Does ESG Reporting Impacts the Performance of Financial Companies?

Effulgence
Vol. 22, No. 2
July - December 2024
Rukmini Devi Institute of Advanced Studies
E-mail : effulgence@rdias.ac.in, Website : www.rdias.ac.in
http://effulgence.rdias.ac.in/user/default.aspx
https://dx.doi.org/10.33601/effulgence.rdias/v22/i2/2024/121-133

Prerna Sharma[1] ✉
Dr. Priyanka Banerji[2]

Abstract

Purpose

The purpose of this study is to look into how a selected group of financial companies' financial performance is affected by their "ESG" (Environmental, Social, And Governance) disclosure score.

Methodology

This work presents a panel data study based on secondary data using a sample of 40 Indian financial companies for the year 2015 - 2023. The ESG disclosure scores were taken from the Bloomberg database. The measurement of a company's performance has taken into account both ROEY and ROA. Empirical models have been developed through the use of the fixed effect method in Stata 16.

Findings

According to our research, the firm performance factors have a positive and significant impact by the firms Environmental Social Governance score. Though the Individual disclosure score of Social and governance doesn't seem to have a significant impact.

Originality

There are a smaller number of studies which have findings about the impact of ESG disclosure on the financial sector. To the best of authors knowledge there is no study on ESG performance I n the Indian financial sector. This study provides important insights about the financial sector company which includes the banks, assets management companies, trading companies, consumer finance companies providing companies listed on the BSE 500 Index.

Keywords: *ESG, Sustainability, Disclosure Practices, Firm Performance, disclosure score, financial companies, financial performance.*

1. **Research Scholar (The NorthCap University)**
2. **Assistant Professor, (The NorthCap University)**

INTRODUCTION

Environmental Social Governance is attracting importance steadily. In fact, the governing public authority has issued various circulars globally to provide directives regarding disclosures and the risk associated with sustainability and sustainable investments. The prime source of information about the companies is their financial reports. The "return on equity" and "return on assets" are one of the main indicators used by stakeholders to analyze the financial performance of a firm. Today sustainability is not just related to the poisonous emissions into the environment, but it has become a comprehensive term that covers the environmental social and governance concerns, the regulators and media has increased persuasion on the corporates to address the pillars of sustainability in a significant way. ESG is a persistent topic in various research fields but in financial sector the interest is recent. (Russo., 2016; Driessen, Marieke,2021).

The relevance of financial sector for any economy is undebatable. The Indian financial sector is no exception. Specially in the pandemic time when everything was over the internet. The financial sector has provided highly efficient and effective support. They have shown themselves adaptive to the unprecedented challenges posed by the pandemic. Despite that, the need for long term sustainability and what impact it possesses on financial performance is an important question. (Enala,2020).

The contribution of financial sector in the environmental damage is not direct and are difficult to report in comparison to other sectors. The public scrutiny has increased on the financial sector as a consequence of the growing interest in the ethical activities of the business. Financial intermediaries are known to be important in the transmission and allocation of financial resources. Therefore, the financial companies, has been conditioned with special regulation on capital adequacy (e.g., Basel III), transparency (e.g., MiFID II) & resolution mechanisms (e.g., Bank Resolution and Recovery Directive, BRRD). The current trend of valuing virtuous triple bottom lines is at odds with the numerous financial scandals and crises that have occurred recently. Consequently, the current sustainability trend might be a turning point for financial institutions to rebuild their reputation and credibility in the eyes of the general public. (M.M.; Miralles-Quirós, J.L.; Redondo Hernández, J. 2019).

The other sector emissions are reported as scope 1 and scope 2 emission while the financial sector main category of emission is scope 3. They are indirect emissions produced both upstream (from items an organization purchases) and downstream (from goods or services it sells), and they are not directly related to a company. (Pisano, U., Martinuzzi, A., & Bruckner, B. 2012).

Corporate responsibility for a company's effects on local communities is a necessary component of social sustainability, but it's a complicated matter that necessitates carefully trading of between the need to make profits and the need to develop the society and providing credit, insurance and other important who are vulnerable and in need to it. The role of financial sector has major responsibility on the social and governance front.

A brief introduction of the concept of ESG can be understood as there are three pillars associated with transparency, sustainability and philanthropy. Out of the three ESG pillars, the environment pillar is the least globally regulated, despite efforts by some organizations to give it structure and recognition. One such group is the GRI indicators. Additionally, it offers ratings that correspond to how transparent and forthcoming an environment-related disclosure is. The social pillar of a given country is greatly influenced by its labor and human rights laws. It is possible to argue that higher customer and employee satisfaction is correlated with the effect of social pillars on the performance of the company. (Hart, T. A., & Sharfman, M., 2015). The third pillar, governance, is dependent not only on external activities and regulatory frameworks but also on

preparedness. Companies should promise to take major steps, follow rules, and be transparent about their operations, quality standards, and ethical business practices. Because these businesses' reputations are crucial building blocks for gaining a client's trust. (Leatherman. S et al.,1999). The Sustainable Development Goals, which are part of the 2030 Agenda, have brought attention to the importance of sustainability.

Recently the SEBI, Securities Exchange Board of India has passed a circular making reporting on ESG related factor mandatory for 1000 listed companies on the Bombay Stock Exchange mandatory for the year 2023-2024. Which further emphasizes the need to study the importance of ESG reporting on financial performance. The study conducted in this paper tries to fill the gap as Indian financial sector has not been analyzed with respect to ESG. The next section of the paper is literature review and Research hypothesis followed by methodology, findings, implications, limitation and confusion.

LITERATURE REVIEW AND RESEARCH HYPOTHESIS

The significance of Corporate Social Performance has been extensively studied by academics. The groundbreaking research, which were conducted in the 1990s, primarily addressed the benefits of companies developing CSR disclosure and engaging in expensive CSR activities. (Campbell, J.L,2007). The literature revolves around two theory the institutional theory & the legitimacy theory. Boarder economic and social structure which consist of laws and regulations imposed by public and private regulatory bodies, business models, strategies, activities and behaviour monitoring international and non-governmental organization all shapes the organization stated by the Institutional theory. While the legitimacy theory explains the importance of reputation. Which is particularly relevant in the financial sector which has been rigorously regulated because of its social implication and also as a consequence of the crises and scandals. (DiMaggio, P.J.; Powell,1983; W.W; Doyle,2018)

With the wide adoption of ESG rating publication in the United Nation Principles of Responsible Investment (PRI) the contribution to academic research has spiked. This has made to topic to be diversified in different arenas leading to a wide heterogenous literature a brief overview of it as follows:

A research framework similar to this has recently been modified to examine ESG performance and, to a lesser extent, corporate social disclosure. Historically, the impact of some specific factors such as firm, industry, country, and time has been examined on organisation’s financial performance.

A study on CSR and earning management identifies earnings as a key parameter to judge the financial performance of the company. It highlights the importance of earnings for accounting managers. (Dechow, 1994)The study by(Gonçalves et al., 2021) is significant and adds to the body of research. First, it demonstrates that the relationship between CSR and EM is negative when economic activity is booming, and managers behave ethically through sustainable practices. But during hard times, whether they are caused by internal or external causes, businesses take advantage of CSR by disguising their EM practices under sustainable policies. For various reasons, this work is significant and adds to the body of research. The above conclusion was drawn by studying a sample of 568 firms listed on the European union from 2010 -2018. These studies support the above study. (Calegari, n.d.; Chih et al., 2008; Dechow, 1994).

The system through which ESG can impact the firm’s performance is quite complex, it is found by some studies that high degree of consumer awareness impacts the firm value through higher stock price return (Barnett, 2007). During the period of economic crisis, the sustainable companies practice more of earning management to provide explanation for expenditure, in order to cover for

earning management CSR is used as an instrument. (Cheney & McMillan, 1990; Kyaw et al., 2017).

Though the impact of ESG on firm performance measured by stock price return, return on assets taking in control the firm size and leverage are found to insignificant impact in the Indonesian economy. (Yanuar. T, 2022). A study with a large sample of 10,000 firms in the US economy claims to have a positive relationship between the Firm performance and ESG, evidencing higher firm performance support ESG disclosure (Khalfaoui. H,2022).

Consequently, given that the impact of the environmental, social, and governance pillars on the performance of the firms varies, an examination of their respective effects is required. The degree to which an industry is sensitive to each ESG pillar varies. (Min et al., 2017; Smith, 2008; Baldini et al., 2018). Within this in this manner, we also respond to (Godfrey and Hatch's 2007) request, who recommend that CSR and performance research be done by researchers' studies for specific industries rather than compiling information from industries, as shown by earlier research.

Social responsibility or CSR is generally observed as an additional cost for the management. It in turn increases the operational cost of the firm, which might have an adverse effect on the profitability of the firm. Though it's been found in the literature that companies with good ESG performance and high disclosure score tend to be rewarded by the financial companies and the investors as such companies are seen as less risky and fundamentally strong (Bacha, S., Ajina, A., & Ben Saad, S. 2021).

Baldini et al,2018 examine the effects of firm-level, country-level, and temporal variables in an international cross-industry sample in a more thorough study. The study's findings support the institutional theory by pointing out that structural country factors have a substantial impact on businesses' ESG disclosure and imply that the political, labour, and cultural systems are significant players. Furthermore, the three pillars of ESG disclosure as well as the overall disclosure have been positively and significantly impacted by all firm-specific variables pertaining to a company's visibility (Moura-Leite et al.,2012). Similarly, Buallay looks into how 235 European banks' ESG scores relate to their operational, financial, and market performance. An individual examination of the three components of "ESG" demonstrates that environmental disclosure does, in fact, have a positive correlation with the three performance measures used in the analysis. Drawing on the segregated literature we are forming the following hypothesis has been framed to analyze the impact of these indicators in the Indian Financial sector.

RESEARCH OBJECTIVE AND HYPOTHESIS

The objectives of the following study are to establish a relationship between the ESG disclosure score obtained from Bloomberg as a proxy for ESG score and the financial performance of the financial sector and to study whether Environmental social governance has a significant impact on its financial performance or not.

Keeping in view the studies of (Ali, Q., Salman, A., & Parveen, S. 2022), (Waddock and Graves, 1997) positively impacts the firm's performance as more companies increase their sustainability practices with increase in the financial performance.

To obtain the above-mentioned objective the following hypothesis is set.

H 1- The Environment disclosure score has a significant impact on the financial performance of the financial sector companies

H 2 – The Social disclosure score has a significant and positive impact on the financial performance of the financial sector companies.

H 3 – The governance disclosure score has a significant and positive impact on the financial performance of the financial sector companies.

H 4 – The combined ESG disclosure score has a significant and positive impact on the financial

performance of the financial sector companies.

RESEARCH APPROACH

1. Data and Sample

The financial and environmental social governance score data has been collected from Bloomberg database. Our data sample comprises of data for the period of 9 years dated from 2015 -2023. The author has chosen the year 2015 as the beginning year for the study as the compliance related to ESG has been announced by SEBI in 2015. (The SEBI Circular, 2015) making reporting of business responsibility reporting mandatory for listed companies. The study sample consists of all financial companies such as banks, asset management companies, consumer finance companies, trading companies, financial product distributor. In the first step our sample consisted of 84 companies marked on the BSE 500 Index categorized as per the Global Industry Classification Standard (GICS) by MCSI and Standard & Poor's in 1999 as universally reliable tool. Out of it only 40 firms had been consistently present in the BSE 500 index from 2015 to 2023. The remaining 44 firms had to be dropped. The below listed Table 1: consist the name of all the companies selected in our study.

Appendix Table 1: Consists of a list of the companies which are included in the study arranged alphabetically.

1. Axis Bank Ltd
2. Bajaj Finance Lt
3. Bajaj Finserv Lt
4. Bajaj Holdings A
5. Bank Of Baroda
6. Bank Of India
7. Bank Of Maharash
8. Canara Bank
9. Central Bk India
10. Cholamandalam In
11. City Union Bank
12. Crisil Ltd
13. Edelweiss Fin Se
14. Fed Bank Ltd
15. Hdfc Bank Ltd
16. Housing Dev Fin
17. Icici Bank Ltd
18. Idbi Bank Ltd
19. Idfc Ltd
20. Indiabulls Housi
21. Indian Bank
22. Indian Overseas
23. Indusind Bank
24. Jm Financial Ltd
25. Kotak Mahindra
26. L&t Finance Hold
27. Lic Housing Fin
28. M&m Fin Services
29. Manappuram Finan
30. Mcx India Ltd
31. Motilal Oswal
32. Muthoot Finance
33. Power Finance
34. Punjab Natl Bank
35. Rec Ltd
36. Shriram Finance
37. State Bank Ind
38. Tata Inv Corp
39. Uco Bank
40. Union Bank India

2. Variables of the study

Independent variables

Our Independent variable is Environmental disclosure Score, Social disclosure score and Governance disclosure Score. Three elements make up the ESG: social, environmental, and governance. Every component addresses a distinct set of variables. We use the environment, social, and governance disclosure scores from the Bloomberg database to evaluate each pillar independently in order to assess its impact. After that, a composite score is created as a stand-in for the ESG score. It is employed to gauge the overall effect of ESG on the business's performance. (Ortas E,2015; Yun J, 2022).

The Environment, Social, and Governance scores are added together, and the total is then divided by three to get the combined ESG score (Bloomberg).

$$\frac{(Environment\ Score + Social\ Score + Governance\ Score)}{3}$$

The ESG score are well known proxy for measuring the responsibility reporting done by the companies has being widely used in the literature. (Turturea M,2015; Amon, J., Rammerstorfer, M., & Weinmayer, K, 2021; Naffa, H., & Fain, M,2020

Dependent variable

The dependent variable of the studies are ROA (Return on Asset) and ROEY (Return on Equity). The data has been collected from Bloomberg database. Return on asset shows the capability of the firm to generate return on total assets that the firm has. Similarly return on equity reflects the efficiency of firm in providing good returns on their equity capital. These two are commonly used proxies for measuring the financial performance of a firm. (S.Son and J. Kim(2022); R.M.A. Zahid, M.K. Khan, W. Anwar et al(2022); Khalfaoui Hamdi, Hassan Guenich & Moufida Ben Saada (2022))

Control Variables

To determine the firm performance several factors are involved. Based on earlier research, we take into account a few control variables to investigate the relationship between ESG and Firm Performance, such as size, financial leverage, in order to account for the respective effects of firm growth, size, flexibility, and profitability. We have taken LOG Total Asset as a control variable for the size of the firm. As the size of the firm has found to have a significant impact on its financial performance. (Diriba, M., & Basumatary, D, 2019). The amount spent on R&D expenditure has an impact on the ESG score therefore it is controlled for the level of indebtedness is correlated to the earnings of the company as suggested Debt equity ratio has an impact on the firm performance therefore it is controlled for in the equation (P.Arora, 2005, Hamdi,2022; Ali et al 2022). For financial leverage is said to have a negative impact on firm performance hence had to be taken as control. Leverage is calculated as the debt equity ratio has been obtained by the following formula.

$$\frac{Total\ debt}{Total\ equity}$$

The leverage and financial risk of the firm has a significant impact on its financial performance. (Zahid R.M.A.; Khan M.K.; Anwar W.; Maqsood,2022).

The problem of correlated omitted variables and control variables that may affect the financial reporting and ESG disclosure of the firm. This may also lead to the problem of endogeneity has been controlled for by using year and companies fixed effects. (Gujrati D.,2005)

Results

Descriptive statistics

Table 2 represents the descriptive statistics of all the variables used in the model. The average level of difference between ESG scores is 30.11317 with a standard deviation of 11.53206 and min value is 0 as some companies has no published information regarding ESG had been while the max score is 66.8. The difference between max and min score are representative of high variance among the top financial listed companies on the Bombay Stock Exchange and constitute the S&P BSE 500 Index. Which shows on an average level the firms are reporting information related to the environment, social and governance parameters. Certain firms have a minimum value of zero, with the exception of

governance. Since the government is based on a set of rules and requirements. The "ROA" on an average is 2.36 with the wide discrepancy in min (-10.4) and max (23.59) value though no firm has a 0 value as there is always some return on the asset whether positive or negative.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROAY	356	2.361601	4.243047	-10.4	23.59
ROEY	356	9.264129	13.83037	-59.73	36.24
EnvDiscScY	340	6.077294	11.00676	0	54.73
SocDiscScY	340	18.03156	11.45243	0	58.56
GovDiscScY	340	71.54474	14.06514	27.15	92.35
ESGdisclos~e	360	30.11317	11.53206	0	66.88333
DebtEquity	360	2.39792	2.375349	0	12.61171
logTA	360	27.83433	1.818724	20.96	31.61274

Source: Authors' Calculation

Table 3: Correlation Matrix

	ROAY	ROEY	EnvDis~Y	SocDis~Y	GovDis~Y	ESGdis~e	logTA	DebtEq~y
ROAY	1.0000							
ROEY	0.5689	1.0000						
EnvDiscScY	0.0129	0.0881	1.0000					
SocDiscScY	-0.1486	-0.0470	0.5884	1.0000				
GovDiscScY	0.2619	0.4457	0.3119	0.1957	1.0000			
ESGdisclos~e	0.0771	0.2431	0.8047	0.7510	0.7164	1.0000		
logTA	-0.5905	-0.2686	0.1584	0.2562	-0.2336	0.0508	1.0000	
DebtEquity	-0.1471	0.2838	-0.1240	0.0146	0.1517	0.0336	0.1148	1.0000

source: Authors Calculations

The above table shows the correlation matrix, where no variable is showing very high correlation. All other variables in the model are having a VIF below 10. Though the Pearson correlation results are low for all the variables as shown in table 3 and hence are under acceptable level.

FINDINGS

1. Environment score and Firm performance

Taking ROA as our dependent variable and time dummies has been used to estimate an ordinary least square regression. The use of time dummies in the equation shows significant heterogeneity in the years 2017,2019,2020,2021,2022 and 2023. Its shows in these years had a significant difference in the companies selected in the sample which has a significant impact on the environmental score of the companies.

Table 4 : A comparison of OLS, Fixed Effect and Random Effect Models with Time dummies

Dependent Variable: ROA				Dependent Variable: ROEY		
	OLS	Fixed Effect	Random Effect	OLS	Fixed Effect	Random Effect
EnvDiscScY |	.0389864	-.0072671	-.0072671	.2389693	-.1100097	.0076341
LOGTA	-1.410082	.1627782	.1627782	-2.491344	3.186987	-.8241361
Debt Equity	-.1116702	.063905	.063905	2.044631	1.032335	1.790849
R Square	0.3713	0.17	0.19	0.2618	0.1959	0.2264
P value	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

After estimating the models with the above methods. The Hausman test is used to decide upon appropriate model for estimation. Whether ordinary least square method, random effect or fixed effect. The P value of Hausman test is of 0.00 hence suggesting that ordinary least square model is appropriate for the above equation showing a positive impact of environmental score

The above model also shows that there is a significant impact on Environmental score of the financial sector. Hence the hypothesis null hypothesis 1 is rejected that environmental disclosure score has a positive and significant impact on the firm performance of the financial sector.

2. Social Score and Firm performance

Table 5 illustrates the values of the three different regression models estimated taking social score as our dependent variable. The use of time dummies in the equation shows significant heterogeneity in the years 2018, 2019, 2020,2021,2022 and 2023. Its shows in these years had a significant impact on the social score of the companies. The Hausman test is used to decide whether the heterogeneity is present due to random effect or fixed effect. The P value of the Hausman test is of 0.85 hence suggesting that fixed effect model is appropriate for the above equation and same has been verified using BP test.

Table 5 : A comparison of OLS, Fixed Effect and Random Effect Models with Time dummies

Dependent Variable: ROA				Dependent Variable: ROEY		
	OLS	Fixed Effect	Random Effect	OLS	Fixed Effect	Random Effect
Soc Disc ScY	-.0014117	0.1781	.0132285	.0853199	-.1082456	-.0920018
LOGTA	-1.373477	1.022738	.180482	-2.380189	3.060402	-.6651542
Debt Equity	-.133904	-.0369065	.0597682	1.89934	1.028425	1.780524
R Square	0.3621	0.1781	0.1349	0.2322	0.1975	0.1737
P value	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000

The above model also shows that there is no significant impact of social disclosure score on the financial sector. Hence the hypothesis (H2) is accepted there is no significant has no impact on the firm performance of the financial sector company.

3. Governance Score and firm performance

Table 6 illustrates the models estimated by taking governance score as our dependent variable. The use of time dummies in the equation shows significant effects in the years for all the years present in the model. Its shows in all these years had a significant impact on the Governance score of the companies. The model shows that No Variable has a significant positive impact on the Governance score of the companies as P values are above 0.05. The Hausman test is used to decide whether the heterogeneity is present due to random effect or fixed effect. The P value of the Hausman test is of 0.9 hence suggesting that fixed effect model is appropriate for estimating the above equation.

Table 6 : A comparison of OLS, Fixed Effect and Random Effect Models with Time dummies

Dependent Variable: ROA				Dependent Variable: ROEY		
	OLS	Fixed Effect	Random Effect	OLS	Fixed Effect	Random Effect
Gov Disc ScY |	.05034	.0046218	.0077888	0.4012806	.0379775	.1796381
LOGTA	-1.259027	1.005376	.1560365	-1.351511	3.263886	-.7384073
Debt Equity	-.1966548	-.0272286	.0668925	1.408386	1.025137	1.74844
R Square	0.3837	0.1711	0.1257	0.3623	0.1935	0.1534
P value	0.0000	0.0000	0.0005	0.0000	0.0000	0.0000

The above model also shows that there is significant impact of ROEY on the combined ESG Score of the financial sector. Hence, we reject the hypothesis (H3) that states government score has positive impact on the firm performance of the financial sector.

4. Environment Social Governance Score and firm performance

Table 7 illustrates the regression models estimated taking combined ESG score as our dependent score. The use of time dummies in the equation shows significant effects in the years for the years 2019-2023 present in the models. It shows these years have had a significant impact on the ESG score of the companies. The model shows that ROEY has a significant positive impact on the ESG score of the companies. The Hausman test is used to decide whether the heterogeneity is present due to random effect or fixed effect. The P value of the Hausman test is of 0.9 hence suggesting that fixed effect model is appropriate for the above equation.

Table 7 : A comparison of OLS, Fixed Effect and Random Effect Models with Time dummies

Dependent Variable: ROA				**Dependent Variable: ROEY**		
	OLS	Fixed Effect	Random Effect	OLS	Fixed Effect	Random Effect
ESG disclosure score	.0461528	.0019062	.0023652	.2841051	.0254582	.0545318
LOGTA	-1.350681	.9640527	.1343197	-2.234256	2.877784	-1.074629
Debt Equity	-.144084	-.0224335	.0654962	1.74783	1.032335	1.772373
R Square	0.3750	0.1674	0.1244	0.2618	0.1959	0.1659
P value	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000

The above models also shows that there is significant impact of ROA and ROEY on the combined ESG Score of the financial sector. Hence, we reject the null hypothesis and accept the hypothesis 4 and state that ESG score has significant positive impact on the firm performance of the financial sector companies.

CONCLUSION

Research has been done on the effects of environmental social governance disclosures scores on the performance of the financial sector for Indian listed companies, as well as the impact of these disclosures on the firm performance as individual indicators. The findings indicate a strong correlation between firm performance and the ESG disclosure score. The results are in agreement with (Yanuar Trisnowati1 et al,2022), (Khalfaoui. H,2022). and in disagreement with (Qaiser Ali et al,2022) Gonçalves T.; Gaio C.; Ferro A (2021). Though the impact of social and government disclosure score has been found insignificant. Some studies have evidenced the relevance of governance indicator has more significance in the ESG indicator (Mercedes Rodríguez-Fernández et all 2019). This study supports a positive and significant relationship between ESG indicators and financial performance for travel and leisure industry. Therefore, we would like to conclude that ESG impacts on the firm performance has a positive relationship in case of financial sector company but the impact of ESG is industry specific and it might have different results for other industry. (Nerlinger, Martin,2020), (López-Toro, A,2021).

IMPLICATION

Our study's primary implication is that, in order to improve the overall Environmental Social Governance within the financial industry uniformly, regulators should ideally take into account the significantly different nature of the environmental,

social, and governance aspects and address them with temporary policies. Furthermore, the various incentive schemes designed to improve the sustainability of financial firms ought to take their size into consideration in some way. More practically, as time goes on, the various actions of the three ESG pillars will also directly affect SRI strategies, which seldom distinguish between issuers that are socially, environmentally, and governance-friendly.

LIMITATION AND FUTURE SCOPE

The purpose of this study was to determine the applicability of ESG indicators in the financial sector. The results showed that environmental disclosure score was significant and positive, and that the composite ESG score was positive as well, albeit the social and governance disclosure scores produced positive but insignificant results. There were just 40 Indian financial sector companies included in the sample. To get a more comprehensive picture, more research with a bigger sample size may be suggested, or a comparison with other developing or developed nations may be conducted.

BIBLIOGRAPHY

Ali, Q., Salman, A., & Parveen, S. (2022). Evaluating the effects of environmental management practices on environmental and financial performance of firms in Malaysia: the mediating role of ESG disclosure. Heliyon, 8(12).

Alareeni, B.A. and Hamdan, A. (2020), "ESG impact on performance of US S&P 500-listed firms", Corporate Governance, Vol. 20 No. 7, pp. 1409-1428. https://doi.org/10.1108/CG-06-2020-0258

Aouadi, A.; Marsat, S. Do ESG controversies matter for firm value? Evidence from international data. J. Bus. Ethics 2018, 151, 1027–1047.

Arora, P., & Dharwadkar, R. (2011). Corporate Governance and Corporate Social Responsibility (CSR): The Moderating Roles of Attainment Discrepancy and Organization Slack. Corporate Governance: An International Review, 19, 136-152.

Bacha, S., Ajina, A., & Ben Saad, S. (2021). CSR performance and the cost of debt: does audit quality matter? Corporate Governance: The International Journal of Business in Society, 21(1), 137-158.

Baldini, M.; dal Maso, L.; Liberatore, G.; Mazzi, F. Role of Country- and Firm-Level Determinants in Environmental, Social, and Governance Disclosure. J. Bus. Ethics 2018, 150, 79–98

Barnett, M.L. Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. Acad. Manag. Rev. 2007, 32, 794–816.

Barbieri, S. V., & Pellegrini, L. (2022). How much does matter ESG ratings in big pharma firms performances?. In Climate Change Adaptation, Governance and New Issues of Value: Measuring the Impact of ESG Scores on CoE and Firm Performance (pp. 185-225). Cham: Springer International Publishing.

Bhargava, A., Franzini, L., & Narendranathan, W. (1982). Serial correlation and the fixed effects model. The review of economic studies, 49(4), 533-549.

Bondy, K., Moon, J., & Matten, D. (2012). An institution of corporate social responsibility (CSR) in multi-national corporations (MNCs): Form and implications. Journal of Business Ethics, 111(2), 281–299.

Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2010). A basic introduction to fixed-effect and random-effects models for meta-analysis. Research synthesis methods, 1(2), 97-111.

Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. Strategic Management Journal, 29(12), 1325–1343

Cash, D. Sustainable finance ratings as the latest symptom of 'rating addiction'. J. Sustain. Fin. Investig. 2018, 8, 242–258.

Calegari, M.F.; Chotigeat, T.; Harjoto, M.A.

Corporate social responsibility and earnings reporting. J. Curr. Res. Glob. Bus. 2010, 13, 1–14.

Campbell, J.L. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. Acad. Manag. Rev. 2007, 32, 946–967

Carey, J., & Mordue, G. (2022). Why Industry 4.0 is not enhancing national and regional resiliency in the global automotive industry. International Journal of Automotive Technology and Management, 22(1), 52-81.

Dalal, K.K.; Thaker, N. ESG and corporate financial performance: A panel study of Indian companies. IUP J. Corp. Gov. 2019, 18, 44–59

Das, S., & Sarkar, A. (2023). Understanding the Factors Promoting Sustainability in the Indian Pharmaceutical Sector Through ESG Approach. American Journal of Theoretical and Applied Business, 9(1), 17-20.

Dewi, K., & Monalisa, M. (2016). Effect of corporate social responsibility disclosure on financial performance with audit quality as a moderating variable. Binus Business Review, 7(2), 149–155.

DiMaggio, P.J.; Powell, W.W. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. Am. Soc. Rev. 1983, 48, 147–160.

Diriba, M., & Basumatary, D. (2019). Impact of corporate governance on firm performance: Evidence from Indian leading companies. Parikalpana: KIIT Journal of Management, 15(1and2), 127-140.

Duque-Grisales, E.; Aguilera-Caracuel, J. Environmental, Social and Governance (ESG) Scores and Financial Performance of Multilatinas: Moderating Effects of Geographic International Diversification and Financial Slack. J. Bus. Ethic 2019, 1–20.

Driessen, Marieke. "Sustainable finance: An overview of ESG in the financial markets." Sustainable Finance in Europe: Corporate Governance, Financial Stability and Financial Markets (2021): 329-350.

Dyduch, J., & Krasodomska, J. (2017). Determinants of corporate social responsibility disclosure: An empirical study of Polish listed companies. Sustainability, 9(11), 1934.

Doyle, M.T. Ratings That Don't Rate: The Subjective World of ESG Ratings Agencies; ACCF: Washington, DC, USA, 2018.

Enala, A. (2020). The Incorporation of ESG Criteria and the Stock Performance of Financial Sector (Doctoral dissertation, University of Vaasa).

Hamdi, Khalfaoui & Guenichi, Hassan & Moufida, Ben. (2022). Does corporate financial performance promote ESG: Evidence from US firms. Cogent Business & Management. 9. 10.1080/23311975.2022.2154053.

Hart, T. A., & Sharfman, M. (2015). Assessing the Concurrent Validity of the Revised Kinder, Lydenberg, and Domini Corporate Social Performance Indicators. Business & Society, 54(5), 575-598. https://doi.org/10.1177/0007650312455793.

Gonçalves, T.; Gaio, C.; Ferro, A. Corporate Social Responsibility and Earnings Management: Moderating Impact of Economic Cycles and Financial Performance. Sustainability 2021, 13, 9969.

Gujarati, D. N. (2022). Basic econometrics. Prentice Hall.

Hedges, L. V. (1994). Fixed effects models. The handbook of research synthesis, 285.

Huang, C.-L., & Kung, F.-H. (2010). Drivers of environmental disclosure and stakeholder expectation: Evidence from Taiwan. Journal of Business Ethics, 96(3), 435–451.

Hong, Y.; Andersen, M.L. The relationship between corporate social responsibility and earnings management: An exploratory study. J. Bus. Ethics 2011, 104, 461–471.

Friedman, M. The Social Responsibility of Business Is to Increase Its Profits. In Corporate Ethics and Corporate Governance; Zimmerli, W.C., Holzinger, M., Richter, K., Eds.; Springer: Berlin/Heidelberg, Germany, 2007.

Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investment, 5(4),

210–233.

Liu, Y., Saleem, S., Shabbir, R., Shabbir, M. S., Irshad, A., & Khan, S. (2021). The relationship between corporate social responsibility and financial performance: A moderate role of fintech technology. Environmental Science and Pollution Research, 28(16), 20174–20187.

Miralles-Quirós, M.M.; Miralles-Quirós, J.L.; Redondo Hernández, J. ESG Performance and shareholder value creation in the banking industry: International differences. Sustainability 2019, 11, 1404.

McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. Academy of Management Journal, 31(4), 854–872

Moura-Leite, R.C.; Padgett, R.C.; Galan, J.I. Is social responsibility driven by industry or firm-specific factors? Manag. Decis. 2012, 50, 1200–1221.

Kothari, S.P.; Leone, A.J.; Wasley, C.E. Performance matched discretionary accrual measures. J. Account. Econ. 2005, 39, 163–197.

Orlitzky, M.; Schmidt, F.L.; Rynes, S.L. Corporate social and financial performance: A meta-analysis. Organ. Stud. 2003, 24, 403–441.

Paolone, F., Cucari, N., Wu, J., & Tiscini, R. (2022). How do ESG pillars impact firms' marketing performance? A configurational analysis in the pharmaceutical sector. The Journal of Business & Industrial Marketing, 37(8), 1594-1606.

Pisano, U., Martinuzzi, A., & Bruckner, B. (2012). Financial Sector and Sustainable Development (No. 27). ESDN Quarterly Report.

Tarmuji, I.; Maelah, R.; Tarmuji, N.H. The Impact of Environmental, Social and Governance Practices (ESG) on Economic Performance: Evidence from ESG Score International. J. Trade Economics Finance. 2016, 7, 67–74.

Velte, P. Does ESG performance have an impact on financial performance? Evidence from Germany. J. Glob. Responsib. 2017, 8, 169–178.

Trisnowati, Y., Achsani, N. A., Sembel, R., & Andati, T. (2022). The Effect of ESG Score, Financial Performance, and Macroeconomics on Stock Returns during the Pandemic Era in Indonesia. International Journal of Energy Economics and Policy, 12(4), 166–172.

Tiftikidou, K. (2021). Does sustainable performance pay off in pharmaceutical industry? Evidence from US firms (Master's thesis, Πανεπιστήμιο Πειραιώς).

Savio, R., D'Andrassi, E., & Ventimiglia, F. (2023). A Systematic Literature Review on ESG during the COVID-19 Pandemic. Sustainability, 15(3), 2020. MDPI AG. Retrieve.d from http://dx.doi.org/10.3390/su15032020.

Zahid, R. A., Khan, M. K., Anwar, W., & Maqsood, U. S. (2022). The role of audit quality in the ESG-corporate financial performance nexus: Empirical evidence from Western European companies. Borsa Istanbul Review, 22, S200-S212.