

ESG DISCLOSURE ON FIRM VALUE

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ABSTRACT

In allocating capital, ESG (Environmental, Social and Governance) disclosure considerations have become more relevant. ESG metrics are intended to identify additional organizational performance indicators not indicated by accounting statistics. That gives businesses a more significant opportunity to draw ESG-sensitive investment sustainably. Analysing ESG data that has been publicly disclosed will help investment firms make more informed decisions and inspire businesses to incorporate sustainability approaches faithfully in their business model. In addition, companies with high ESG results have a committed knowledge of the long-term strategic challenges in their industries. Many businesses make long-term decisions to maintain their market performance over extended periods. Through this work, the researcher aims to create an effective partnership between ESG practice and the company's profitability. The theory of stakeholders will be used as a framework to analyse a large enough sample size and correlation between the assessment of businesses and the employment level of ESG practice among companies engaged in environmental policies, social policies and governance. Traditionally, a company's primary aim is to increase shareholder capital. Therefore, from the stakeholder point of view, this is claimed that other actors, workers, suppliers, clients, societies, banks, regulators, etc., also engage in the nexus. Analysis of the relation between the competitiveness of companies and the satisfaction of diverse stakeholders with survey results shows that key stakeholders can benefit from being treated as a group of interests.

Keywords: ESG, Firm value, Company performance

INTRODUCTION

The growing attention to sustainability because of industrial pollution causing climate change has increased the firms' disclosure of environmental, social and governance (ESG) practices. Companies are subject to an increasing set of non-financial reporting requirements relating to environmental, social and governance (ESG) factors. Demand for the ethical treatment of employees, customers and other stakeholders is also growing, as is the

indignation about poorly managed companies. Evidence shows that increased transparency of firms by disclosing ESG performance and practice has led to increased market interest. This transparency has further been spurred on by the UN Sustainable Stock Exchange (SSE) initiative, directing companies to report the impact of environmental and social practices by 2030. This paper intends to establish a proper relationship between ESG practice employment and firm value. We will use stakeholder theory as a framework to analyse a large enough sample size of the economic performance of multinational companies employing environmental, social and governance policies and find a correlation between the firms' valuation and the degree of employment of ESG practices.

From the traditional point of view, the company's ultimate goal is maximizing shareholders' value. However, from a stakeholder perspective, other parties are also involved in the nexus, employees, suppliers, customers, communities, banks, regulatory agents, etc. This analysis argues that increased disclosure of ESG practices can benefit both financial investors and major stakeholders, resulting in an improved relationship between firms and their stakeholders, which can benefit all the parties involved financially.

There are five main arguments favouring this paper's point of view. First, it helps the firms improve their reputation and trust. Disclosures on ESG practice provide additional information on financial data, which differs from a standard accounting practice. There has been an increasing demand for firms for improved business reporting. There is a special emphasis on providing non-financial information that provides a better understanding of the firms' business, which helps them differ from other forms working in the same industry. An ESG report will help external stakeholders understand the company and its approach to ESG issues. Greater transparency may also increase a company's credibility and improve its image and reputation.

Second, ESG disclosure practices enhance management efficiency and employee relations, leading to improved relationships with the firm's stakeholders involved in the business. Thus, ESG disclosures can increase the transparency of information related to the firm, which may help managers further improve their control over improving internal mechanisms to comply with the regulations and serve stakeholders' interests.

Third, this helps develop a competitive advantage for better operating performance and increase the firm's visibility with different stakeholders. Consumers may prefer to buy products from a firm that discloses more information regarding the sustainability of the

products, which may lead to an increase in profits. Similarly, a supplier may prefer to supply its material to the firm with better ESG scores, thus providing financial benefits relative to its peers. This paper hypothesizes that improved ESG disclosure leads to increased firm value.

Fourth, better ESG disclosure practices will attract investors. A good ESG report can show investors how the reporting company manages its environmental and social challenges and risks. A good ESG report also indicates the companies' effort to improve corporate governance, increase transparency, and reduce financial risks. Many conventional managers also use ESG factors particularly to assess risk. The more transparent the ESG information disclosed the better investment decisions these managers make.

Lastly, ESG practices will help the firms enhance their risk management ability. It helps the firms to reduce agency costs by increasing transparency. The preparation of an ESG report can sharpen a company's ability to analyze, prepare for and manage potential risks. It helps the firms to make better decisions by having better relations with essential stakeholders. Furthermore, corporate social responsibility (CSR) policies help firms adopt a more long-term perspective by discouraging short-term opportunistic behaviour, which boosts firms' value in the long run.

To study the relationship between Firm value and ESG ranking, which includes disclosure level, this paper will randomly select 30 companies employing ESG practices from top indices like S&P or choose the companies from the list of fortune 500 companies. Data related to these companies will be secondary data that will include variables like total assets (plant, property and equipment), capital expenditure, total debts, sales growth, and cash flows from Bloomberg, Thomson Reuters, annual reports of companies or third-party websites. ESG scores or CSR scores will also be taken from these websites for comparison. ESG scores disclosure is voluntary for the organizations. Many large organizations disclose their ESG scores as it shows accountability and transparency on their behalf. Bloomberg provides ESG scores of these large firms and will be based on how these large companies disclose this information.

This research hopes to find a positive relationship between ESG practice and firm value. This consolidated data can give companies incentives to take up sustainable practices. This will ensure that business growth runs in close coordination with environmental sustainability while providing companies with a competitive edge to help them navigate the current economic scenario.

LITERATURE REVIEW

The majority of the literature has explored the relationship between the environment, social, and governance performance of a firm and its value. However, the results have been indefinite, partly because of measurement data constraints and partly because of the wrong choice of model.

Some studies examine the cost-benefit analysis of ESG disclosure practices. For example, Crifo, P., et al. (2015), in their study “The price of environmental, social and governance practice disclosure: An experiment with professional private equity investors” experiments with various start-ups and looks at the perspective of private equity investors and deduces that irresponsible ESG practices have a more substantial impact on firm value than responsible ESG practices.

Other papers have concentrated their efforts on analyzing the relationship between ESG and the firm’s accounting performance, as in Brooks, C., & Oikonomou, I. (2018). It reviews previous literature to find a positive and statistically significant but economically weak link between ESG and financial performance at the firm level.

By linking ESG performance with the cost of debt Eliwa, Y., et al. (2019) in their “ESG practices and the cost of debt: Evidence from EU countries” makes for one of the missing links that explain the positive relation between ESG performance and firm value.

Researchers like Fatemi, A., et al. (2018) in their “ESG performance and firm value: The moderating role of disclosure” find that though ESG strengths increase firm value and weaknesses decrease it, ESG disclosure decreases firm profits, just like the research mentioned above. Also, an intriguing finding of this paper is that disclosure plays a crucial moderating role by mitigating the negative effect of weaknesses and attenuating the positive effect of strengths.

Also by drawing attention to the importance of ESG disclosure, Li, Y., et al. (2018), in their “The impact of environmental, social, and governance disclosure on firm value: The role of CEO power” show a positive association between ESG disclosure level and firm value, implying that improved transparency and accountability led to enhanced stakeholder trust, which played a crucial role in boosting firm value.

Moving away from ESG and concentrating on CSR, Chen, Y. C., et al. (2018) in their “The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China” focus on the effect of the mandatory CSR disclosure rule passed in

China and provides an intriguing list of findings that all conclude that mandatory CSR disclosure alters firm behaviour for the good of the environment and society by creating positive externalities. However, it all comes at the expense of shareholders due to decreased profitability. On the lines of CSR, we see Ding, D. K., et al. (2016) in their “Does it pay to be different? Relative CSR and its impact on firm value” that only those firms who can differentiate themselves using CSR, i.e., by spending more, see an increase in their profits.

Papers like Sila, I., & Cek, K. (2017) in their “The impact of environmental, social and governance dimensions of corporate social responsibility on economic performance: Australian evidence” focus on economic indicators rather than accounting indicators. Social performance consistently led to improved economic performance; however, environmental and governance performance had a weak link to the firm’s economic performance.

In conclusion, this study will build its framework on previous and recent studies while addressing the limitation of each study and drawing unusual perspectives from these research papers to give direction to the study surrounding the relation between firm ESG disclosure and firm value.

RESEARCH METHODOLOGY AND HYPOTHESES DEVELOPMENT

To study the relationship between Firm value and ESG disclosure level, this paper will randomly select 30 companies employing ESG practices from top indices like S&P or select the companies from the list of fortune 500 companies. Data related to these companies will be secondary data that will include variables like total assets (plant, property and equipment), capital expenditure, total debts, sales growth, and cash flows from Bloomberg, Thomson Reuters, annual reports of companies or third-party websites. ESG scores or CSR scores will also be taken from these websites for comparison.

The primary independent variable in this study is the ESG disclosure level or score. Apart from the varying mandatory requirements for disclosure, ESG disclosure is primarily voluntary and is usually a show of transparency and accountability. ESG disclosure scores for big firms are readily available from Bloomberg. Halbritter and Dorfleitner (2015) have shown that the Bloomberg sub-criteria are relatively consistent within the whole measure. Therefore, this paper applies Bloomberg’s ESG score as an overall ESG measure to examine the relation between ESG disclosure and firm value.

The first hypothesis proposes that ESG disclosure is positively related to firm valuation. To support that, test the following regression model, between firm value and ESG scores, added to which have a few control variables:

$$\begin{aligned} \text{Tobin's } Q_{i,t} = & \beta_0 + \beta_1 \text{ESG}_{i,t} + \beta_2 \text{PPE}_{i,t} + \beta_3 \text{LNTA}_{i,t} + \beta_4 \text{CAPEX}_{i,t} + \beta_5 \text{LEVERAGE}_{i,t} \\ & + \beta_6 \text{GROWTH}_{i,t} + \beta_7 \text{CASH}_{i,t} + \text{YearFixedEffect}_t \\ & + \text{IndustryFixedEffect}_i + \varepsilon_{i,t} \end{aligned}$$

The variables used here follow Aggarwal, et al. (2010), who have found that these variables significantly affect firm valuation and financial performance. Here

- PPE is the ratio of property, plant and equipment combined with that of total sales,
- LNTA refers to the natural log of total assets that helps to measure firm size,
- CAPEX is calculated as the ratio of capital expenditure to total sales,
- LEVERAGE has been found by dividing the total assets from the total debts,
- GROWTH refers to the growth in sales and is measured as the percentage change in sales year on year
- CASH is the ratio of cash and total assets
- Also, the association between ESG disclosure and firm profitability has been estimated as measured by ROA.

This paper randomly picked 37 companies using ESG methodology from top US indices such as the S&P 500 to research the relationship between company value and transparency level ESG or choose companies from the list of fortune 500 firms. The project investigates how the disclosure of superior financial, social and corporate governance (ESG) impacts corporate values. The analysis found a negative relationship between the degree of disclosure for ESG and firm value and suggested that increased transparency and accountability and increased trust among stakeholders are not instrumental in raising corporate value. The proof is clear and consistent with three different behaviours linked to ESG divulgation: the ESG and the environmental and social divulgation principles.

There have been many studies regarding this relationship between ESG disclosure level and firm value, but there is no clear consensus on the nature of the relationship. Since ESG disclosure is a part of non-financial reporting, no particular standard is followed, as in financial reporting. This means ESG disclosure varies significantly, and therefore building a consensus becomes hard. Therefore, it is no surprise that earlier research documents that ESG disclosure differs across companies, regions, and countries due to the information and format

being up to the discretion of the management. In terms of key findings, there are two main streams of ESG research. One stream has found positive correlations, like Cormier and Magnan (2007), and another stream has found negative correlations, like Schuler & Cording (2006). However, when observed across countries, all of these papers failed to provide a consistent finding.

Baldini, et al. (2016) have argued that political, labour, and cultural systems, which tend to be very country-specific, significantly affect firms' ESG disclosure practices. Therefore, it is essential to understand the relationship between ESG disclosure and financial performance within country-specific contextual factors.

So, this study aims to assimilate all these earlier research with their findings to address the inconsistencies in the relationship between ESG disclosure and firm value. The previous literature lead to this research's central hypothesis: -

Hypothesis 1

There is a positive relationship between ESG disclosure level and firm value.

The available funding or affordability theory suggests a reverse causality. This theory claims that, although all firms want to play the role of good corporate citizenship, the limited resources employed by most of them mean that they cannot engage in social activities that have a significant cost attached to them. Thus, the causality that the affordability model implies can be stated as "better financial performance leads to higher ESG practice usage/disclosure" This leads us to an alternate hypothesis: -

Hypothesis 2

Higher firm values lead to better ESG disclosure.

DISCUSSION OF RESULTS

This paper collected 37 random companies from the top 100 companies in the US. All of them were given an ESG rating by Bloomberg, ranging from 11 to 98. This research collected all the other financial data such as income, assets, cash positions, etc. The regression equation looked like this;

$$Tobin's\ Q = \beta_0 + \beta_1\ ESG + \beta_2\ (Cash/Asset) + \beta_3\ (PPE/Revenue) + \beta_4\ (CAPEX/Revenue) + \beta_5\ (Debt/Asset) + \beta_6\ (Growth) + \beta_7\ (Log(Asset))$$

$$RoA = \beta_0 + \beta_1\ ESG + \beta_2\ (Cash/Asset) + \beta_3\ (PPE/Revenue) + \beta_4\ (CAPEX/Revenue) + \beta_5\ (Debt/Asset) + \beta_6\ (Growth) + \beta_7\ (Log(Asset))$$

Where Tobin’s Q and RoA were the dependent variables, they were used as a proxy to measure the value of a company. The dependent variables are ESG scores, the cash position of the company, portion of PPE in the assets, a portion of capital expenditure out of the revenue, leverage and the firm size (log of assets).

Summary of the regression of RoA vs ESG

Regression Statistics					
Multiple R	0.770122				
R Square	0.5930873				
Adjusted R Square	0.4948669				
Standard Error	0.06286				
Observations	37				
ANOVA					
	df	SS	MS	F	Significance F
Regression	7	0.167016	0.023859	6.038336	0.000210642
Residual	29	0.114589	0.003951		
Total	36	0.281605			
	Coefficients	Standard Error	t Stat	P-value	Lower 95%
Intercept	0.071723	0.060601	1.183528	0.246211	-0.052219707
ESG Scores	0.000412	0.000493	0.836085	0.4099436	-0.000596351
Cash/Asset	0.236176	0.08022	2.9441	0.006319	0.072107527
PPE/Revenue	0.004738	0.020963	0.226008	0.822781	-0.038136013
CAPEX/Revenue	0.006349	0.154946	0.040973	0.967598	-0.310551947
Debt/Asset	0.111504	0.060652	1.838418	0.076264	-0.012543618
Revenue growth	0.223897	0.139659	1.603169	0.119735	-0.061737867
Log of Assets	-0.02951	0.008722	-3.38307	0.00207	-0.047345601

Looking at the R square and the adjusted R square, about 60% variation in the company’s value (dependent variable) is explained by the independent variables. The significance is also very low. Hence this model used is correct.

Nevertheless, the *p-value* of the ESG scores of 0.41 is way higher than the .05 required for the 95% confidence. Therefore, ESG scores do not impact the *Return on Assets* of the firm.

Summary of the regression of RoA vs ESG

Regression Statistics					
Multiple R	0.835502937				
R Square	0.698065158				
Adjusted R Square	0.625184333				
Standard Error	1.592725871				
Observations	37				
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	7	170.0837396	24.29767709	9.578173226	4.01377E-06
Residual	29	73.5664953	2.5367757		
Total	36	243.6502349			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	2.456722198	1.535489694	1.59996007	0.120446807	-0.68370684
ESG Scores	0.012535634	0.012496637	1.003120653	0.324099759	-0.013022857
Cash/Asset	8.038045149	2.032605039	3.954553391	0.000452549	3.880901072
PPE/Revenue	-0.061514733	0.531152109	-0.115813779	0.908598388	-1.147842771
CAPEX/Revenue	1.869091565	3.925998114	0.476080607	0.63758415	-6.160476154
Debt/Asset	3.104503346	1.536795361	2.02011499	0.052694375	-0.038596081
Revenue growth	5.743202536	3.5386582	1.622988775	0.115414183	-1.494166108
Log of Assets	-0.904795261	0.220996126	-4.094167974	0.00030962	-1.356783089

The R square and the adjusted R square are .69 and .63, so about 60% variation in the company’s value (dependent variable) is explained by the independent variables. The significance is also very low. Hence this model used here is also correct.

Even here, the *p-value* of the ESG scores of 0.32 is higher than the .05 required for the 95% confidence. Therefore, ESG scores do not impact *Tobin’s Q* of the firm.

Company	Ro A	Tobin’s Q	ESG Scores	Cash/Asset	PPE/Revenue	CAPEX/Revenue	Debt/Asset	Revenue growth	Log of Assets
3M Co	0.10	2.70	85.19	0.05	0.32	0.05	0.77	-0.02	3.80
Accenture PLC	0.14	4.03	94.09	0.18	0.11	0.01	0.54	0.05	3.51
Alphabet Inc	0.12	3.44	81.09	0.43	0.52	0.16	0.27	0.18	5.62
American International Group Inc	0.01	0.91	27.19	0.01	0.00	0.00	0.87	0.05	6.26
Bank of America Corp	0.01	0.98	64.65	0.07	0.00	0.00	0.89	0.00	7.80
Berkshire Hathaway Inc	0.10	1.05	11.72	0.16	0.00	0.05	0.48	0.45	6.71
Biogen Inc	0.22	2.64	82.38	0.16	0.26	0.05	0.51	0.07	3.30
Booking Holdings Inc	0.23	3.50	28.00	0.34	0.09	0.02	0.72	0.04	3.06
Capital One Financial Corp	0.01	0.92	43.28	0.01	0.00	0.03	0.85	0.02	5.97
Charter Communications Inc	0.01	1.51	19.63	0.02	0.78	0.16	0.74	0.05	5.00
Cisco Systems Inc	0.11	2.26	93.86	0.31	0.05	0.02	0.60	0.05	4.69
Citigroup Inc	0.01	0.95	64.40	0.01	0.00	0.07	0.90	0.02	7.58

Colgate-Palmolive Co	0.16	5.11	48.00	0.06	0.24	0.02	0.96	0.01	2.71
Comcast Corp	0.05	1.33	63.55	0.02	0.44	0.11	0.68	0.15	5.57
Costco Wholesale Corp	0.08	3.70	18.97	0.21	0.14	0.02	0.66	0.08	3.82
Emerson Electric Co	0.11	2.11	34.21	0.07	0.20	0.03	0.60	0.06	3.02
Facebook Inc	0.14	4.10	75.12	0.41	0.63	0.21	0.24	0.27	4.89
FedEx Corp	0.01	1.27	76.24	0.04	0.44	0.08	0.67	0.06	4.00
Gilead Sciences Inc	0.09	2.20	73.58	0.39	0.20	0.04	0.63	0.01	4.12
Honeywell International Inc	0.10	2.37	55.56	0.18	0.14	0.02	0.68	-0.12	4.07
Johnson & Johnson	0.10	3.07	89.53	0.12	0.22	0.04	0.62	0.01	5.06
JPMorgan Chase & Co	0.01	1.01	79.79	0.01	0.00	0.47	0.90	0.06	7.90
Kinder Morgan Inc/DE	0.03	1.00	55.17	0.01	2.76	0.17	0.54	-0.07	4.31
Mastercard Inc	0.28	10.12	86.07	0.26	0.11	0.04	0.80	0.13	3.38
Merck & Co Inc	0.12	3.16	90.16	0.12	0.32	0.07	0.69	0.11	4.44
Microsoft Corp	0.14	5.25	98.01	0.47	0.35	0.11	0.64	0.14	5.66
Morgan Stanley	0.01	0.98	87.21	0.05	0.00	0.05	0.91	0.03	6.80
NIKE Inc	0.17	6.34	45.45	0.20	0.12	0.03	0.62	0.07	3.17
NVIDIA Corp	0.31	13.49	90.48	0.82	0.20	0.04	0.38	0.21	2.59
Oracle Corp	0.10	2.36	89.66	0.35	0.16	0.04	0.79	-0.01	4.69
PayPal Holdings Inc	0.05	3.19	78.82	0.21	0.10	0.04	0.67	0.15	3.94
Pfizer Inc	0.10	1.83	65.28	0.06	0.27	0.05	0.62	-0.04	5.12
Philip Morris International Inc	0.17	4.03	75.69	0.16	0.22	0.03	1.22	0.01	3.76
Schlumberger Ltd	### #	0.95	48.78	0.04	0.28	0.05	0.57	0.00	4.03
Union Pacific Corp	0.10	2.35	63.37	0.01	2.57	0.16	0.71	-0.05	4.12
United Parcel Service Inc	0.08	2.45	82.18	0.10	0.45	0.09	0.94	0.03	4.06
Visa Inc	0.17	5.84	90.15	0.17	0.00	0.00	0.00	0.00	0.00

The above figure shows various companies' RoA, Tobin's Q and ESG scores. From the above table, companies like Berkshire Hathaway have a low ESG score but very high RoA and Tobin's Q score.

CONCLUSION

This research selected companies which come under Fortune 500. From the above observations and results, it can be concluded that for companies that have a high valuation, the ESG scores are not the right indicator of their valuation.

For companies with a very high valuation, investors invest in them irrespective of their ESG scores. This is why we do not observe any correlation between the ESGs scores and RoA values of the selected companies.

There is a further need for a study to analyse the same for a sample of random companies taken from the top 2000 companies in the US. It will give a definite answer if we are to study the relevance of ESG scores.

REFERENCES

- Aggarwal, R., et al. (2009). Differences in governance practices between US and foreign firms: Measurement, causes, and consequences. *Review of Financial Studies*, 22(8), 3131–3169. <https://doi.org/10.1093/rfs/hhn107>
- Baldini, M., Maso, et al. (2018). Role of country and firm-level determinants in environmental, social, and governance disclosure. *Journal of Business Ethics*, 150(1), 79–98. <https://doi.org/10.1007/s10551-016-3139-1>
- Brooks, C., & Oikonomou, I. (2018). The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *The British Accounting Review*, 50(1), 1-15.
- Chen, Y. C., et al. (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. *Journal of Accounting and Economics*, 65(1), 169-190.
- Cormier, D., & Magnan, M. (2007). The revisited contribution of environmental reporting to investors' valuation of a firm's earnings: An international perspective. *Ecological Economics*, 62(3), 613-626.
- Crifo, P., et al. (2015). The price of environmental, social and governance practice disclosure: An experiment with professional private equity investors. *Journal of Corporate Finance*, 30, 168-194.
- Ding, D. K., et al. (2016). Does it pay to be different? Relative CSR and its impact on firm value. *International Review of Financial Analysis*, 47, 86-98.
- Eliwa, Y., et al. (2019). ESG practices and the cost of debt: Evidence from EU countries. *Critical Perspectives on Accounting*, 102097.
- Fatemi, A., et al. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45-64.
- Li, Y., et al. (2018). The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *The British Accounting Review*, 50(1), 60-75.

Schuler, D. A., and Cording, M. 2006. "A corporate social performance- Corporate financial performance behavioural model for consumers". *Academy of Management Review*, 31(3): 540–58.

Sila, I., & Cek, K. (2017). The impact of environmental, social and governance dimensions of corporate social responsibility on economic performance: Australian evidence. *Procedia Computer Science*, 120, 797-804.