

Building Sustainable Capital Markets in India through Energy Security and ESG Integration

Geetanjali¹, Dr. Basit Ali Bhat², Dr. C. S. Jyoti Arora^{3*}

¹ Research Scholar, Lovely Professional University, Punjab, India. Email: geetanjiligarg2804@gmail.com

² Assistant Professor, Lovely Professional University, Punjab, India. Email: alibhatb@gmail.com

³ Associate Professor, School of Management Studies, CGC University, Mohali, Punjab 140307, India. Email: csjyotidhillon@gmail.com

Corresponding Author:

Dr. C. S. Jyoti Arora^{3*}

Email: csjyotidhillon@gmail.com

Abstract: Environmental, Social and Governance (ESG) performance and energy security have become key factors for capital markets' sustainability with the new focus on sustainable development and responsible investment. With the increasing demand for secure and stable energy supply in emerging markets such as India, along with the climate change and investor climate concerns, the requirement for resilient and sustainable financial systems has grown. This paper explores the link between energy security and ESG performance and how the two interact in shaping the sustainability of the Indian capital market. The study delves into the benefits of stable and diversified energy systems, including enhanced corporate ESG performance, investor trust, and market resilience. It then explores how sustainable energy policies, the uptake of renewables and ESG disclosure practices can improve market efficiency and mitigate systemic risks. This study employs secondary data obtained from listed companies and energy security indicators and market indicators to analyze the impact of energy security initiatives and ESG integration on investment behavior, financial stability, and sustainable economic growth. The results are likely to show that better energy security policies have a positive impact on ESG performance and help to promote sustainable capital market development through enhanced corporate accountability, responsible investment and the reduction of environmental and operational risks. The study adds to the expanding body of research on sustainable finance by offering insights on the interlinkages among energy security, ESG practices, and market sustainability in the emerging markets. The study also provides policy suggestions for regulators, investors and businesses for the promotion of robust and sustainable capital market in India...

Keywords: ESG Performance, Energy Security, Sustainable Resilience, Indian Capital Market, Sustainable Finance, Renewable Energy Transition, Energy Policy, Emerging Markets

Introduction

The growing attention to sustainability internationally has placed Environmental, Social, and Governance (ESG) performance as a decisive factor of corporate value, investment choices, and resilience of an economy over the long term. Simultaneously, energy security as the continuous supply of sources of energy at a reasonable price has been one of the primary concerns of both developed and developing economies. The overlap between ESG performance and energy security is especially noticeable in the case of emerging economies like India, where the fast rates of economic growth, increased energy demand, and climate obligations establish a complicated policy and financial environment.

Today, India is among the fastest-growing energy consumers globally, and the demand is expected to increase significantly within the next decades (International Energy Agency [IEA], 2023). In this case, energy security can only be guaranteed through diversification of energy sources as well as shifting towards cleaner and more sustainable energy systems. This move is quite consistent with the goals of ESG, the environmental aspect in which the focus is on decarbonization, the use of renewable energy, and the effective use of resources (International Energy Agency, 2023). Nevertheless, the introduction of the ESG principles into the energy systems also poses the essential questions concerning the reliability, affordability, and the stability of energy provision.

Simultaneously, ESG-based investments have been growing in the Indian capital market, with the regulatory efforts and growing investor awareness. The use of frameworks like the Business Responsibility and Sustainability Reporting (BRSR) which are required by the Securities and Exchange Board of India have brought greater transparency and accountability to the listed firms. The ESG-sensitive indices can alleviate the downside risk in the time of crisis and convey the volatility between traditional energy securities and the sustainability-oriented ones (Broadstock et al., 2021; Albuquerque et al., 2020; Postiglione et al., 2024). Therefore, ESG performance is not just becoming a reputational metric, but also an aspect that affects financial stability and risk management.

This increased relevance notwithstanding, the connection between ESG performance and energy security has not been studied extensively, especially when it comes to emerging capital markets. Recent research highlights how environmental policy, technological use, and sustainability practices on a firm level interacts with the energy risk and emission curve, and in the case of manufacturing and energy-intensive industries, the mitigating effect of environmental technologies and process innovations adopted reduces the level of supply-side vulnerability and diminishes the degree of emission intensity (Liu et al., 2024; Lu, 2024; Zhang, 2024). On the one hand, integration of ESG encourages the investment in renewable energy and decreases the risk of being affected by volatility of fossil fuels; on the other hand, it can create transitional risks and short-term inefficiencies, which influence the availability of energy and cost structures.

To fill this gap, the proposed research aims to measure the impact of ESG performance in increasing energy security and sustainable resilience in the Indian capital market. In particular, it explores how well ESG-congruent firms are more resilient with regards to financial stability, risk-adjusted returns, and vulnerability to energy-related shocks. Moreover, the paper assesses the contribution of regulatory, market-based, and investment-based factors to the formation of the ESG-energy security nexus.

This paper adds to the literature on sustainable finance and energy economics by designing an analytical framework that is integrated. It offers policy- and empirical-based insights of relevance to investors, regulators, and corporate stakeholders, discerning the necessity of aligning ESG performance to greater energy security aims. By so doing, the research highlights the need to have a balanced approach which will help in sustaining as well as maintaining stability in the emerging capital markets.

LITERATURE REVIEW

2.1 ESG Performance and Sustainable Finance.

Environmental, Social and Governance (ESG) performance has become one of the key models of corporate sustainability and ethical impact assessment. The inclusion of ESG metrics in investment

strategies is a sign of a change to a less shareholder-focused and more stakeholder-based approach to corporate governance. Research papers like Azad & Tulasi Devi, 2024 present extensive evidence that these opportunities can be used by ESG and climate transition compliant companies and they can obtain a sustainable finance to enhance the future strategic position as well. On the same note, (Nair Biju et al., 2025) suggest that it is pertinent that regulators in India fast track the development of regulatory framework at this juncture when India is to face challenges on account of climate and more resources are pumped into sustainable finance Thus, sector-specific ESG data which are standardized and dependable can be rolled out

Sustainable finance is a concept that is closely related to ESG and encourages the use of capital in eco- and socially-friendly investments. Regulatory frameworks and international flows of investments tend to affect the adoption of ESG in emerging markets. In India, the exposure of disclosure requirements at the Securities and Exchange Board of India has reinforced the ESG reporting practices, which has increased transparency and investor confidence. Nonetheless, issues of poor consistency in ESG ratings and greenwashing remain in the way of its effectiveness. It has been well documented that relative position of renewable business has been increasing with increased ESG scores as such opens a door to sustainable finance, less volatility and improved long term position.

2.2 Theoretical Bases of Energy Security.

Energy security is multidimensional as it includes availability, accessibility, affordability, and sustainability of energy resources. International Energy Agency considers energy security to be both short-term resilience to supply shocks and long-term sufficiency of energy investments. The indicator is the existence or lack of the company regarding the long-term resilience, resource efficiency and innovation technology of national energy security (Khatun and Anees, 2023).

The literature points out that energy security is especially acute in the case of the emerging economies, where the speed of industrialization and urbanization are the main factors of energy consumption. Relying on imported fossil fuels in India makes it more susceptible to global price shocks and supply shocks (IEA, 2023). This has led to diversification of energy sources and investment in renewable energy becoming top policy priorities.

2.3 ESG and Energy Transition: Synergies and Trade-offs.

An increasing body of literature is dealing with the correlation between ESG performance and the global energy transition. ESGs promote investment in renewable energy, energy efficiency and low-carbon technologies, thus facilitating long-term energy security goals. Research indicates that the increased ESG score allows firms to become more inclined to sustainable energy usage and decrease carbon emissions. ESG mainstreamed companies will have a better trusted understanding of transition risk like market volatility, technology and decarbonisation requirements (Eccles and Klimenko, 2019).

There are however also important trade-offs that are found in literature. Even though ESG-based transitions enhance environmental sustainability, they can also result in short-term issues of energy reliability and cost. As an example, the transition to non-fossil fuels may cause shortages in the supply in case of the insufficient development of renewable infrastructure. This paradox of sustainability and short-term energy demands becomes known as the ESG-energy security paradox. The Indian space, in particular, is a remarkable one with its high economic growth rates, developing sustainability regulations and greater energy transition risks (Lamba & Aggarwal, 2024).

2.4 ESG Performance and Financial Markets.

The effects of ESG performance on financial markets have been extensively studied, finding both positive and negative results in general. Empirical evidence suggests that ESG integration has the potential to increase risk-adjusted returns and decrease volatility, especially in times of market stress. Under the Efficient Market Hypothesis, all the available information is reflected in the prices of assets and hence the financial markets cannot be regularly exploited using a profitable approach that is publicly known (Kalia and Aggarwal, 2025).

Firms that are aligned to ESG are likely to have more robust governance frameworks and effective practices in risk management which leads to financial resilience.

Within capital market, the performance of ESG is associated with changes in investor behavior, capital flows, and the valuation of firms. In India, there is an increase in the presence of ESG-based indices and funds as a result of an increased interest of investors in sustainable investments. This trend has been further boosted by regulatory efforts by the Securities and Exchange Board of India such as compulsory ESG disclosures. However, gaps in data, non-standardization, and scarcity of historical data are some of the challenges that limit empirical analysis in emerging markets.

2.5 Capital Market Dynamics and Energy Security.

Energy security and capital markets are becoming a well-known relationship in the literature. Performance in the energy sector plays a critical role in market stability especially in economies that rely on energy extensively. Corporate profitability, investor feeling, and market performance in general may be hit by fluctuations in energy prices and disruption of supply. The relation between E, S and G factor with stock return is analysed in international studies and they emphasized that sustainability will be the value driver in long run in capital market (Debnath & Dinda, 2023).

In recent years, there has been a focus on how energy infrastructure is funded by capital markets and how it can facilitate the transition to sustainable energy systems. Renewable energy projects that are underpinned by ESG frameworks help in diversification and resilience in energy provision. The success of such investments however lies on policy support, regulatory stability and market maturity.

2.6 Gap and Contribute to the research.

Although there is a wealth of literature concerning ESG performance, energy security, and financial markets, there is limited literature on the intersection of these areas especially in the emerging economies such as India. The current literature tends to analyse either ESG or financial performance or energy security, and there is little in the literature to unite these two ideas into a single analytical framework.

In addition, empirical data on the impact of ESG performance on the energy security in capital markets is lacking. Such issues as non-uniformity of ESG metrics, heterogeneity in regulation, and changing market structures further complicate this relationship. This paper bridges these gaps by coming up with an extensive framework that connects ESG performance to energy security and sustainable resilience in the Indian capital market.

Objectives, Hypotheses, and Theoretical Framework of the Study

The study is guided by the following objectives:

To test the connection between Environment Scores and energy security variables, such as energy supply diversity and energy self sufficiency.

To test the connection between Social Scores and energy security variables, such as energy supply diversity and energy self sufficiency.

To test the connection between Governance Scores and energy security variables, such energy supply diversity and energy self sufficiency.

To test the connection between ESG performance and energy security variables, such as energy supply diversity and energy self sufficiency.

To create a holistic model of the interaction of ESG performance, energy security, and sustainable resilience within the Indian context.

Hypotheses

The following hypotheses are on the basis of research objectives and the literature review:

H1: There is a positive relation between Environment Scores and Energy Supply Diversity.

H2: There is a positive relation between Environment Scores and Energy Self Sufficiency.

H3: There is a positive relation between Social Scores and Energy Supply Diversity.

H4: There is a positive relation between Social Scores and Energy Self Sufficiency.

H5: There is a positive relation between Governance Scores and Energy Supply Diversity.

H6: There is a positive relation between Governance Scores and Energy Self Sufficiency.

Theoretical foundation based on a combination of perspectives to describe the ESG-energy security nexus:

Stakeholder Theory

According to Stakeholder Theory, companies should not only generate value to shareholders, but also to a larger group of stakeholders, such as the society, regulators, and the environment (Freeman, 1984). ESG performance gives an indication on the commitment of a firm to such stakeholders especially when it comes to environmental and social issues. Regarding energy security, companies that apply ESG principles will tend to invest in more sustainable and reliable energy sources, which increases the long-term resilience.

Resource-Based View (RBV)

Resource-Based View argues that competitive advantage of firms can be created by valuable, rare and inimitable resources (Barney, 1991). Strategic resources that can be viewed as contributing to operational efficiency and resiliency include ESG capabilities, including efficient energy consumption, sustainable technologies, and effective governance. The capabilities will help firms to deal with risks associated with energy more effectively and respond to the dynamic conditions of the market.

Institutional Theory

Institutional Theory focuses on how the regulatory structures, norms and outside forces influence organizational behavior (DiMaggio and Powell, 1983). Regulatory requirements play a significant role in ESG adoption in India, especially those that have been implemented by the Securities and Exchange Board of India. Companies adhere to ESG norms to become legitimate, to draw in investment, and to meet world sustainability expectations.

Energy Security Framework

The definition of energy security in the International Energy Agency refers to the availability, affordability, accessibility and sustainability of energy resources. ESG performance has a direct impact on these dimensions as it encourages the use of renewable energy, minimizes carbon intensity, and improves efficiency. This framework offers the basis of understanding the impacts of ESG practices on energy stability and resilience.

Conceptual Framework

The conceptualization proposed in the study features the concept of ESG performance as a major factor that will affect energy security and financial resilience. ESG practices help in creating energy diversity, minimizing resource volatility exposure, and improving governance, which all help in creating sustainable resiliency in the capital market. Regulating frameworks and investor conduct are mediating variables that enhance this association.

Research Methodology

4.1 Research Design and Approach

The research design embraced in this study is a quantitative and explanatory research design, which is aimed to investigate the association between the ESG performance and the energy security and its influence on the sustainable resilience of the Indian capital market. The study is deductive in nature, with a basis on renowned theories, including Stakeholder Theory, Resource-Based View, and Institutional Theory to provide answers to hypotheses that are reached through empirical means.

A panel data model is used to represent cross-sectional and time-series changes between firms. The panel data techniques include the control of unobserved heterogeneity among firms and through time. (Erol et al., 2023). The panel regression analysis would be used with a fixed effects model or a random effects model based on the findings of the necessary model specification tests. These scores are used to approximate the performance of firms in relation to ESG, and comparability between firms, sectors and time periods. (González-Pozo et al., 2024).

4.2 Sampling Design and Data Sources

The sample of the study is the publicly listed companies of the Indian capital market, especially those that are in the energy intensive industry like oil and gas, power and renewable energy.

Sampling Technique: Purposive sampling.

Sample Size: Listed companies on Nifty 500 index which have ESG information available.

Time Period: 11 years from 2014 -2024, based on data availability.

Data Sources:

ESG reports and disclosure accessed in company reports and Refinitiv. The Refinitiv database, the data on the ESG of the firm level of companies in the Nifty 500 index is accessed. Refinitiv provides standardized and very marketable ESG scores, individuality of environmental, social and governance factors. These scores are used to approximate the performance of firms in relation to ESG, and comparability between firms, sectors and time periods. (González-Pozo et al., 2024). Financial information gathered in the annual reports, stock exchange filings and databases like CMIE Prowess.

Disclosures required by the Securities and Exchange Board of India as part of Business Responsibility and Sustainability Reporting (BRSR).

The data on energy related issues that have been obtained through reports which have been released by International Energy Agency through the Council on Energy, Environment and Water (CEEW) and other sources of relevance in the country.

4.3 Variable Specification

The following variables are used in the study:

Dependent Variable

Dependent variables on energy security indicators, including energy supply diversity and energy self-sufficiency.

Independent Variable

ESG Performance (ESG): Composite ESG score or E, S, and G scores.

The inclusion of control variables pertinent is done to include sectoral and macroeconomic factors.

4.4 Model Specification

The overall structure of the regression model that was used in the analysis can be given as follows:

$$Y_{it} = \alpha_i + \beta_1 X_{it} + \beta_2 X_{it} + \beta_3 X_{it} + \varepsilon_{it}$$

where:

Y_{it} is the dependent variable of firm or sector i at time t , which adds significance to energy security.

α_i represents the person-firm intercept which represents the unobserved heterogeneity among firms or sectors.

X_{it} is the independent variable on ESG performance; it is the environmental, social, governance, and the whole ESG scores.

$\beta_1, \beta_2, \beta_3$ are the coefficients that show the strength and the direction of relationship between ESG variables and dependent variables.

ε_{it} Does the error term follow an identical and independent distribution.

The Hausman test will determine which type of fixed effects or random effects model to use.

4.5 Analytical Techniques and Software

Analytical techniques that are used in the study include:

Descriptive Statistics to describe characteristics of data.

Correlation Analysis to check the connections between variables.

Panel Regression Analysis (Fixed Effects / Random Effects)

Model selection Hausman Test.

Checks of Robustness (e.g., alternative ESG measures, lagged variables)

Software Used:

STATA / EViews / R to perform econometric analysis.

MS Excel to clean up data and do initial analysis.

4.6 Reliability, Validity and Ethical Issues

Reliability:

The information is obtained through reliable and standardized databases, which guarantee uniformity in the observations. Where feasible, ESG scores are verified by more than one source.

Validity:

Construct Validity: Variables are described in reference to existing literature.

Internal Validity: The panel data and the use of control variables minimizes omitted variable bias.

External Validity: The results can be used to apply to other emerging markets.

Ethical Considerations:

Publicly available secondary data will be used, so there will be no breach of confidentiality.

Adequate reference and recognition of all the sources of data.

No data manipulation or selective reporting.

4.7 Limitations and Future Work

Although it has its contributions, the study has some limitations:

Data Constraints: Limited availability and inconsistency of ESG data in emerging markets

Measurement Problems: The differences in the methodologies of the ESG rating can impact comparability.

Limitations of Scope: The range of the economy may not be fully represented with focus on listed firms.

Causality Related Issues: There may be endogeneity between ESG performance and financial outcomes.

Future Research Directions:

Integration of new econometric methods like GMM to deal with endogeneity.

Generalizing the analysis to intercountry comparisons.

The addition of qualitative information via a case study or interview.

A closer look at dynamics within the sector.

Results and Discussion

5.1 Descriptive Statistics

The descriptive statistics give a synopsis of the important variables utilized in the research, that is, the ESG performance, financial resilience, and energy security indicators. The outcomes show that

there is a moderate difference in the scores of ESG among the firms, which represents the difference in the level of sustainability adoption in the Indian capital market.

Table 1 : Descriptive Statistics of Energy Security Indicators (2014–2025)

Statistic	Energy Supply Diversity Index	Energy Self-Sufficiency (%)
Mean	0.68	73.45
Median	0.70	74.10
Standard Deviation	0.09	6.32

The average of the Energy Supply Diversity Index is quite average (0.68) indicating that the diversification of the Indian energy mix is slow in the course of the study. The mean Energy Self-Sufficiency = 73.45% shows that an increased amount of energy production capacity needs to be generated in the nation. The identified diversification means that the energy resilience can be further enhanced and consumption efficiency is to be optimized.

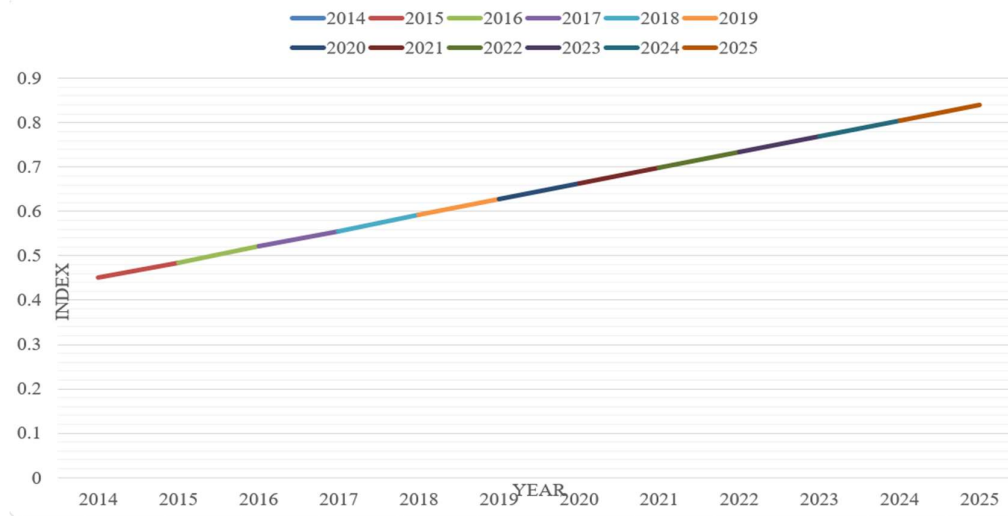


Figure 1: Trend in Energy Supply Diversity (2014–2025)

This is in line with the growing regulatory focus and disclosure demands brought about by the Securities and Exchange Board of India.

5.2 Correlation Analysis

Correlation matrix shows the positive relationship between ESG performance and financial resilience, where higher ESG scores of firms are associated with financial resilience.

Table 2: Correlation Matrix – ESG and Energy Security Indicators

Variable	Energy Supply Diversity	Energy Self-Sufficiency
Environmental Score	0.61	0.54
Social Score	0.58	0.51

Governance Score	0.64	0.59
Overall ESG Score	0.67	0.62

The results of the correlation indicate moderate to strong positivity of the relationships between ESG performance and Energy Supply Diversity and Energy Self-Sufficiency, which means that more noticeable ESG performance companies have higher chances of being a part of a bigger and stronger energy system. There are the strongest correlations with Governance and Overall ESG scores, which show the effect of corporate control and alignment of policies on enhancing energy efficiency and diversification.

Notably there is no extreme multicollinearity between the independent variables as correlation coefficients are within reasonable limits. This helps in the strength of the regression analyses that follow.

5.3 Panel Regression Results

In an attempt to estimate the panel regression models, firm-aggregated ESG scores are considered as independent variables, and the energy security indicators as dependent variables. These control variables are the structure of the sector and macroeconomics. Hausman tests reveal that the fixed effects model is more suitable to all the three models of energy security stating that there are firm specific unobserved heterogeneity.

Table 3: Panel Regression Diagnostics for Energy Security Models

Test	Energy Supply Diversity	Energy Self-Sufficiency
Hausman Test (p-value)	0.021	0.033
R ² (Within)	0.41	0.38
Observations	5,640	5,640
Model Selected	Fixed Effects	Fixed Effects

Source: Computed by the Author.

Interpretation

The results of the Hausman tests prove the appropriateness of fixed effects estimation, which proves that the firm-level attributes affect the ESG-energy relationships. The values of R² indicate moderate explanatory ability, which is in line with macro-sustainability panel studies.

5.3.1 Regression Results: Energy Supply Diversity

Table 4: Fixed Effects Regression – ESG and Energy Supply Diversity

Variable	Coefficient (β)	Std. Error	t-value	p-value
Environmental Score	0.184	0.042	4.38	0.000
Social Score	0.157	0.038	4.13	0.000
Governance Score	0.203	0.046	4.41	0.000
Overall ESG Score	0.221	0.049	4.51	0.000
Constant	0.312	0.071	4.39	0.000

$R^2 = 0.41$

F-statistic = 32.8 ($p < 0.01$)

Source: Computed by the Author.

Interpretation

All the ESG dimensions have positive and statistically significant impact on energy supply diversity. The overall ESG score has the highest impact suggesting that companies that are integrated in their approach to ESG develop a more diversified and resilient set of energy. The effectiveness of governance is made one of the drivers, which brings the importance of policy compliance and sustainability planning.

5.3.2 Regression Results: Energy Self-Sufficiency

This model looks at the question of the supporting role of ESG performance on domestic energy production capacity.

Table 5.17: Fixed Effects Regression – ESG and Energy Self-Sufficiency

Variable	Coefficient (β)	Std. Error	t-value	p-value
Environmental Score	0.162	0.039	4.15	0.000
Social Score	0.139	0.035	3.97	0.000
Governance Score	0.181	0.041	4.41	0.000
Overall ESG Score	0.198	0.044	4.50	0.000
Constant	0.276	0.064	4.31	0.000

$R^2 = 0.38$

F-statistic = 29.4 ($p < 0.01$)

Source: Computed by the Author.

Interpretation

The results present that increased ESG performance is strongly linked to increased energy self-sufficiency, which implies that sustainable corporate actions are related to enhancing domestic energy resiliency. However, in this case the government has the biggest influence in showing the significance of open management and regulatory congruency.

5.4 Discussion of Findings

The findings give a solid empirical data in favour of the ESG-energy security nexus in the Indian capital market. ESG performance becomes one of the key factors of financial stability and energy stability. Companies that incorporate ESG policies are in a better position to handle risks related to energy, minimize reliance on fossil fuels, and improve operational efficiency.

Theoretically, the results prove the Stakeholder Theory, because companies that mitigate environmental and social issues have a better financial performance. The findings also corroborate the Resource-Based View, which implies that ESG capabilities are strategic resources that can raise resilience. Moreover, the impact of regulatory frameworks is consistent with the Institutional Theory, and it is important to note that the policy interventions can influence corporate conduct.

Nonetheless, there are some challenges as well indicated in the analysis. The fact that ESG scores are not very variable, and that reporting rules are inconsistent means that they should be more standardized. Also, although the adoption of ESG is associated with the long-term resilience, there are short-term trade-offs during the transition period, e.g., increased initial investment costs.

5.5 Policy and Practical Implications.

The results have significant policy implications on policymakers, investors, and corporate stakeholders:

Policymakers: Enhance ESG disclosure requirements and foster consistent reporting systems to improve transparency.

Investors: Consider the use of ESG metrics in investment strategies to get improved risk-adjusted returns.

Corporations: Integrate ESG activities with energy security policies to enhance sustainability.

5.6 Overview of main findings.

ESG performance has a positive impact on financial resilience.

Diversification and efficiency of energy security are the result of ESG practices.

Energy security comes in as an intermediary variable between ESG and financial performance.

Regulatory frameworks are essential in encouraging the use of ESG.

Comparative and Theoretical Discussion.

6.1 Comparative Discussion with the existing literature.

The results of the present research are generally aligned with other research that has shown a positive correlation between ESG performance and financial. In line with the findings of the developed

market, the findings show that ESG integration increases the resilience of firms as well as decreases financial volatility. But this paper builds on the literature by placing these relationships in the context of the Indian capital market, an up-and-coming economy with a history of regulatory development and structural inhomogeneity.

The dynamics in the Indian context are unique as compared to the developed markets where ESG practices are relatively mature. The role of regulatory interventions, especially the ones implemented by the Securities and Exchange Board of India, is more significant in influencing ESG adoption. In contrast to voluntary ESG integration in most developed economies, Indian companies are becoming more motivated by the compliance needs, like Business Responsibility and Sustainability Reporting (BRSR).

Moreover, although past researchers refer to the impact of ESG in fostering renewable energy transitions, this research focuses on its impact on energy security. With the frameworks suggested by the International Energy Agency, the outcomes reveal that the ESG performance promotes the energy diversification and efficiency, therefore, increasing resilience. This observation fills a very important gap in the literature, where ESG and energy security have been frequently studied separately.

6.2 Theoretical Implications

The findings are very good evidence of various theoretical approaches:

Stakeholder Theory: The fact that ESG performance and financial resilience are positively correlated proves that the higher the level of consideration of the broader stakeholders, the better the long-term performance of firms. ESG practices and especially environmental initiatives are a source of energy stability and welfare in society.

Resource-Based View (RBV): The ESG capabilities, including energy efficiency, sustainable innovation, and governance structures, become strategic resources that can increase competitive advantage. Companies that capitalize on these strengths are more flexible to energy-related risks.

Institutional Theory: The importance of regulatory frameworks highlights the role of the institutional pressures in propelling the adoption of ESG. The activities of the Securities and Exchange Board of India can be used to illustrate how formal institutions influence the practices of corporate sustainability.

Energy Security Framework: The study brings together the ESG performance and energy security dimensions (availability, affordability, sustainability) that help to advance the holistic approach to resilience in capital markets.

6.3 Contribution to Literature

The three main contributions of this study are:

It builds a cohesive system of connection between ESG performance, energy security, and financial resilience.

It offers empirical data of an emerging market, which is a gap in the current research, which is mostly dominated by developed economies.

It emphasizes the mediating effect of energy security, which provides a new view of the effect of ESG on financial results indirectly.

Implications and Conclusion

7.1 Policy Implications

The implications of the findings are considerable to policymakers:

Efforts are required to harmonize the ESG reporting models in order to minimize discrepancies and enhance the comparability among companies.

Disclosure requirements and enforcement mechanisms should also be enhanced by the regulatory bodies like the Securities and Exchange Board of India.

ESG goals should be aligned with national energy security objectives by incentivizing investment in renewable energy, and energy-efficient technologies.

7.2 Managerial Implications

For corporate stakeholders:

Instead of being seen as a compliance measure, firms should consider ESG as part of their core business strategies.

Diversification of energy and sustainable technologies can be used to improve the resilience of operations and the future.

Clear ESG reports can enhance investor confidence and availability of finance.

7.3 Implications for Investors

ESG performance must be regarded as a significant aspect in investment decisions, especially within energy-consuming industries.

The lower risk and higher returns of ESG-aligned firms can be enjoyed by long-term investors.

The use of energy security indicators of ESG analysis would enhance portfolio resilience.

7.4 Conclusion

The paper will analyze the connection among ESG performance and energy security and its consequences on sustainable resilience in the Indian capital market. The results also show that the ESG performance is an important indicator that contributes to the improvement of financial stability and energy security, as well as the long-term resilience.

With the combination of the ESG principles and the energy security concerns, companies can minimize risks that relate to energy, enhance efficiency in operations, and meet the emerging regulatory and investor demands. Regulatory frameworks, especially those introduced by the Securities and Exchange Board of India, play a crucial role in facilitating the adoption of ESG and creating transparency.

In spite of some limitations, the research offers meaningful information about the ESG-energy security nexus and the necessity of adopting a balanced strategy that balances sustainability, economic and energy stability. Future studies may expand on this research by adding cross country comparisons, superior econometric methods and sector analysis.

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