The Lenses of Indian Knowledge Systems to Environmental, Social, and Governance Performance: Indian pharmaceutical company's evidence

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Abstract

Environmental, Social, and Governance (ESG) performance has emerged as a critical determinant of corporate sustainability; however, its theoretical foundations remain predominantly grounded in Western governance paradigms. This study extends the ESG financial performance literature by integrating principles from Indian Knowledge Systems (IKS) specifically Dharma (ethical duty), Lokasangraha (collective welfare), and alignment with Prakriti (ecological balance) as culturally embedded governance mechanisms that may influence firm outcomes.

Using panel data from 77 Indian pharmaceutical firms over the period 2007–2023, ESG scores are obtained from Refinitiv ESG and financial data from CMIE ProwessIQ. The study employs firm and year fixed-effects panel regressions with firm-level controls to address unobserved heterogeneity.

The findings reveal a positive and statistically significant association between aggregate ESG performance and firm profitability, measured by Return on Assets (ROA). Component-wise analysis indicates that governance exhibits the strongest relationship with financial performance.

The study contributes to the literature in three ways: first, by offering a culturally grounded theoretical extension to ESG-performance research; second, by providing long-horizon emerging market evidence from a strategically important and highly regulated industry; and third, by highlighting the differential financial relevance of ESG components. The results offer implications for corporate strategy, investors, and policymakers seeking to align sustainability with financial performance in emerging markets.

Keywords: Indian Knowledge Systems (IKS); Environmental, Social and Governance (ESG); Corporate Sustainability; Firm Performance

1.Introduction

Over the last couple of years, the idea of ESG performance scores is considered among the key pillars of sustainability, ethical responsibility, and value creation in the long run for corporates. Regulators, investors as well as stakeholders are increasingly appreciating the fact that financial performance is not sufficient to describe the overall contribution of a firm to the society. Rather than that, companies are supposed to trade-off between profitability and environmental care, social accountability, and open governance practices. This change indicates a deeper move towards models that are shareholder-centric to those that are stakeholder-centric in corporate operation [5][6].

The pharmaceutical industry is a crucial area of ESG performance, as it is related to human health, ethical responsibility, and social welfare. The pharmaceutical companies are at the nexus of scientific advancement, human health and economic prosperity and hence their sustainability practices are of paramount importance. Environmental practices have an impact on the ecological safety and waste control, social practices on accessibility and affordability of medicines and governance mechanisms on transparency, ethical behaviour, and stakeholder trust. The implications of ESG performance amongst pharmaceutical firms, can be cited both at the firm level profitability and at wellbeing in the society.

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The applicability of ESG performance is even deeper in the Indian context when the subject is viewed through the prism of Indian Knowledge Systems (IKS). The Indian philosophical traditions have traditionally paid much attention to such conceptual values of economic activity like ethical governance, sustainability, and societal welfare. The ancient writings of the Arthashastra, Bhagavad Gita, Vedic literature, and others give an emphasis on the concept of Dharma meaning in ethical duty, moral responsibility and upright conduct. The Arthashastra highlights the need to adopt ethical governance, accountability and welfare of citizens as the pillars of sustainable economic systems [11]. Likewise, the Bhagavad Gita makes an appeal of responsible action (Karma Yoga) and self-serving which further supports the notion that the success of organizations must be geared towards the good of the society [18].

These philosophical principles are very close to the current ESG models. The concepts of harmony between humans and nature (Prakriti) can be reflected in environmental sustainability, the idea of welfare of all (Sarvodaya) is related to social responsibility, and ethical leadership and transparency, which is a focus of the ancient Indian governance systems, can be associated with governance. In this way, the performance of ESG can be realized as a contemporary institutional expression of the old ethical and sustainability values incorporated in Indian Knowledge Systems.

Even though the role of ESG performance is increasingly gaining importance, the empirical studies on its effects on financial performance are not convincing, especially in the emerging economies like India. According to some studies, the robustness of ESG results in greater financial performance through better reputation, efficiency, and increased investor confidence [6][21], whereas other researchers report no or weak effects. Moreover, the existing literature is mostly concentrated on developed markets, and the number of studies that concentrate on ESG performance in the Indian pharmaceutical companies is slightly fewer, and similarly fewer works are based on ethical and philosophical point of view based on Indian Knowledge Systems.

The aim of the study is to bridge gap by analysing how the performance of ESG affects the financial performance, as proxied by Return on Assets (ROA), in Indian pharmaceutical companies. Also, Indian Knowledge Systems have been incorporated in the study as a theoretical framework to generate greater understanding on the ethical and sustainability elements of corporate performance.

In particular, the research questions that are examined in the study are as follows:

- How ESG performance affects the financial performance of pharmaceutical firms of Indian origin?
- What is the relationship of ESG dimensions with firms financial performance?
- How insights from the Indian Knowledge Systems can contribute towards theoretical understanding of ESG-based corporate sustainability?

This study serves three significant purposes by answering these questions. To begin with, it offers empirical data to connect between ESG performance and profitability in the Indian pharmaceutical companies. Second, it builds upon the ESG literature by proposing the concept of Indian Knowledge Systems as a theoretical framework and providing a culturally based vision of sustainability and governance. Third, it adds to the policy and managerial discussions by emphasizing the relevance of ethical governance and social practices of sustainability to the long-term corporate success.

The findings of the present study suggest usefulness to the corporate managers, investors and policymakers interested in the development of sustainable and ethical business activities that should be consistent with the contemporary ESG principles as well as with the traditional Indian philosophical backgrounds.

2. Review of Literature and Hypothesis Development

2.1 ESG Performance and Financial Performance

ESG performance is now an essential model on how corporate sustainability and creating long-term value are assessed. ESG incorporates non-financial metrics that display the level of responsibility of a firm towards the environment, social activities, and the quality of its governance. All these dimensions have an overall impact on the reputation of the firm, its operational efficiency, risk management, and investor confidence, which subsequently affects financial performance [15][6].

The theoretical explanation of the linking between the ESG performance and financial results stems out of the stakeholder theory. Stakeholder theory suggests that companies that take the needs of various stakeholders such as the customers, employees, regulators and the society in consideration perform better in the long-term than companies that are only concerned with shareholders only [5]. The ESG practices result in increased corporate legitimacy, conflicts as well as the stakeholder trust that helps to improve the financial performance.

ESG performance exhibits a positive relationship with financial performance is mostly supported by empirical evidence. In a meta-analysis of more than 2,000 empirical studies, [6]conclude that about 90 percent of the studies reported a non-negative relationship between ESG and financial performance, most of which reported positive relationship. In the same vein, [21] discovered that ESG performance has a positive impact on the profitability of firms and their market value. ESG practices offers benefits that includes the improvement of the operational efficiency, cost reduction of environmental compliance, corporate reputation, as well as investor trust which lead to better financial performance.

Considering the emergent economies, the ESG performance becomes more important as the regulation process advances, the number of investors also changes toward more thorough scrutiny, and the focus on sustainable business activities is gaining more importance. The implementation of ESGs is also increasingly becoming common in Indian companies, especially pharmaceutical companies, to boost their competitiveness and appeal to international investments.

Based on the above mentioned theoretical and empirical premises, the following hypothesis is formulated:

H1: ESG performance positively influences financial performance of Indian pharmaceutical companies significantly.

2.2 Environmental Performance and Financial Performances

Environmental performance component of ESG Performance score indicates the activities of a firm to minimize environmental effects by efficient use of resources, waste management, pollution control, and sustainable use of resources in production. Companies that embrace environmentally friendly operations usually experience efficiency in their operations, lower risks of law, and improved reputations of the company [1]

The pharmaceutical industry is one of the fields in which environmental sustainability is being given special consideration due to the chemical waste, chemical emissions, and resource-consuming production processes associated with the manufacturing process. Companies with responsible environmental practices can lower their compliance expenses, enhance productivity, and increase the trust of the stakeholders.

Empirical research exhibits a positive correlation between environmental performance and financial performance. [12] discovered that companies that have good environmental performance have better financial performance because of high quality operations and low risks involved in the environment. Equally, [13] found that the environmental performance has a positive effect on the firm profitability and competitive edge.

According to the Indian Knowledge Systems, environmental sustainability, as far as the harmony between the human and nature (Prakriti) is concerned. There are ancient Indian traditions of philosophy that focus on the ecological balance and reasonable use of resources. The Atharva Veda emphasizes the need to conserve the environment, which indicates the early realization of the values of environmental sustainability[2].

H2: There is a positive influence of environmental performance on financial performance in Indian pharmaceutical companies, which is substantial.

2.3 Social Performance and Financial Performance.

Social performance is an aspect that describes how a firm is concerned with ethical practices at the labour level, employee & community welfare and responsibility towards the end user. When firms invest in social responsibility programmes, The satisfaction & loyalty of employee and customer increases which further enhances the corporate reputation and long-term lead to better financial performance.

According to the stakeholder theory, companies that perform their social responsibilities can establish better relationships with their stakeholders leading to increased productivity, fewer cases of employees turning over, and better organizational performance [8]. Social responsibility programs also enhance the image of the brand and customer confidence, which has a positive effect on financial results.

Social performance has a positive influence on the financial performance, and this is supported by empirical evidence.[22] discovered that socially responsible companies have greater profits because of better relationship with stakeholders.[13] established that social performance has a positive impact on the performance of firms by enhancing corporate image and consumer loyalty.

Indian Knowledge Systems have a great emphasis on the social responsibility based on the idea of Sarvodaya, meaning the good of all. This value emphasizes the need to have inclusive development and social prosperity [20]. According to the ancient Indian systems of governance, they stressed on economic activities contributing to the prosperity of the society and this is like the current principles of social responsibility.

Based on this, the hypothesis stated below is formulated:

H3: A significant positive relationship exists between social performance and financial performance with Indian pharmaceutical firms.

2.4 Corporate Governance Performance and Financial Performance

The governance performance scores of corporates represent the quality of corporate governance practices which effects board effectiveness, transparent, ethical and accountable leadership. The quality of decision-making is improved, and the agency conflicts are minimized with the help of strong practices of governance, which, in turn, contribute positively to financial performance [3].

Corporate governance is the key to transparency and accountability in the organization. Companies that possess good governance structures enjoy reduced risk, better performance, and increased confidence to the investors.

A positive correlation is found between governance score, and financial performance is supported by empirical literature [7] discovered that the superior financial performance and high firm valuation of firms with strong governance practices occur. On the same note, [10] also found that the level of governance has a significant role in the profitability of firms.

Indian Knowledge Systems are based on ethical governance in the form of Dharma that is moral duty and righteous action. The book Arthashastra emphasizes the essence of ethical leadership, accountability, and transparency in the governance systems [11]. These principles are quite consistent with the contemporary corporate governance models [14]

According to such theoretical and empirical premises, the following hypothesis is formulated.

H4: A positive relationship exists between governance performance score and financial performance of the Indian pharmaceutical companies.

2.5 Indian Knowledge Systems as Theoretical Base of ESG.

Indian Knowledge Systems offer an ethical and philosophical framework in a broad manner that can be closely related to the contemporary ESG principles. Sustainability, ethical governance and welfare of society are vital elements of the economy highlighted in ancient texts of India.

The principle of Dharma stresses on ethical accountability and responsibility, which coincides with principles of governance. Sarvodaya concept focuses on socially responsible and inclusive development, which is consistent with social responsibility. Environmental sustainability is manifested in the principle of harmony with nature.

The philosophical principles are a good theoretical basis of comprehending the ESG performance in the ethical and sustainability context. The ESG practices can thus be considered as new institutional formations of old Indian sustainability.

Therefore, Indian Knowledge Systems can be employed into ESG research offering a culturally grounded and theoretically sound understanding of sustainable corporate performance[19].

3. Data, Variables and Empirical Model

3.1 Research Design

This study has a quantitative research design in order to determine the relationship between ESG performance scores and financial performance of Indian pharmaceutical companies. The paper utilizes panel data regression model to assess the effects of ESG performance and its constituent elements on the financial performance of the firms.

This type of analysis is especially appropriate to this study is panel data analysis This approach, leveraging panel data, mitigates concerns regarding endogeneity and reverse causality by providing more robust and accurate estimations of relationships between variables over time [23]. Furthermore, panel data analysis inherently addresses unobserved time-invariant heterogeneity, thereby enhancing the efficiency of estimators and increasing the validity and reliability of research findings [23].

The method is more effective in estimating and gives more valid and stronger outcomes as opposed to the cross-sectional analysis [23]

It is a study that combines both the ESG performance indicators and financial performance indicators to determine whether sustainable corporate practices are associated with firm profitability.

3.2 Data Description and Sample Construction

Our sample comprises of Indian pharmaceutical companies that are listed at the Indian Stock exchanges (National Stock Exchange; NSE and Bombay Stock Exchange; BSE). The pharmaceutical industry was chosen owing to the high level of environmental, social and governance by virtue of its regulatory intensity, environmental effects and its relevance to society.

In the research, secondary data on credible financial and ESG databases are utilized. It was based on the ESG rating databases and company sustainability disclosures to obtain ESG scores and their personal determinants (Environmental Score, Social Score, Governance Score).

The data on the financial performance were obtained through company annual reports and financial databases.

The analysis includes the years 2014 to 2023, which will offer a balanced panel data set to reflect recent ESG trends and financial performance trends.

The last sample consists of several pharmaceutical companies followed during several years, which guarantees the presence of enough number of observations to run a panel regression analysis.

3.3 Variables and Measurement

3.3.1 Dependent Variable: financial performance.

Return on Assets (ROA) is used as a proxy to measure financial performance based on how it makes a profit out of its total assets. ROA is an effective tool in ESG research because it is a valid measure of profitability and efficiency of firm operations [21].

ROA is calculated as:

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

Higher ROA indicates better financial performance.

3.3.2 Independent Variables: ESG Performance.

The primary independent variable is ESG performance, and it is determined by ESG scores and their components.

The paper looks at the performance of ESG based on aggregate score and the individual ESG score:

- Environmental pillar Score (ENV)
- Social Pillar Score (SPC)
- Governance pillar Score (GOV)

These scores indicate good performance of firms on environmental sustainability, social responsibility and quality of governance.

The high ESG scores show the improved sustainability performance.

3.3.3 Control Variables

To achieve strong outcomes, the regression model contained firm-level control variables.

These include:

Firm Size (Size):

Expressed in natural logarithm of total assets. The bigger companies might be more resourceful and high performing financially.

Leverage (LEV): Debt to total asset ratio measured as the total debt/ total assets, indicates the component of debt present in total asset, increase in leverage can impact on the firm risk and financial performance.

The control variables are used to isolate the impact of ESG performance on financial performance.

3.4 Model Specification

The estimation of panel regression models was done to investigate how ESG performance affects financial performance.

Aggregate ESG Model

$$ROA_{it} = \alpha + \beta_1 ESG_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \epsilon_{it}$$

Where:

ROA = Financial performance

ESG = ESG performance score

Size = natural log of total asset

LEV = total debt/ total asset

ε = Error term

α= constant

ESG Component Model

To examine the individual impact of ESG components, the following model was estimated:

$$ROA_{it} = \alpha + \beta_1 ENV_{it} + \beta_2 SPC + \beta_3 GOV_{it} + \beta_4 SIZE_{it} + \beta_5 LEV_{it} + \epsilon_{it}$$

Where:

ENV = Environmental Pillar score

SOC = Social Pillar score

GOV = Governance Pillar score

This model allows examination of which ESG component contributes most to financial performance.

3.5 Data Analysis Technique

The relationship between the ESG performance and financial performance was estimated by a panel regression analysis.

R statistical software was used to analyse the data; it offers the strong econometric devices to analyse the panel data.

The analysis was done in the following steps:

1. Descriptive statistics to summarize the variables in ESG and financial performance.
2. Correlation test to check the correlation between variables.
3. Panel Regression analysis to determine relationship between ESG-financial performance.
4. Control variables analysis of robustness.

The panel regression is more accurate in estimating because it considers both the heterogeneity of the firms and the variation of time.

3.6 Integrity with Indian Knowledge Systems Framework.

The paper combines the ESG performance and the Indian Knowledge Systems (IKS) which priorities are on sustainability, ethical governance, and social responsibility.

Ethical governance and responsible leadership, which are the focus of the concept of Dharma, conform to governance performance.

Environmental sustainability is in line with the idea of harmonious living with nature.

The social responsibility is aligned with the Sarvodaya principle which is concerned with the welfare of society.

Therefore, ESG performance is the contemporary institutional implementation of Indian Knowledge Systems in the corporate governance and sustainability.

3.7 Conceptual Framework

According to the given theories such as; stakeholder theory, cost theory, contingency theories etc., and the Indian Knowledge Systems, the ESG performance will positively affect the financial performance.

The hypothesized conceptual framework suggests that:

Environmental Performance affects the Financial Performance; Social Performance also affects Financial Performance and governance performance score affects the financial performance. The panel regression analysis is used to test this relationship.

4.Results

4.1 Descriptive Statistics

The descriptive statistics were calculated to analyse the central tendency, dispersion, and distribution of both variables of ESG performance and financial performance of Indian pharmaceutical companies.

Table 1: Descriptive Statistics of Study Variables

Variable	Mean	Median	Std. Dev.	Minimum	Maximum
ROA	0.084	0.079	0.052	-0.032	0.212
ESG Score	56.42	57.10	14.83	22.50	89.30
Environmental Score	52.17	53.40	16.75	18.20	88.10
Social Score	58.94	59.80	15.21	24.60	91.40
Governance Score	61.33	62.70	13.89	29.50	92.80
Firm Size (log assets)	8.92	8.85	1.14	6.75	11.32
Leverage	0.31	0.29	0.18	0.02	0.78

The findings reveal that there is significant difference in ESG scores and financial performance amongst firms. The means of the governance scores are relatively high than the means of the environmental and social scores, indicating the existence of stronger governance practices within Indian pharmaceutical companies.

The diversification of the ROA shows that the profitability of firms and time are different.

These results indicate the dissimilarity in sustainability practice and financial performance across firms.

4.2 Correlation Analysis

The correlation was done to determine the relationship between ESG performance and financial performance.

Table 2: Determine The Relationship Between ESG Performance and Financial Performance.

Variable	ROA	ESG	ENV	SOC	GOV
ROA	1.000				
ESG	0.482***	1.000			

ENV	0.394***	0.861***	1.000		
SOC	0.417***	0.882***	0.736***	1.000	
GOV	0.461***	0.903***	0.702***	0.768***	1.000

***$p < 0.01$

The findings reveal that the positive correlation between ESG performance and the financial performance is positive and statistically significant.

The most closely related with financial performance is the governance performance followed by social and environmental performance.

This implies that the higher performance in ESG is linked with enhanced profitability of the firm.

The high degree of correlations among ESG components gives evidence of the sustainability performance across the dimensions.

In the Indian Knowledge Systems point of view, this can be understood as the combined status of ethical governance, social responsibility and environmental stewardship.

4.3 ESG and Financial Performance Regression Analysis.

The panel regression analysis was performed to investigate the effect of the ESG performance on the financial performance.

Table 3: Panel Regression Results – Aggregate ESG Model

Variable	**Coefficient**	**Std. Error**	**t-value**	**p-value**
ESG Score	0.00281	0.00064	4.39	0.000***
Firm Size	0.01142	0.00425	2.69	0.008**
Leverage	-0.04216	0.01571	-2.68	0.008**
Constant	-0.03628	0.01893	-1.92	0.056*

$R^2 = 0.37$

F-statistic significant at $p < 0.001$

The findings show that ESG performance has a positive and statistically significant influence on financial performance.

The increase in ESG score by one unit correlates with the high increase in Return on Assets. This supports Hypothesis 1.

The size of firms also has a positive impact on financial performance and leverage on performance is negative. This implies that better profitability is realised in financially stable firms whose sustainability practices are good.

4.4 ESG Components and financial performance regression analysis.

The regression analysis was undertaken to determine the effect of each of the ESG components based on the environmental, social, and governance scores.

Table 4: Panel Regression Results – ESG Components Model

Variable	Coefficient	Std. Error	t-value	p-value
Environmental Score	0.00172	0.00069	2.49	0.014**
Social Score	0.00194	0.00071	2.73	0.007***
Governance Score	0.00236	0.00066	3.58	0.000***
Firm Size	0.01088	0.00411	2.65	0.009**
Leverage	-0.03975	0.01529	-2.60	0.010**
Constant	-0.03421	0.01792	-1.91	0.057*

$R^2 = 0.42$

F-statistic significant at $p < 0.001$

The findings show that the three ESG elements have a positive impact on financial performance.

The strongest impact is on governance performance followed by social and environmental performance. This favours Hypotheses 2, 3 and 4.

Effective governance enhances efficiency in decision making, transparency and investor confidence in the company which results to effective financial performance.

Environmental sustainability increases operational efficiency and minimizes the regulatory risk.

Social responsibility enhances trust of the stakeholders and corporate image.

4.5 Interpretation from Indian Knowledge Systems Perspective

The findings are solid empirical evidence of the Indian Knowledge Systems principles.

Dharma focuses on ethical governance and responsible leadership, which agrees with the performance of governance to enhance the financial results.

The principle of harmony with nature is like environmental sustainability, which puts more focus on the balance between economic growth and environmental protection.

Social responsibility enhances the performance of firms; the idea of Lokasangraha, which focuses on social welfare and collective well-being is like it.

Such results imply that contemporary ESG models represent the ancient civilization Indian philosophy of sustainable and ethical corporate behaviour.

Therefore, Indian Knowledge Systems offer a powerful philosophical basis of ESG-based financial performance.

4.6 Robustness and Model Validity

The regression equation illustrates good explanatory strength with the R^2 values of 0.37 to 0.42. The strength of the correlation between ESG performance and financial performance is supported by the significance of ESG variables calculated statistically.

The reliability of the findings is also confirmed by control variables. These findings verify that financial performance is a significant factor that is determined by ESG performance.

The empirical evidence is a great support to the hypothesis that ESG performance enhances financial performance. The performance of governance can be identified as the most powerful indicator of financial performance.

The results confirm the stakeholder theory as well as the Indian Knowledge Systems perspective.

5. Discussion

This research was aimed at investigating how Environmental, Social, and Governance (ESG) performance are related to financial performance in Indian pharmaceutical companies and analyse the results through the Indian Knowledge Systems (IKS) perspective. The empirical findings are very convincing that the ESG performance is a significant contributor to the financial performance of a firm in terms of Return on Assets (ROA). These conclusions are applied to the contemporary sustainability and sustainability literature as well as the philosophical basis of ethically oriented economic behaviour with the Indian traditions. [4][20][17].

The regression outcomes prove that the overall ESG performance has a positive and significant impact on financial performance. This observation is in line with the stakeholder theory [5] that supports that the better firms handle their relations with stakeholders such as investors, employees, customers and the society, the better financial results they get. The ESG practices enhance transparency, decrease the risk of operations, improve the reputation of the firm, as well as increase investor confidence, which in turn, increases profitability and long-term sustainability.

In analysing the individual ESG components, the performance of governance came out as the best predictor of financial performance. This observation highlights the essentiality of governance related mechanisms in ethical leadership, transparency, accountability, and good decision-making. Good governance systems would minimize agency issues, efficiency in resource allocation and effectiveness of strategy. According to the Indian Knowledge Systems, this result adheres to the principle of Dharma which encompasses ethical leadership and moral responsibility. Like Arthashastra, ancient Indian literature focused on ethical leadership and governance, accountability and welfare-oriented leadership as the keys to economic stability and prosperity [11]. Hence, current administrative governance is an indication of ancient Indian rules of ethical governance.

The findings also show that environmental performance has a positive impact on the financial performance. Companies that are environmentally friendly enhance the efficiency of operations, waste reduction and regulatory and environmental risks. These would strengthen the resilience and sustainability of the firms. This observation is consistent with the Indian philosophical notion of harmony between man and nature (Prakriti) that focuses on balance and sustainability. The Indian Knowledge Systems have always known the significance of preserving the environment as an essential part of the economic and social prosperity.

In the same way, the social performance was identified to have a positive effect on the financial performance. Socially responsible companies increase employee satisfaction, stakeholder trust, and corporate image. These are the reasons of better operational performance and financial sustainability in the long run. This observation is congruent with Indian concept of Lokasangraha that translates to serving the good and wellbeing of society. According to the Bhagavad Gita, responsible deed and social responsibility is paramount, thus, implying that organizations must serve the society in as much as they are trying to achieve economic goals [18]

It is also found that firm size has a positive influence on financial performance, which suggests that large firms have advantages of economies of scale, better market positioning, and access to a greater number of financial resources. Conversely, leverage has negative impacts on financial performance implying that high levels of debt amplify financial risk and lowers profitability.

All in all, the results support the idea that the ESG performance elevates the financial performance of the firm and increases its long-term sustainability. What is more important is that the findings indicate that ESG principles are not the newest regulatory deconstructs but are the manifestation of the well-established principles of ethics and sustainability that are identified in the Indian Knowledge Systems.

Therefore, ESG-capable corporate performance is a meeting point of the current sustainability models and the old Indian philosophical thought.

6.Conclusion

The paper has explored the connection between Environmental, Social, and Governance (ESG) performance and financial performance of the Indian pharmaceutical companies and presented the results in the context of Indian Knowledge Systems (IKS). The study conducted a panel data regression analysis, and with this analysis, significant empirical evidence was established that the ESG performance is a substantial boost to the financial performance.

The outcomes indicate that the overall ESG performance has a positive effect on the profitability of firms. Governance performance proved to be the most significant aspect of ESG predictive of financial performance, then social and environmental performance. These results demonstrate that ethical governance, stakeholder involvement, and environmental sustainability can help to enhance corporate financial performance.

The results have valuable theoretical implications as they connect the ESG performance to the Indian Knowledge Systems. Dharma (ethical duty), Lokasangraha (social welfare), and harmony with nature are ancient Indian principles of philosophy, where ethical behaviour is of importance, as well as sustainability and responsible leadership. These principles are very similar to the contemporary ESG frameworks, which implies that the ESG is the form of ancient ethical and sustainability principles, re-expressed by institutions in the present day[19].

In this way, the research provides significance to the literature in three aspects.

First, it offers empirical findings of the positive association of ESG performance with financial performance in Indian pharmaceutical companies.

Second, it combines Indian Knowledge Systems and contemporary ESG models, offering a culturally based theoretical approach to the corporate sustainability.

Third, it emphasizes the role of ethical leadership and sustainability in practice and stakeholder-based management in enhancing financial performance and long-term corporate sustainability.

On balance, the results indicate that companies that embrace the concept of ESG do not just enhance financial performance but also benefit society and the environment in general.

7.Policy Implications

This research has significant implications on corporate managers, policymakers, regulators, investors, as well as academic researchers.

7.1 Implications to Corporate Managers.

The findings indicate that ESG performance greatly increases the financial performance of firms. Corporate managers are thus supposed to incorporate the ESG principles as part of their strategic mainframe as opposed to considering them as a compliance strategy. The companies should enhance their governance, promote transparency, and ethical leadership practices. It was found that the performance of governance was the best predictor of financial performance, and that ethical leadership, accountability, and responsible decision-making are key issues in increasing profitability of firms.

In the eyes of Indian Knowledge Systems, ethical leadership that follows the concept of Dharma has the capability of boosting organizational sustainability, trust of the stakeholders, and corporate success in the long term. The corporate executives are supposed to focus on enhancing responsible governance, transparency, and stakeholder welfare to attain sustainable financial growth.

7.2 Policymaker and Regulator Implications.

The results confirm the usefulness of ESG frameworks in enhancing performance and sustainability of firms. The policymakers and regulators, including the Securities and Exchange Board of India (SEBI), must enhance the requirements in disclosure of the ESG, including the Business Responsibility and Sustainability Reporting (BRSR) framework.

The regulators need to motivate firms to implement ESG practices by ensuring that there are standardized ESG disclosure systems, enhancing governance rules and offering incentives on sustainable corporate behaviour. Made to incorporate the Indian ethical and sustainability principles in ESG policies, it will serve as an additional strength in the implementation of ESG by Indian companies.

7.3 Implications for Investors

The results indicate ESG performance is a significant indicator of financial and sustainability of firms. The ESG metrics should be included in the investment decision-making process by investors to find out the financially viable and ethically responsible companies.

Investment strategies that are ESG centric can assist investors to minimize investment risk, increase portfolio performance and increase the returns in the long term. Companies that exhibit good governance, environmental sustainability and social responsibility are bound to give high long-term financial performance.

7.4 Society and Sustainable Development Implications.

The results emphasise the importance of the ESG practices in ensuring sustainable economic development. ESG-based companies can also help in protecting the environment, social good, and ethical governance, which promotes national and global sustainability.

Indian Knowledge Systems focus on economic development, society and environmental sustainability. The combination of ESG values and Indian ethical principles may bring to the sustainable and inclusive economic growth.

8. Limitations and Future Research.

Although this study has its contributions, it has some limitations which give this study directions in future research.

To begin with, the research is based on the Indian pharmaceutical companies. Although the pharmaceutical industry is the most important part of the Indian economy, the results may not be quite applicable in other sectors. The analysis can be extended to other industries like manufacturing, banking and information technology by doing research in the future.

Second, the research makes use of secondary ESG data and financial performance indicators. ESG rating can be different in different rating agencies, and this is because of difference in measurement techniques. Substitute ESG measures and primary data may be applied in future research to prove the findings.

Third, accounting-based financial performance indicators that the study gives attention to include Return on Assets (ROA). Market based performance measures like Tobins Q, stock returns, and valuation of firms can be used in future research.

Fourth, the research analyses the direct association between ESG performance and financial performance. Innovation capability, corporate reputation, institutional ownership and corporate culture are some of the mediating and moderating variable that can be examined in future studies.

Lastly, the future studies may extend the topic of integration of Indian Knowledge Systems with modern sustainable models to design culturally based sustainability models.

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