSR or ESG disclosure can be used in place of minimizing information asymmetry. In line with Hussainey and Walker (٢٠٠٩) and Brockman and Unlu (٢٠١١), the results of model ٣ support the hypothesis and demonstrate that ESG disclosure has a positive and significant influence on dividend distribution at a level of ٥%. By providing shareholders with exact information about the financial flows the company generates, more transparent disclosure, according to Kooet et al. (٢٠١٧) and Trihermanto and Yunieta (٢٠٢٠), increases dividend payments.

Concerning firms' profitability, many recent studies have highlighted the importance of ESG in improving company performance. ROA was found to have a positive correlation with ESGVD. The results confirm that environmental and social performance and collective ESG performance play a crucial role in enhancing the companies' performance. On the other hand, ROE was found to have no significant relationship with ROE. Our results were consistent with the literature that proved that both ROE and ESGVD are uncorrelated, and thus no relation is

found. In addition, findings showed that ESG disclosure had an important positive and significant effect on a firm's asset turnover, which indicates that the efficiency with which a company is using its assets to generate revenue is positively correlated with ESGVD.

٧,٤ Fourth Model: Panel Data Regression Results

Model ٤: Investigate the impact of profitability on firm environmental, social and governance voluntary disclosure.

Table (٦): Model ٤ - Impact of Profitability on ESGVD

Model ٤: Pooled OLS Dependent Variable: ESGVD				Decision
Independent variables	Coefficient	Drisc/Kraay Standard errors	P – value	
Return on Assets (ROA)	-٥,٤٠١٨٣١	١١,٤٥٦٧١	٠,٠٤٠	Significant
Return on Equity (ROE)	١,٢٢٢٤٣٢	١,٢٤٩٧٢٥	٠,٣٣٥	Insignificant
Gross Profit Margin (GPM)	-١,٣٨٠٨٧٢	٦,٥٨٧٠٩٥	٠,٨٣٥	Insignificant
Earnings Per Share (EPS)	-١٩٠,٨٠٠٥	٦٧,٩٩٢٧	٠,٠٠٨	Significant
Tobin's Q (TQ)	٨,١٤٢٨٦	٦,٥٧٧٠٤٥	٠,٢٢٤	Insignificant
Firm Size (FS)	٦٠,٦٩٩٥١	٦٨,٤٩٨٧٤	٠,٣٨٢	Insignificant
R – squared		٠,٠١٨٠		
Prob. (F – test)		٠,٠٠٠٠		
Modified Wald test for group wise heteroscedasticity	Chi-square		P – value	
	٧٧٧٣,٤٠		٠,٠٠٠٠	
Wooldridge test for autocorrelation	F-test		P – value	
	٢,٩٢٢٢		٠,٠٠٠٠	
Cross sectional dependence Test			P – value	
			٠,٠٠٠٠	

Table (٦) shows the results of panel regression for model ٤ estimated using pooled OLS, where the cross-sectional dependence problem proved to exist and thus Driscoll-Kraay standard errors were used. In this model, ESGVD is the

dependent variable, while gross profit margin (GPM), return on assets (ROA), return on equity (ROE), earning per share (EPS), firm size (FS), and Tobin's Q are the independent variables and controls. The model examined the impact of profitability, which has a significant positive impact on firm environmental, social, and governance voluntary disclosure. The results show that 2 out of 5 variables are significant. In other words, return on assets (ROA), and earnings per share (EPS) have a significant negative impact on a firm's ESGVD at the 1% level of significance.

The overall equation for forecasting ESGVD:

$$ESGVD_{it} = 12.35497 - 5.401831 ROA_{it} + 1.222432 ROE_{it} - 1.380872 GPM_{it} - 190.8005 EPS_{it} + 8.14286 TQ_{it} + 60.69951 FS_{it} + \varepsilon_{it}$$

5.5 Fifth Model: Panel Data Regression Results

Model 5: Investigate the impact of liquidity on firm environmental, social and governance voluntary disclosure.

Table (5): Model 5 - Impact of Liquidity on ESGVD

Model 5: Pooled OLS Dependent Variable: ESGVD				Decision
Independent variables	Coefficient	Drisc/Kraay Standard errors	P – value	
Current Ratio (CR)	-0.4113893	0.6260907	0.510	Insignificant
Asset Turnover (AT)	36.11032	9.172024	0.000	Significant
Inventory Turnover (IT)	-1.104868	0.9170333	0.216	Insignificant
Tobin's Q (TQ)	8.193907	6.349003	0.200	Insignificant
Firm Size (FS)	67.82122	70.08319	0.343	Insignificant
R – squared		0.0226		
Prob. (F – test)		0.0000		
Modified Wald test for group wise heteroscedasticity		Chi-square	P – value	
		7.10408	0.0000	
Wooldridge test for autocorrelation		F-test	P – value	
		27460.410	0.0000	
Cross sectional dependence Test			P – value	
			0.0000	

Table (٧) shows the results of panel regression for model ٥ estimated using pooled OLS, where the cross sectional dependence problem proved to exist and thus Driscoll-Kraay standard errors were used. In this model, ESGVD is the dependent variable, with current ratio (CR), asset turnover (AT), inventory turnover (IT), firm size (FS), and Tobin's Q as the independent variables and controls. The model examined the impact of liquidity on firm environmental, social, and governance voluntary disclosure. The results show that only ١ variable out of ٧ variables is significant. In other words, asset turnover (AT) is the only variable that has a significant positive impact on a firm's ESGVD at the ١% level of significance.

The overall equation for forecasting ESGVD:

$$ESGVD_{it} = 11.35798 - 0.4113893 CR_{it} + 36.11532 AT_{it} - 1.154868 IT_{it} + 8.193957 TQ_{it} + 67.82122 FS_{it} + \varepsilon_{it}$$

Table (^): Summary of the Result of the Five Panel Regression Models

Variables	Regression Research Models									
	First		Second		Third		Fourth		Fifth	
	Type	Significance	Type	Significance	Type	Significance	Type	Significance	Type	Significance
Dependent Variable: ESGVD										
FV	Independent	Significant	-	-	-	-	-	-	-	-
ROA	Independent	Significant	Independent	Significant	Independent	Significant	Independent	Significant	-	-
ROE	Independent	Insignificant	Independent	Significant	Independent	Insignificant	Independent	Insignificant	-	-
CR	Independent	Insignificant	Independent	Insignificant	Independent	Insignificant	-	-	Independent	Insignificant
AT	Independent	Significant	Independent	Insignificant	Independent	Significant	-	-	Independent	Significant
GPM	-	-	-	-	-	-	Independent	Significant	-	-
EPS	-	-	-	-	-	-	Independent	Significant	-	-
FL	-	-	Independent	Significant	-	-	-	-	-	-
DP	-	-	-	-	Independent	Significant	-	-	-	-
IT	-	-	-	-	-	-	-	-	Independent	Insignificant
TQ	Controlling	Insignificant	Controlling	Significant	Controlling	Insignificant	Controlling	Insignificant	Controlling	Insignificant
FS	Controlling	Insignificant	Controlling	Insignificant	Controlling	Insignificant	Controlling	Insignificant	Controlling	Insignificant
Overall hypothesis	Accept		Accept		Accept		Accept		Reject	

Conclusion:

This research contributes to recent ESG literature by presenting empirical evidence on the impact of firm value, financial decisions, and financial performance on environmental social governance voluntary disclosure for the period ۲۰۱۵–۲۰۲۱ by analyzing the panel data of ۲۵۲ firm-year observations using a sample of ۳۶ listed firms of the most actively traded companies in Egypt.

Voluntary disclosure of environmental, social, and governance issues has become increasingly popular among firms. The results indicate that such disclosure has been shown to positively impact firm financial decision-making by improving stakeholder trust, reducing risks, and fostering long-term sustainability. Engaging in ESG reporting can also benefit businesses by enhancing their reputation and competitiveness in the marketplace. As such, firms should consider the potential benefits of voluntary ESG disclosure when making financial decisions.

This research examines the relationship between firm financial performance and voluntary disclosure of ESG practices. Evidence suggests a positive association between firm financial performance and ESG voluntary disclosure. The findings reveal that firms with better financial performance are more likely to disclose their ESG practices voluntarily. Additionally, firms that have higher levels of environmental and social disclosure tend to have better financial performance than those that have fewer or

no disclosures. The study concludes that voluntary ESG disclosures are positively related to firm financial performance and that companies should consider disclosing ESG practices to attract more investment.

Companies that disclose ESG information are perceived as more trustworthy and transparent, resulting in increased investment, better access to capital, and an improved reputation. This, in turn, enhances shareholder value and may generate long-term economic benefits. As such, companies that prioritize ESG disclosures may enjoy a competitive advantage over those that don't, with studies indicating that investors increasingly consider ESG issues when making investment decisions.

Research results have shown that larger firms are more likely to engage in ESG (environmental, social, and governance) practices than smaller ones, due to factors such as increased resources and stakeholder pressure. Some studies have also suggested that larger firms may be better at implementing ESG practices due to their more established corporate governance structures. However, it is important to note that there are exceptions and variations within industries and regions, and that the correlation between firm size and ESG practices is not always straightforward. Tobin's Q is a financial measure that evaluates a firm's market value relative to its tangible assets. It is commonly used to assess a company's investment opportunities and potential for growth. In recent years, there has been an increased

focus on integrating environmental, social, and governance (ESG) considerations into financial analysis, and Tobin's Q is no exception. Some argue that companies with strong ESG practices may be more likely to achieve a higher Tobin's Q, as they may have a better reputation with stakeholders and be better positioned for long-term success.

Finally, firm size showed an insignificant impact on the financial performance of the firm, which implies that firm size, does not play a significant role. In other words, it is not one of the important factors that affect firms' financial performance. Similarly, Tobin's Q and firm size were not significant.

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