ESG Compliance and Its Effect on the Investment Behaviour: Evidence from the Indian Software Sector

1.   **Dr. Ana Mateen,** Associate Professor, Doctorate of Business
Administration (DBA), Business Research Programs, UniAthena Global Education, Magdalen Centre, Robert Robinson Avenue, Oxford, OX4 4GA, UK.
2.   **Dr. Priyanka Kushwah**, Associate Professor, Doctorate of
Business Administration (DBA), Business Research Programs, UniAthena Global Education, Magdalen Centre, Robert Robinson Avenue, Oxford, OX4 4GA, UK.
3.   **Dr. Navalpreet Kaur,** Associate Professor, Doctorate of
Business Administration (DBA), Business Research Programs, UniAthena Global Education, Magdaen Centre, Robert Robinson Avenue, Oxford, OX4 4GA, UK.

Abstract:
Environmental, Social, and Governance (ESG) criteria have gained prominence as vital factors influencing investment decisions, with growing recognition of their potential to drive sustainable business practices and mitigate risks. This trend is driven by a growing awareness of the material impact that ESG factors can have on long-term investment performance, as well as a growing emphasis on the importance of corporate social responsibility and environmental stewardship. This shift has had a profound impact on the behaviour of market participants, as investors increasingly demand greater transparency and accountability from corporations regarding their ESG practices. The growing importance of ESG factors has been accompanied by a significant increase in the flow of capital into ESG-linked products, with assets under management in these strategies surging in recent years. This study examines the impact of ESG ratings on investment behaviour within the software industry in India. A sample of 95 respondents was surveyed for this cross-sectional quantitative research. The study revealed that a significant majority (about 71%) of the participants hold the belief that adherence to environmental, social, and governance (ESG) standards is crucial for ensuring the sustained prosperity of a company. The results also suggest that only 33% of the respondents believe in the reliability of ESG metrics and ratings when assessing a company's ESG performance.

Keywords: ESG, Investment Behaviour, ESG Ratings, Sustainable Development, Sustainable Finance, Corporate Governance.

1.   Introduction

The implementation of the environmental, social, and governance (ESG) principle is imperative for the sustainable development of the global economy and society. The ESG principle has undergone a development process over the last twenty years since its formal proposition in 2004 (Sarangi, 2021)

The practice of ESG reporting facilitates transparency concerning an organization's performance with respect to the pillars of ESG policies and practices. There is a current discourse about the extent to which corporations should reveal information concerning their ESG profiles and undertakings. The increasing incorporation of ESG considerations into the investment management process, facilitated by ESG ratings and research, can be attributed to the contribution of ESG factors in influencing valuation and financial performance, thereby mitigating risks (Akala et al., 2022). Enterprises are currently devising models for uniform ESG revelations for sustainable performance. The World Economic Forum, in partnership with the International Business Council and several leading professional services firms including Deloitte, EY, KPMG, and PwC, has devised a set of metrics for the purpose of reporting. These metrics are categorized into four distinct pillars, namely governance, planet, people, and prosperity. The aforementioned pillars have been aligned strategically with the UN SDG's(Fulton et al., 2012).

Numerous investors acknowledge that corporations that demonstrate robust ESG performance typically demonstrate superior financial performance in an extended period. There is a positive relationship between sustainability measures taken and enhanced profits. The drivers of sustainable investment encompass the conviction that the inclusion of ESG factors can result in more precise evaluation of risks, improved allocation of capital, and heightened resilience of businesses (Friede et al., 2015).

The academic community continues to show interest in sustainable investment, as researchers and industry professionals endeavour to examine investor preferences regarding socially responsible investments that provide value for the ESG global market, which is marked by unpredictability and instability. Use of ESG directly impacts the valuation and market return (Pei-yi, 2018).

ESG investment is a type of investment that specifically considers a company's non-financial performance in terms of its impact on the environment, society, and internal governance. "The ESG investment philosophy is derived from socially responsible investing and is a branch of socially responsible investing. ESG stands for Environment (Economic), Society (Social) and Corporate Governance (Governance)" (Wang et al., 2023).

This study intends to explore whether shareholders exhibit a preference for investing in organisations who are focussing on the criteria's of ESG while operating, which in turn may lead to enhanced financial performance (Song, 2016).

1.1. Problem Statement

There is little research that focusses on comparing the Company's perception towards ESG compliance and its impact on their return for the software industry (Borovkova & Wu -July, 2020). This study intends to explore whether shareholders exhibit a preference for investing in organisations in software industries, who are focussing on the criteria's of ESG while operating, which in turn may lead to enhanced financial performance (Song, 2016). The study aims to gain an in-depth knowledge of investors' perceptions of ESG compliance and transparency, as well as the resulting influence on investing behaviour of the shareholders. It is noteworthy that the adoption of ESG reporting, and disclosure is increasingly prevalent within India.

1.2. Scope and significance of the research

This study project entails a thorough examination of the Indian software sector, with a focus on the application of ESG compliance and its potential impact on investment behaviour. It aims to measure the importance of these policies in fostering sector sustainability. Furthermore, it dives into how ESG compliance and disclosure practices influence the investment attitudes of software sector investors, offering insight into their role in moulding investment decisions. Furthermore, the study intends to investigate how the availability of ESG-related information sources affects stakeholders' investment decision-making capabilities, offering significant insights into the dynamics of responsible investing in the Indian software market.

Despite significant progress in sustainable investment research, there remain certain areas that researchers are striving to address. The existing lacuna in sustainable investment requires further research to a diverse array of subjects. This research endeavours at gaining a deeper comprehension of the potential financial implications associated with sustainable investments in comparison to their conventional counterparts. Further research is required to investigate the risk-return characteristics, enduring financial consequences, and correlation between ESG factors and investment returns (Liang & Renneboog, 2020; Wang et al., 2023).

1.3. Research Questions

Following are the key research questions of this study:

1. Is it important for the software industry in India to implement ESG Compliance & Disclosure Policies?
2. What is the impact of company's ESG-related compliance on the investor's decision?
3. What is the impact of availability of information source on the investment decision making capability?

1.4. Research Objectives

Following is the key Research Objective of the study:

1. To investigate the requirement of implementation of ESG compliance in the software industry in India.
2. To study the effect of ESG compliance on the investment behavior for the software industry in India.
3. To understand the effect of availability of information source on the investment behavior.

1. Literature Review

According to Pinchot and Christianson(Pinchot & Christianson, 2019) (Pinchot & Christianson, 2019), the field of ESG management study is concerned with the examination of the various concerns related with the incorporation of ESG parameters into the strategic decisions of organisations (Wang et al., 2023).

In order to ensure the continued growth of the world's economy and society in a sustainable manner, it is essential that the ESG paradigm be put into practise. Since its official presentation in 2004, the ESG concept has been the subject of an ongoing process of development that has spanned the past twenty years (Sarangi, 2021).

According to Friede et al. (Friede et al., 2015), more than 2,200 academic research have been conducted in an effort to explore the connection between corporate financial performance (CFP) and environmental, social, and governance (ESG) initiatives. The first academic research on the relationship between the financial success of corporations and their corporate social responsibility date back to the 1970s.

According to the findings of Borovkoba et al., ESG initiatives typically has a negative effect on stock returns in regions such as the United States and Asia, where investors place less importance on the concept of sustainability. Businesses that have a high ESG score and are located in these areas have lower levels of volatility and pose less risks (Borovkova & Wu -July, 2020).

Using a stringent panel data methodology and a comprehensive dataset that included more than 2,000 companies over 9 years, Borovkoba et al. concluded that investors in European Union (EU) and Australian firms do not experience a reduction in their returns when they invest in firms that exhibit high environmental, social, and governance (ESG) scores (Borovkova & Wu -July, 2020).

Farook (Farooq, 2015), found that there is a negative relationship between the disclosure of ESG information and company performance in situations where there is less difference in the availability of information. This unfavourable correlation develops because participants in stock markets in developing countries consider ESG activities to be costs that are not relevant.

The most important findings from Lansilahti's research (Länsilahti, 2012) are that the market exhibited a significant negative reaction in the form of stock returns within a short-term period of around five days. On the other hand, a highly positive reaction was detected in the long-term, particularly at intervals of 12, 24, and 36 months. As a consequence of this, the empirical findings of the research indicate that investors have a propensity to overreact when responding to news. The findings also imply that the initial bad response has been more significant over time, while the persistent anomalous returns from a buy-and-hold strategy have lessened. The market reaction was highly impacted by the category of news pertaining to environmental, social, or corporate governance, which had an effect on the volume as well as the direction of the response.

Finally, Borovoka et al (Borovkova & Wu -July, 2020) found that the size of a corporation was positively correlated with its ESG score. The observed phenomena can be related to the view that larger organisations hold greater financial resources to allocate towards sustainable practises, which in turn results in higher ESG ratings. This notion can be supported by the observation that larger companies have been shown to have higher environmental, social, and governance (ESG) scores.

The recent surge in sustainable investment research has led scholars and policymakers to evaluate the interconnections among the factors related to sustainable investment (Almarar&Nobanee, 2019) .

In recent times, the academic discipline of sustainable investment has gained prominence, evidenced by the emergence of pertinent issues, scholarly publications, and academic symposia that are focused on sustainable development. There has been a significant rise in the popularity of indices and financial instruments that promote sustainable investment practises in recent years (Fulton et al., 2012).

Notwithstanding the increase in attention, the incorporation of sustainable investing into capital markets is not yet a standard practise. There exist significant obstacles, such as widely acknowledged constraints associated with ESG data, that hinder the genuine expansion and integration of ESG practises into mainstream business operations (Amel-Zadeh et al., 2017).

The endeavour of procuring companies, be it through amalgamations, procurements, or alternative modes of corporate amalgamations, presents noteworthy obstacles for investing organisations. The aforementioned challenges may have significant implications for sustainable investment strategies. The following are several significant obstacles:

1-   Due Diligence on ESG Risks and Opportunities
2-   Alignment of ESG practices with Investment Decisions
3-   Alignment with Sustainable Investment Strategy
4-   Post-Acquisition Integration and Transformation
5-   Stakeholder Engagement and Communication
6-   Long-Term Value Creation

To tackle these concerns, it is imperative to adopt a comprehensive and strategic methodology towards sustainable investment. It is imperative for investment firms to take into account ESG factors during the entire acquisition process, ranging from the initial due diligence phase to the subsequent post-acquisition integration stage. Investment companies can promote sustainable business practises and mitigate risks, and increase valuation by integrating sustainability considerations into their investment decisions and aligning the acquired firms with their ESG objectives (Friede et al., 2015).

The trend of sustainable investments has been witnessing a consistent rise owing to the growing demand from investors. ESG factors are increasingly being acknowledged by institutional investors, asset managers, and individual investors as crucial elements in their investment decision-making process. The escalating demand has the potential to augment enhance transparency, and expand the accessibility of sustainable investment alternatives, consequently amplifying the possibility of competitive returns (Niu et al., 2022).

Because non-public and private organisations are not required to provide as much information to the public as publicly traded corporations are, it can be difficult to measure the ESG components of these types of businesses. Numerous academic research and business reports have demonstrated that sustainable investing can be financially profitable, despite the fact that the relationship between ESG characteristics and investment returns might vary across different market conditions, locations, and investment methods. However, it is crucial to remember that, as with any investment plan, generating competitive investment returns necessitates thorough study, analysis, and selection of high-quality sustainable investments (Talan & Sharma, 2019).

The purpose of this study is to explore the impact of ESG practices on valuation and investing behaviour. More specifically, the research will focus on the stock market reactions to ESG compliance in order to answer how ESG compliance may affect the stock returns for large firms as compared to small firms in India.

1.1   Existing Research

Adequate information on various dimensions of a firm is imperative for investors to evaluate the ESG profile and undertakings of the firm. The provision of such information is being demanded by investors, and a considerable number of companies are adhering to this request. In 2019, a significant increase was observed in the number of sustainability reports issued by S&P 500 firms, with 90% of them publishing such reports. This is in contrast to the mere 20% of firms that issued sustainability reports in 2011 (Marc S. Gerber, 2021). Nonetheless, there exists a considerable degree of heterogeneity among sustainability reports with respect to their disclosures, leading to discontentment among a significant number of investors who contend that the quantum of information being divulged is inadequate (Pinchot & Christianson, 2019).

Further research is being conducted with regards to a consolidated ESG reporting structure that incorporates essential investment grade metrics and disclosures that cover ESG concerns (Cort & Esty, 2020).

Tere is ongoing research exploring whether shareholders exhibit a preference for investing in organisations that possess a robust CSR image, which in turn may lead to enhanced financial performance (Song, 2016)(Pei-yi, 2018). Some researchers also studied how ESG disclosure can be used as a risk mitigation strategy which can lead to sustainable development (Länsilahti, 2012)(Farooq, 2015)(Aritonang, 2018).

1.2   Theoretical Framework

The stakeholder theory provides a helpful conceptual framework for understanding the dynamic relationship that exists between ESG (environmental, social, and governance) aspects and the many different stakeholders who are involved in the operational activities of a firm. In order for organisations to achieve enduring success and sustainability, it is recommended, in accordance with the stakeholder theory, that they take into careful consideration and effectively manage the concerns and interests of all relevant stakeholders. When the stakeholder theory is applied to the field of environmental, social, and governance (ESG) considerations, it becomes clear that the stakeholder theory underlines the necessity of actively involving stakeholders and effectively reacting to their ESG-related apprehensions. This becomes apparent as a result of the fact that the application of stakeholder theory to the realm of ESG considerations is examined.

1.3   Research gap

There is a lot of scholarly research done in the domain of ESG in India. This study pertains to the view of companies and investors about environmental, social, and governance (ESG) compliance. First the study investigates how the impact of ESG compliance and transparency can have an effect on the performance of those companies. After that, additional analyses will be carried out to predict the factors that determine ESG transparency (Wang et al., 2023) and how availability of ESG information could impact investment decision making capability (Friede et al., 2015)(Pei-yi, 2018).

2.   Methodology

The study adopts a quantitative, survey research strategy. The research philosophy pertaining to the examination of the influence of environmental, social, and governance (ESG) factors on the performance of company may exhibit variability contingent upon the researcher's standpoint of the research. By applying the positivism research philosophy (David Crowther & Geoff Lancaster, 2008), the researcher seeks to collect quantitative data pertaining to the perception of Environmental, Social, and Governance (ESG) factors, and company performance. Subsequently, statistical analysis will be employed to examine hypotheses and ascertain correlations or causal relationships between these variables. The primary emphasis lies on the principles of objectivity, replicability, and generalizability in relation to the findings.

2.1   Sampling

Based on the research aims, non-probability sampling is adopted. In this particular scenario, convenience sampling was employed. The utilisation of this particular sampling approach carries an increased likelihood of encountering sampling bias. The primary objective of the study is to ensure that the samples are as representative of the population as feasibly achievable. Non-probability sampling encompasses the utilisation of non-random selection techniques that are predicated on particular criteria for sample selection.

2.1.1   Population

The researcher focussed on 25 Indian software companies. There is in average 5 executives per company would be contacted for the survey, making the total population 125. Based on the population, the recommended sample size for the study was 95.

2.1.2   Sampling Method

The utilisation of simple random sampling is employed in order to draw statistical inferences pertaining to a certain population. Randomization is a powerful method for reducing the impact of any confounding variables, thereby ensuring strong internal validity.   It was ensured that the samples were highly representative of the population.

The respondents comprised of various executives of the companies in the sector who are also investors in the said companies to provide a two-way approach to the study.

2.2   Data Collection & Proposed Data Analysis

The primary data was gathered via self-administered, semi structured questionnaire that was distributed to all chosen investors and decision makers in the sample. The secondary data was used to conduct a literature review through academic papers, books, and reports, provide valuable context and existing knowledge on a research topic. Given the research objectives the research used collections methods that are quantitative in nature. Multiple companies were surveyed in order to acquire data regarding how well companies have fared financially and how it relates to the level of ESG compliance they have and how it has progressed over the years.

To achieve the research objectives, descriptive analysis, correlation and regression were conducted through Excel and SPSS.

2.3 Validity and Reliability

Reporting on the validity and reliability of measures and methods is a crucial aspect for researchers, as it enables readers to evaluate the credibility and trustworthiness of their research outcomes.

The Researcher can enhance the rigour, credibility, and trustworthiness of this research findings by considering different types of validity. This ensures that the findings accurately depict the phenomena being studied and can be applied reliably in practical situations. The following list comprises various types of validity that will be taken into considerations: predictive validity, concurrent validity, content validity, construct validity, face validity and interpretive validity.

Reliability in research refers to the consistency and accuracy of study results over time and across different conditions. A reliable study can produce consistent findings when replicated or tested under similar circumstances, enhancing confidence in the validity of its conclusions (Daniel L. Segal & Frederick L. Coolidge, 2018). Cronbach Alpha will be calculated to check the internal consistency reliability of the questionnaire.

3. Data Analysis and Findings

3.1 Introduction

This section gives an analysis of the empirical study undertaken for the current research, including the findings of the investigation. Consequently, this chapter presents the outcomes and discoveries of the survey, employing the designated statistical methodologies. This chapter provides an overview of the descriptive statistics, as well as the findings and subsequent analysis. The study hypotheses are examined through the utilisation of basic regression analysis. Prior to undertaking these analyses, it is important to verify the normalcy assumption in order to utilise parametric tests. In conclusion, a comprehensive overview of the findings and outcomes obtained from the experimental evaluation of the research hypotheses is presented.

3.2 Reliability analysis

Cronbach's alpha is a statistical metric used to assess the internal consistency of the results, indicating the degree of interrelatedness among the items as a collective entity. Scale dependability is commonly regarded as a metric. In general, an appropriate level of internal consistency is indicated by a Cronbach's alpha score of 0.7 or higher. This suggests that the items in the measure are reliably measuring the same underlying construct. Elevated values, such as 0.8 or 0.9, signify heightened levels of internal consistency. Cronbach's Alpha was calculated using excel as shown in tables (1,2&3) below.

Table1: Cronbach's alpha Calculation for ESG Knowledge and Awareness ESG

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	100.1965	94	1.06592	4.427973	2.24E-18	1.331981
Columns	6.74386	2	3.37193	14.00744	2.13E-06	3.04398
Error	45.25614	188	0.240724			
Total	152.1965	284				

Source: Author's calculations using Ms. Excel

The Cronbach Alpha formula is 1-(Error/Mean square of rows) which provides a value of 0.77. This value represents a reliable level of reliability.

Table2 : Cronbach's alpha Calculation for Compliance and Return Impact

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	95.72632	94	1.018365	3.368148	2.93E-15	1.306011

Columns	8.736842	3	2.912281	9.632099	4.5E-06	2.636616
Error	85.26316	282	0.302352			
Total	189.7263	379				

Source: Author's calculations using Ms. Excel

The Cronbach Alpha formula is 1-(Error/Mean square of rows) which provides a value of 0.70. This value represents a reliable level of reliability.

Table3: Cronbach's alpha Calculation for Information Sources and Decision Making

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	134.9179	94	1.435297	3.366569	6.74E-17	1.292732
Columns	6.096842	4	1.524211	3.575121	0.007068	2.395681
Error	160.3032	376	0.426338			
Total	301.3179	474				

Source: Author's calculations using Ms. Excel

The Cronbach Alpha formula is 1-(Error/Mean square of rows) which provides a value of 0.703. This value represents a reliable level of reliability.

The calculated Cronbach's alpha coefficient for the variables surpassing the predefined criterion. This indicates a high level of inter-item correlation and establishes the questionnaire questions as reliable measures for assessing the construct.

3.3 Demographic Analysis

Demographic data was collected through the conducted survey such as age, gender, education background and professional background. Table number 4 show the outcome of the data analysis.

Table no 4: Demographic analysis results

Demographic Analysis			
Variables	**Categories**	**Count**	**Percentage**
1. Gender:	Male	75	78.947368
	Female	20	21.052632
	Total	95	100
2. Age:	25-34	27	28.421053
	35-44	37	38.947368
	45-54	25	26.315789
	55-64	6	6.3157895
	Total	95	100
3. Educational Background:	Bachelor's Degree	31	32.631579
	Master's Degree	57	60
	Ph.D. or Doctorate	7	7.3684211
	Total	95	100
4. Professional Background:	Finance	30	31.578947
	Executive	35	36.842105
	Corporate Governance	30	31.578947
	Total	95	100

Source: Author's calculations using Ms. Excel

The demographic analysis reveals a predominantly male sample, with nearly 79% identifying as male and 21% as female. In terms of age, most respondents fall within the 35-44 years range (39%), followed by those aged 25-34 (28%) and 45-

54 (26%), while only a small portion (6%) are aged 55-64. This suggests the majority are professionals in their prime working years. Educationally, the respondents are highly qualified, with 60% holding a Master's degree, 33% possessing a Bachelor's degree, and a smaller segment (7%) having a Ph.D. or Doctorate, indicating a well-educated and specialized group. Their professional backgrounds are fairly balanced among Executives (37%), Finance professionals (32%), and those in Corporate Governance (32%), emphasizing a workforce deeply involved in business and leadership roles. Overall, the analysis suggests a group of highly educated professionals, mainly in managerial or financial roles, with a strong concentration in mid-career stages.

3.4 Correlation

Table 5: Multiple corelation analysis results

	ESG Knowledge and Awareness	*ESG Compliance and Return Impact*	*Information Sources and Decision Making*
ESG Knowledge and Awareness	1		
ESG Compliance and Return Impact	0.65	1	
Information Sources and Decision Making	0.45	0.599	1

Source: Author's calculations using Ms. Excel

Results indicate that there is a significant medium positive relationship between ESG Compliance and Return Impact and Information Sources and Decision Making, ($r = 0.599$). Furthermore, results of the multiple correlation analysis indicated that there is a significant medium positive relationship between ESG Knowledge and Awareness and Information Sources and Decision Making, ($r = 0.45$).

3.5 Hypotheses testing
3.5.1 Testing the first hypothesis: The relation between ESG compliance & disclosure on the investment perception of the investor

Table 1 shows the linear regression analysis results for the relation between ESG compliance & disclosure on the investment perception of the investor using excel.

Table 6 – Regression testing – first hypothesis

Regression Statistics								
Multiple R	0.5992657							
R Square	0.35911938							
Adjusted R Square	0.35222819							
Standard Error	0.43121799							
Observations	95							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	9.690326	9.690326	52.11283	1.4003E-10			
Residual	93	17.29325	0.185949					
Total	94	26.98358						
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1.45124258	0.394053	3.682861	0.000387	0.66873132	2.233754	0.668731	2.233754

ESG Compliance and Return Impact	0.63633165	0.088148	7.218922	1.4E-10	0.4612877	0.811376	0.461288	0.811376

Source: Excel Output

The R square value of 0.599 indicates that 59% of the values fits the regression model. In other words, 59% of variance in Information Sources and Decision Making is explained by ESG Compliance and Return. The Regression equation: y = 0.6363x + 1.4512 explains itz impact. The significance F value of is less than 0.05 which states that the model is acceptable. ESG Compliance and Return Impact significantlyInformation Sources and Decision Making, $R2 = 0.599$, $F(1,93)= 52.11$, $p < .001$; $\beta = .633$, $p < .001$, $\alpha = 1.45$, $p < .001$. Hence, null hypothesis is rejected.

3.5.2 Testing the second hypothesis: There is no significant impact of availability of information source on the investment decision making capability.

Table 7 shows the regression model for the relation between ESG compliance & disclosure on the investment perception of the investor.

Table 7 – Regression testing – second hypothesis

Regression Statistics								
Multiple R	0.450782							
R Square	0.203205							
Adjusted R Square	0.194637							
Standard Error	0.480819							
Observations	95							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	5.48319	5.48319	23.71755	4.5582E-06			
Residual	93	21.50039	0.231187					
Total	94	26.98358						
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	2.496512	0.369093	6.763902	1.17E-09	1.76356566	3.229459	1.763566	3.229459
ESG Knowledge and Awareness	0.405183	0.083199	4.870067	4.56E-06	0.23996685	0.570399	0.239967	0.570399

Source: Excel Output

The R square value of 0.45 indicates that 45% of the values fits the regression model. In other words, 45% of variance in Information Sources and Decision Making is explained ESG Knowledge and Awareness. The Regression equation: y = 0.405x + 2.49 explains itz impact. The significance F value of is less than 0.05 which states that the model is acceptable. ESG Knowledge and Awareness significantly impacts Information Sources and Decision Making, $R2 = 0.45$, $F(1,93) = 23.71$ $p < .001$; $\beta = .0.405$, $p < .001$, $\alpha = 2.49$, $p < .001$. Hence, null hypothesis is rejected.

4. Conclusion and Recommendations

The key objective of this study is to analyse the inclinations of investors with regards to socially responsible investments that offer value within the ESG global market and to investigate the effect of ESG on investment decisions. These attributes were selected in this study based on theories and prior literature. This research chose Indian software

organizations and employed descriptive statistics analysis to elucidate the data. The regression analysis was conducted using the ordinary least squares regression method. This paper provides a comprehensive summary of the entire research project, including its significant findings. It was found that the availability of environmental, social, and governance (ESG) information has a marginally negligible influence on the way investors perceive investments. It was discovered that there is only a moderate influence of corporate transparency on ESG compliance and disclosure and the investor's impression of the value of their investments.

This section elucidates the manner in which the present study successfully attained its research objectives. As delineated in the first chapter of this study, the research objectives are outlined as follows:

a. To investigate the importance of implementation of ESG compliance & disclosure policies in the software industry in India.

b. To study the impact of ESG compliance & disclosure on the investment perception of the investor for the software industry in India.

c. To understand the impact of availability of information source on the investment decision making capability.

The purpose of this research was to enhance understanding and provide deeper insights into the subject matter of ESG and its influence on investing decisions. The collected data was assessed in conjunction with all of the hypotheses. The empirical investigation of the hypotheses yielded a combination of results, as presented in table (3)

Table (8) Hypothesis Summarization

Research Objective	Null Hypotheis	Accepted/ rejected
1. To study the impact of ESG compliance & disclosure on the investment perception of the investor for the software industry in Canada.	There is no significant impact of ESG compliance & disclosure on the investment perception of the investor.	Rejected
2. To understand the impact of availability of information source on the investment decision making capability.	There is no significant impact of availability of information source on the investment decision making capability.	rejected

The research findings can be summarized as follows:

- The study revealed that a significant majority (about 71%) of the participants hold the belief that adherence to environmental, social, and governance (ESG) standards is crucial for ensuring the sustained prosperity of a company.

- In the initial hypothesis, it was determined that there exists a moderate impact of corporate transparency on ESG compliance and disclosure, as well as on the investment perception of investors. Hence, the initial theory is substantiated to some extent.

- When it comes to the second hypothesis, the results suggests that there is a lack of meaningful impact between the availability of ESG information and the perspective of investors regarding their investment decisions. Consequently, the second hypothesis lacks empirical validity. In the meantime, only 37% of respondents indicated that they would be willing to invest in a product or a firm that is well-known for good ESG compliance. These results appear to be in contradiction with one another.

- The results also suggest that only 33% of the respondents believe in the reliability of ESG metrics and ratings when assessing a company's ESG performance.

4.1 Implications of the Study

The scope of the research survey encompassed both country-specific elements and common worldwide factors. Additionally, we collected investors' perspectives on these aspects. The selected executives and decision makers as the

experts for the survey. Including institutional investors as the experts for this survey will be extremely valuable in validating our results.

Country-specific characteristics can enhance the accuracy of performance predictions for companies that have implemented Environmental, Social, and Governance (ESG) practices. Additionally, these factors can assist companies in directing their attention towards ESG concerns that are most pertinent to their individual country. The inclusion of shared global elements facilitates the uniformity of assessment criteria, hence enabling cross-border data comparisons. Companies can prioritize addressing imminent ESG implementation challenges and successfully resolving these challenges will bring advantages to the relevant stakeholders. It is obvious that additional training is required for employees, including executives, regarding ESG and its potential impact, which will help raise awareness across all stakeholders.

4.2 Future Research Directions & Recommendations

The results of this research provide evidence that corporate transparency on ESG compliance and disclosure has a moderate impact on the investment perception of investors. There are various ways in which this research could be further expanded. Initially, a limited sample size was proposed for this study, and hence increasing the size of this sample may provide additional information. Also, earlier research has shown strong relationships between ESG and investment decisions, that was found not to be true in this research. A comparison between the Indian software firms and other firms (e.g. US firms) might reveal additional information to researchers. It is also suggested to look at the company size and whether the relationship between ESG and investment decisions will impact the research findings. One could then start drawing a higher degree of generalization. As India's ESG policy is not yet mandatory for all firms, future research comparing India to other countries, where ESG disclosure is mandatory, and the impact of ESG on investment decisions might reveal more information that could help the academic community at large.

References

1. Akala, C. S., Neuhaus, T., & Leary-Govender, I. O. (2022). A Systematic Review of Sustainable Investment Approaches. *International Journal of Economics and Finance*, *14*(12), 72. https://doi.org/10.5539/ijef.v14n12p72
2. Almarar, F., & Nobanee, H. (2019). *Sustainability and Risk: A Mini-Review*. https://ssrn.com/abstract=3539058
3. Amel-Zadeh, A., Serafeim, G., & School, H. B. (2017). *Why and How Investors Use ESG Information: Evidence from a Global Survey*. https://ssrn.com/abstract=2925310Electroniccopyavailableat:https://ssrn.com/abstract=2925310Electroniccopyavailableat:https://ssrn.com/abstract=2925310
4. Aritonang, F. A. (2018). *The Influence of Environmental, Social and Governance (ESG) Disclosure on Firm Risk*.
5. Borovkova, S., & Wu -July, Y. (2020). *ESG Versus Financial Performance of Large Cap Firms: The Case of EU, U.S., Australia and South-East Asia*.
6. Cort, T., & Esty, D. (2020). ESG Standards: Looming Challenges and Pathways Forward. *Organization and Environment*, *33*(4), 491–510. https://doi.org/10.1177/1086026620945342
7. Daniel L. Segal & Frederick L. Coolidge. (2018). Reliability. In *The SAGE Encyclopedia of Lifespan Human Development*. SAGE Publications, Inc. https://doi.org/10.4135/9781506307633.n683
8. David Crowther, & Geoff Lancaster. (2008). *Research Methods* (Second Edition).
9. Farooq, O. (2015). Financial Centers And The Relationship Between ESG Disclosure And Firm Performance: Evidence From An Emerging Market. In *The Journal of Applied Business Research* (Vol. 31, Issue 4).
10. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance and Investment*, *5*(4), 210–233. https://doi.org/10.1080/20430795.2015.1118917
11. Fulton, M., Director, M., & Kahn, B. M. (2012). *Sustainable Investing Establishing Long-Term Value and Performance Climate Change Investment Research 2 Sustainable Investing*. www.Know-The-Number.com
12. Länsilahti, S. (2012). *Market reactions to Environmental, Social, and Governance (ESG)-news: Evidence from European Markets*.
13. Liang, H., & Renneboog, L. (2020). *Corporate Social Responsibility and Sustainable Finance: A Review of the Literature*. http://ssrn.com/abstract_id=3698631www.ecgi.global/content/working-papersElectroniccopyavailableat:https://ssrn.com/abstract=3698631
14. Marc S. Gerber, C. S. K. and J. G. S. A. S. M. & F. L. (2021). Havard Article on Corporate Governance. *Harvard Law School Forum on Corporate Governance*.
15. Niu, S. J., Park, B. Il, & Jung, J. S. (2022). The Effects of Digital Leadership and ESG Management on Organizational Innovation and Sustainability. *Sustainability (Switzerland)*, *14*(23). https://doi.org/10.3390/su142315639
16. Pei-yi, E. (2018). ESG transparency and firm value. In *Conference*. UK & Ireland Chapter.
17. Pinchot, A., & Christianson, G. (2019). What Investors Want from Sustainability Data. In *COMMENTARY* (Issue 1). www.wri.org/news/commentary-sustainability-data

18. Sarangi, G. K. (2021). *ADBI Working Paper Series RESURGENCE OF ESG INVESTMENTS IN INDIA: TOWARD A SUSTAINABLE ECONOMY Asian Development Bank Institute*. www.adbi.org
19. Schramade, W. (2016). *Integrating ESG into valuation models and investment decisions: the Value Driver Adjustment Approach*. http://ssrn.com/abstract=2749626
20. Song, R. (2016). *The Effect of ESG Information on Market Returns in Mergers*.
21. Talan, G., & Sharma, G. D. (2019). Doing well by doing good: A systematic review and research agenda for sustainable investment. In *Sustainability (Switzerland)* (Vol. 11, Issue 2). MDPI. https://doi.org/10.3390/su11020353
22. Wang, Z., Sun, Z., Sheng-Xian Teo, B., & Teo, X. (2023). Literature review on the impact of corporate ESG performance on corporate value. In *Journal of Innovation and Development* (Vol. 2, Issue 2).